

INTERNAL MEDICINE Questions Bank

PAST YEAR MCQ EXAMS
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Preface

The file contains all the questions for the Internal Medicine department at Mu'tah University from the year 2004 to the current year.

The file will be updated periodically and modified as appropriate.

In order to benefit, the file was divided into two parts:

Part one: Contains questions for complete exams.

Part Two: Contains questions related to a specific topic.

ملاحظات :

- (1) أحر تعديل على هذا الملف كان في صيف عام 2022 حيث تم إضافة امتحان السنة السادسة (وطن) و امتحان السنة الرابعة (وريد).
- (2) جميع حلول هذا الملف هي جهد طلابي؛ لذلك فهي معرضة للخطأ والصواب ونعمل دائماً على إنتقاء الأخطاء وتصويبها.

1-Absolute contraindication in chronic kidney disease?

Metformin

2-iv drug user have infective endocarditis , one is correct?

Most common is S.aures affecting tricuspid valve

3-pt of DM takes metformin and sulfonylurea, he complain of hypoglycemia & congestive heart failure , how to adjust treatment?

Stop sulfonylurea & give SGLT2 inhibitor

4- which one is not of child pugh?

Elevated AST,ALT

5- which TB drug contraindicated in pregnancy?

Streptomycin

6-which one of the following not a fungi?

Leprosy

7-pt with hypocalcemia & short 4th &5th metacarbals, Dx?

Pseudohypoparathyroidism type 1a

8-pt with exertional loss of conceiousness with crescendo decrescendo murmer?

Aortic stenosis

9-bence jones is ?

Light weight proteins

10-best drug for DVT?

Low molecular weight heparin

11-clinical scenario of thyrotoxicosis with low TSH level what expect to see in this pt?

Exophthalmous

12-according to chronic renal failure classification,creatinine clearance rate at 3A is?

45-60

13-conjunctivitis, urethritis,artheritis?

Reiter syndrome

14-fredrick house what electrolyte disturbance expect to find?

Hyponatremia , hyperkalemia & hypoglycemia

15-wrong about ITP?

Prolonged pt,ptt

16-typical case scenario of scleroderma with shortness of breath , what is the most likely diagnosis?

Pulmonary hypertension

17-wrong about myositis?

Inclusion body myositis common in females than males

18-the correct about idiopathic pulmonary fibrosis?

Antifibrotic drugs decrease the decline in lung function

20-a pregnancy women came for follow up , her last pregnancy complicated by GDM & resolved after pregnancy, what is your next step?

Order oral glucose tolerance test

21-which of the following is wrong?

Anemia of chronic disease is macrocytic anemia

22-a case of RA and takes etanercept, what statement is correct?

There is risk of reactivation of TB

23-lady with history of recurrent pregnancy losses and DVT,Dx?

Antiphospholipid antibody syndrome

24-patient with right ankle artheritis, which statement is correct?

Previous two attacks of gouty artheritis in the 1st MTP rises the suspicion of gout in this joint

25-a 29 female patient with recurrent hand joints artheritis and oral ulcer, what is the diagnosis?

SLE

26-true about acute rheumatic fever? **Aspirin is used for artheritis**

27-a case of massive upper gi bleeding and the vitals are unstable, which of the following is not indicated at this point?

Transfusion of O negative blood

28-all are true about PUD except?

PPI is not essential in the eradication therapy of H.pylori

29-true about MALTOMA?

Treated by eradication of H.pylori

30-wrong about DIC?

Thrombocytosis in CBC

31-wrong about pernicious anemia?

Treated by oral vitamin B12

32-one is a cause of anion gap metabolic acidosis?

Salicylate poisoning

33-the cause of pleural fluid LDH > 0.6 of the serum LDH?

Mesothelioma

34-not a treatment for ITP?

Azathioprine

35-absolute contraindication of thrombolytics?

Previous stroke in previous month

36-true about anemia of chronic disease? High level of hepcidin

37-man with spondylosis, ratio of fev1\fvC is 95% what is the diagnosis?

Restrictive lung disease

38-q about poly cystic kidney disease? Don't give ACEI

39-mechanism of action of aspirin? Inhibits thromboxane

40-brown urine with bubbles? Chrons disease

41-bloody diarrhea not responding to 5 aminosalicylic acid "a case of ulcerative colitis" ,next step?

Azathioprine

42-wrong about celiac?

Its associated with hypothyroidism

43-ABG respiratory alkalosis?

Asthma

44-complication of intracranial hemorrhage?

SIADH

45-history of viral infection ,painful neck mass what is the finding on iodine uptake?

Low iodine uptake

46-bipolar patient ,low urine osmol , low serum osmol,what is the diagnosis?

Psychogenic polydipsia

47-all done as initial screening in HTN except?

Brain natriuretic peptide

48-false statement?

Cushing disease can be treated medically

49-all can be seen in sle except?

Anticentromere antibodies

50-seen in Xray of osteoarthritis?

Narrowing of joint space

51-kidney biopsy necrotizing granulomatosis and hemoptysis?

Good pasture syndrome

52-1.5 cm mass on right kidney, next step?

Adrenal venous sampling

53-complication of amiodarone ?

Pulmonary fibrosis

54-most common cause of diarrhea in travelers?

E.coli

1) Direct thrombin inhibitor:

argatroban

Fondaparinux

2) One of the following incorrect in acromegaly :

Atrophy of sweat glands

3) Not found in UC or can be found in Crohn's ? Not sure !!

Granuloma

Crypt abscess

Transluminal

Skip lesion

Terminal ileum

4) Tb treatment that causes Discoloration of urine

rifampin

isoniazid

pyrazinamide

ethambutol

5) Not in Treatment of siadh:

Diuretics

Fludrocortisone

Salt tablets

Fluid restriction

6) 3% nacl :

Na concentration : 513

7) Not a cause of nephrogenic DI

Cisplastin

Demeclocylin

Sjorian syndrome

Hyper ca hypo k

8) A patient who has prolactinoma suspected to have : (men1syndrome)

Pheochromocytoma

ناسية باقي الخيارات بس هاد غلط

9) Anti ccp, pain and swelling in mcp

- RA

- To differ purplish purpura of vasculitis from other causes

- Painful raised lesions

- On lower limb

10) Treatment of hyperkalemia except

- Nahco3

- B agonist

- Aldactone Diuretics

- Insulin

Incorrect

11) Lid lag in all types of hyperthyroidism

Liver cirrhosis is caused by
Distrupted architecture by direct viral cause
Idiopathic fibrosis
Necrosis and liver nodules
Longstanding alcohol

12 - Hcv quantitation of activity detected by?

Pcr
Alt alp enzyme
Anti hcp

13- Incorrect in non hodgkin

Reed stenburg cells

14 -Cml incorrct :

Smudge cells
Philadelphia chromosome
Tyrisine kinase inhibitors
Increased wbc with shift to the left
Massive splenomegaly

15- Not a Treatment of of itp

Ivig
Splenectomy

16-The following statements are true regarding HOCMP except: Select one:

- a. Non-dilated LV with systolic anterior motion of the mitral valve.
- b. Tachyarrhythmias are well tolerated in HOCM.
- c. ischemic chest pain in HOCM is multifactorial.
- d. Patients with HOCM are usually asymptomatic.
- e. Betablockers are important in the management of HOCM

17-Commonest cause of GI bleeding in the following?

- A. GI cancer
- B. esophagitis
- C. Dieulafoys lesion
- D. Mallory Weiss tears
- E. Esophageal varices

18- In systemic arterial hypertension. One statement is false

Select one:

- a. Kidneys regulate blood pressure by controlling intravascular volume.
- b. Cardiac complications of HTN include diastolic dysfunction and coronary artery disease.
- c. HTN is generally asymptomatic and easily diagnosed.
- d. Secondary hypertension HTN is usually familial
- e. Hyperglycemia is a known side effect of frusemide

19_ Celiac patients are instructed to report to clinical follow up every 3-6 months. What is the best way to ensu strict diet if you suspect that your patient is not compliant on the requested dietary program?

Select one:

- a. Anti Endomysial antibodies
- b. Anti Tissue Transglutaminase antibodies

c. Endoscopy with duodenal biopsy

d. Detailed history of what he eats

20-The most common HLA subtype seen in celiac disease is:

Select one:

a. HLA DR3

b. HLA DR4

c. HLA DQ2

d. HLA DQ8

e. HLA B27

21-The natural history of arthritis in patients suffering from rheumatoid arthritis with no regular treat

Select one:

a. Progressive

b. Intermittent

c. Migratory

d. Regressive

e Stable with occasional exacerbation

22- 43_ All the followings are true about pernicious anaemia except Select one:

a. It is a disease of old age.

b. Can be associated with other autoimmune diseases.

c. Intrinsic factor antibodies are specific but not sensitive.

d. Treated with oral vitamin B12.

23- 40_ In dilated cardiomyopathy one of the following is true:

Select one:

a. Pathologically in DCM the left ventricle is dilated with significant fibrosis and normal weight.

b. Recovery from DCM with treatment is common.

c. Peripartum CMP always carries poor prognosis.

d. Endomyocardial biopsy is sensitive and specific for diagnosis.

e. LBBB is a common finding in DCM

24-All of the following are ECG findings in acute inferior STEMI:

Select one:

a. Sinus tachycardia

b. Sinus bradycardia

c. Second degree Mobits type two AV block.

d. Junctional rhythm

e. LBBB

25-cough, loss of weight, and night sweats. His trachea is deviated to the left and there are crepitations over the apex of the left lung. CXR shows fibrosis and cavitation in the left apex. The investigation most likely to confirm the diagnosis would be?

Select one:

a. CT chest

b. Gastric lavage

c. Sputum for acid and alcohol fast bacilli

d. Mantoux test

e. Fibreoptic bronchoscopy

26- All the following are causes for immune thrombocytopenia (ITP) except.

Select one:

a. B-cell lymphocytes malignancies.

b. HIV

c. Heparin.

d. Systemic lupus erythematosus.

e. Folic acid deficiency anemia.

27-In mitral stenosis one of the following is true

Select one:

- a. The commonest cause is mitral annular calcification.
- b. Left ventricular dilatation indicates severe disease.
- c. Hemoptysis indicates pulmonary hypertension.
- d. Longer S2 to opening snap interval indicates severe MS.
- e. Cardiac catheterization is the gold standard for diagnosis.

28- Anisocytosis Definition : Variable sizes

29- One of the following is wrong : Secondary adrenal insufficiency causes skin hyperpigmentation

30- Does not used in long term control of bleeding?

- A. Non selective B antagonist
- B. TIPS
- C. Banding
- D. Sclerotherapy

31-hodgkin lymphoma emergency: SVC obstruction

32-Type 2 Respiratory Failure : Hypoxemia and Hypercapnia

33-Wrong about Crohn's : Backwash ileitis

34-Patient came with SOB and cough, trachea shifted to the right with hyper-resonance percussion note on the right side. Diagnosis is:

Left-sided pneumothorax ✓

35- "Blue-bloater", all are true except:

Progressive dyspnea and dry cough ✓

36- initial investigation (asthma or COPD one of them not sure) : Spirometry ✓

37- All are causes of high anion gap metabolic acidosis except:

Renal tubular acidosis ✓

38-History of cough and erythematous lesions in the lower limb. No other complaints. CXR showed bilateral hilar lesions. Diagnosis:

Sarcoidosis ✓

39- Management for nonvariceal UGIB:

PPI ✓

40- Typical case for SLE !!

41- all of the following may be found in IDA except :

High serum ferritin

42-WRONG about Light's criteria of pleural effusion:

Serum LDH is more than 2/3 of pleural fluid LDH ✓

43-NOT a feature of transudative effusion??

44- SE of the immunosuppressant Calcineurin inhibitors ??

45-All true except

1-icd indication (fatigue in exertion)

2-Vasodilator use.

3-af well tolerated

4- patient with dcm.. Next step biopsy

46-All false except.

1-Sudden death risk in (more 3.5cm thickness).

47-all of the following treatment of hyperkalemia except?

48-Wrong about heart failure :

-compensatory mechanism by sympathetic nervous system inhibition

49-Low SAAG :

Liver cirrhosis

Heart failure

Malignancy

50--Aortic dissection can cause all except :

Tamponade

Pleural effusion
Mitral valve regurgitation

51- all are causes of iron deficiency anemia "IDA" except :

Blood loss
Low iron intake
Anemia of chronic disease

52-Non variceal upper GI bleeding management :

Beta adreno antagonist
Terlipressin
PPI

53-wrong about DM : Can be diagnosed by a single random glucose tolerance test

54- Wrong about CML :

-Philadelphia chromosome translocation
-Smudge cell

55- Indication for dialysis except :

-hyperkalemia
-acidosis
-hypertension
-chest pain

56-Wrong about transudate effusion :

***HCL More than two thirds of serum HCL

57-all wrong about H-pylori investigation tests except:

a .Rapid urease test is a non invasive test
b .Urea breath test is an indirect indicator for h pylori

58-All are causes of ITP except :

-HIV
-SLE
-Heparin
-folic acid deficiency anemia

59- Most sensitive for celiac disease follow up :

-Anti-endomysial antibodies
-Anti tissue transglutaminase antibodies

60-Hyperkalemia ECG except :

-ST depression
-peaked T wave
-flat p waves
-T wave inverted ?

61-Wide -high- anion gap except :

-Ethanol
-sepsis
-renal tubular acidosis

62- Absolute contraindication for chronic renal disease or renal failure?

-NSAIDS
-metformin***
-ACE

63-Wrong about Heart failure :

BNP secretes only in heart failure????

64- all in management of hyperkalemia except:

-dialysis
-insulin

65-False about non-STEMI ??

normal cardiac enzyme

66- About Atrial fibrillation all except:

- most common arrhythmia
- irregular pulse
- rhythm control superior than rate control

67- True about hepatitis A :

- can cause chronicity
- antigens found in bile secretion and stool****

68-Wrong about hepatitis B :

- can cause chronicity
- anti hep E with infectious state ?

69-All to detect renal disease except:

- biopsy
- CT triphasic
- autoimmune serology
- HbA1c****

70-False statement :

Hyperthyroidism can occur in Hashimoto thyroiditis

Lid retraction can be in any hypothyroidism disease **

71-Myxedema coma all except :

- it has mortality rate higher than thyroid storm

72--glomerular filtration rate at third stage renal failure:

eGFR at CKD 3b : 30-44****

73-wrong about lymphoma : Large tender-painful- lymph node

74-which of the following drugs improve mortality rate in heart failure ?

75-Patient who have GI bleeding. he is alert and conscious then pale and looks unwell . Whats the first step in the management ??

- normal saline
 - packed RBCs****
 - urgent endoscopy
 - blood transfusion with blood group o
- 76-typical case of RA.

6th year –2021

1) Rouleaux formation on blood film is mainly seen in ONE of the following

Select one:

- a. Multiple myeloma.
- b. Iron deficiency anemia.
- c. Acute myeloid leukemia.
- d. Acute lymphoblastic leukemia.
- e. Pernicious anemia.

2) A 20-year-old female patient comes with 2 weeks history of increasing difficulty in combing hair and getting up from a sitting position. She was previously healthy and using no medications. Her ESR is 45 mm/hr. CPK is elevated. One of the following is not a consideration?

- a. Hypothyroidism
- b. Systemic lupus erythematosus with myositis
- c. Steroid myopathy.
- d. Polymyositis
- e. Osteomalacia

3) What is the most common cause of hypothyroidism worldwide? Select one: a. Autoimmune disease

- b. Graves' disease
- c. Iatrogenic causes
- d. Iodine deficiency
- e. Medication side effects

4) A 64-year-old man is evaluated for a 6-week history of intermittent red-colored urine. He notes fatigue but otherwise feels well. Medical history includes hypertension, mechanical mitral valve replacement due to myxomatous degeneration, and calcium oxalate nephrolithiasis. He is a current smoker with a 60-pack-year history. Medications are amlodipine, warfarin, and aspirin. On physical examination, temperature is 37.6 °C (99.7 °F), blood pressure is 112/72 mm Hg, and pulse rate is 98/min. BMI is 30. Examination of the heart reveals a metallic click with a grade 2/6 cardiac systolic murmur that radiates to the axilla. The lungs are clear. There is no costovertebral angle tenderness. The remainder of the examination is unremarkable. Urinalysis is dipstick positive for 3+ blood, 1+ protein, and no leukocyte esterase or nitrites; on microscopic examination, there are no cells or casts, although calcium oxalate crystals are seen. Which of the following is the most likely cause of this patient's clinical findings?

Select one:

- a. Bladder cancer
- b. Glomerulonephritis
- c. Hemoglobinuria
- d. Rhabdomyolysis
- e. Nephrolithiasis

5) A 43-year-old man presents with diarrhoea and rectal bleeding for the past ten days. On examination he has brown pigmented lesions on his lips and palms but abdominal and rectal examination is unremarkable. What is the most likely cause for this presentation? Select one:

- a. Intussusception
- b. Angiodysplasia
- c. Meckel's Diverticulum
- d. Colon cancer
- e. Diverticular abscess

6) Which of the following ABG parameters are CORRECT in chronic type II respiratory failure?

- a. PH 7.25, paCO₂ 52.5 mmHg, paO₂ 56 mmHg, HCO₃ 30 mmol/L.
- b. PH 7.10, paCO₂ 52.5 mmHg, paO₂ 62 mmHg, HCO₃ 24 mmol/L.
- c. PH 7.30, paCO₂ 30 mmHg, paO₂ 63.7 mmHg, HCO₃ 15 mmol/L.
- d. PH 7.36, paCO₂ 30 mmHg, paO₂ 50 mmHg, HCO₃ 22 mmol/L.
- e. PH 7.54, paCO₂ 22.5 mmHg, paO₂ 90 mmHg, HCO₃ 24 mmol/L.

7) In the management of chronic obstructive pulmonary disease, which of the following statements is true Select one:

- a. influenza immunisation should only be offered once
- b. long-term antibiotic treatment decreases the frequency of exacerbations**
- c. regular inhaled anticholinergics are of no prove
- d. supplemental oxygen during air travel is necessary if the resting PaO₂ < 60
- e. long-term controlled oxygen therapy improves symptoms but not the prognosis

8) A 70 years old woman is admitted with a 4-day history of fever, rigors and dyspnea. She is disoriented, respiratory rate of 32/min and a systolic blood pressure of 85 mmHg. Blood urea is normal. There is bronchial breathing at her right base, where a chest radiograph reveals consolidation. Which would be the most appropriate antibiotic regimen?

Select one:

- a. Intravenous ceftriaxone and intravenous gentamicin
- b. Oral levofloxacin
- c. Intravenous gentamycin and oral azithromycin
- d. Intravenous ceftriaxone and levofloxacin**
- e. Intravenous vancomycin

9) A 70-year-old woman is seen for follow-up evaluation for possible Cushing syndrome. She presented with new-onset diabetes mellitus and a 9.1 -kg (20-lb) weight gain over the last 6 months. Medical history is otherwise unremarkable, and she is currently taking no medications and has had no exposure to exogenous glucocorticoids in the past year. On physical examination, blood pressure is 160/90 mm Hg, pulse rate is 80/min, and respiration rate is 12/min. BMI is 30. Facial plethora, central obesity, and bilateral supraclavicular fat pads are noted. There are violaceous abdominal striae measuring 1 cm wide and multiple ecchymoses on the extremities. Initial laboratory studies show a serum cortisol level of 9 pg/dL (248.4 nmol/L) following a 1 -mg dose of dexamethasone the night before, and a 24-hour urine free cortisol level that is greater than 3 times the upper limit of normal, which is confirmed on a second measurement. A plasma adrenocorticotropic hormone (ACTH) level is undetectable. Which of the following is the most appropriate diagnostic test to perform next? Select one:

- a. CT scan of the adrenal glands**
- b. Inferior petrosal sinus sampling
- c. Late night salivary cortisol measurement
- d. MRI of the pituitary gland
- e. Synactin test

10) Reed Sternberg cell is a characteristic finding in lymphnode biopsy in ONE of the following diseases.

Select one:

- a. Hodgkin's lymphoma.**
- b. Non Hodgkin's lymphoma.
- c. Chronic lymphocytic leukemia.
- d. Acute lymphoblastic leukemia.
- e. Chronic myeloid leukemia.

11) A 52-year-old male presents with one month history of a right sided chest pain, dyspnea. CXR shows a rightsided pleural effusion. A thoracentesis is performed and the results of the pleural fluid analysis are as follows: Pleural/serum total protein ratio: >0.5 WBC count: 7,000 cells/pL Lymphocytes: 85% Glucose: 30 mg% LDH: 1430 IU/L Which of the following is NOT likely to be a cause of the pleural effusion in this patient?

Select one:

- a. Rheumatoid arthritis
- b. Mesothelioma
- c. Tuberculosis
- d. Para-pneumonic effusion**
- e. Lymphoma

12) An 84-year-old female has become progressively more short of breath over the past 2 months. She is finding it difficult to breathe when lying down and so has been sleeping upright in her chair for the past two weeks. She also has a cough productive of frothy sputum and swollen legs. What is the most likely description of her pulse? Select one:

- a. Pulsus alternans
- b. Collapsing
- c. Jerky
- d. Slow rising
- e. Pulsus bisferiens

13) A 72-year-old male develops acute renal failure after cardiac catheterization. Physical examination is notable for diminished peripheral pulses, livedo reticularis, epigastric tenderness, and confusion. Laboratory studies include (mg/dL) BUN 131, creatinine 5.2, and phosphate 9.5. Urinalysis shows 10 to 15 white blood cells (WBC), 5 to 10 red blood cells (RBC), and one hyaline cast per high-power field (HPF). The most likely diagnosis is Select one:

- a. acute interstitial nephritis caused by drugs
- b. rhabdomyolysis with acute tubular necrosis
- c. acute tubular necrosis secondary to radiocontrast exposure
- d. cholesterol embolization
- e. renal arterial dissection with prerenal azotemia

14) A 42-year-old woman is evaluated for a routine outpatient medical assessment. She was diagnosed with a ventricular septal defect at age 6 months. Evaluation was performed early in life and observation was recommended. She has no symptoms and is taking no medications. On physical examination, blood pressure is 100/60 mm Hg, pulse rate is 70/min and regular, and respiration rate is 15/min. BMI is 28. The estimated central venous pressure is normal. The apical impulse is normal. There is no parasternal impulse. S1 and S2 are masked by a loud holosystolic murmur noted at the left lower sternal border. The rest of the examination is unremarkable. An electrocardiogram is normal. The heart size is normal on the chest radiograph. An echocardiogram demonstrates normal left ventricular size and function with an ejection fraction of 60%. A membranous ventricular septal defect is noted with a small left-to-right shunt. The right heart chambers and valve function are normal. The estimated pulmonary artery pressure is normal. Which of the following is the most appropriate management?

- a. Cardiac catheterization
- b. Cardiac magnetic resonance (CMR) imaging
- c. Endocarditis prophylaxis
- d. Follow-up in 3 to 5 years
- e. Stress testing to determine exercise capacity

15) Causes of acute pancreatitis include all of the following, except Select one:

- a. measles
- b. hypothermia
- c. choledocholithiasis
- d. azathioprine therapy
- e. alcohol misuse

16) A patient is noted to have a crescendo-decrescendo mid-systolic murmur on examination. The murmur is loudest at the left sternal border. The patient is asked to squat, and the murmur decreases in intensity. The patient stands and the murmur increases. Finally, the patient is asked to perform a Valsalva maneuver and the murmur increases in intensity. Which of the following is most likely to be the cause of this murmur?

Select one:

- a. Aortic stenosis
- b. Chronic mitral regurgitation
- c. Hypertrophic cardiomyopathy (HOCM)
- d. Mitral valve prolapse
- e. Pulmonic stenosis

16) A 33-year-old male with end-stage renal disease who is on hemodialysis complains of decreased libido, inability to maintain erections, increasing fatigue, and mild weakness. He has been on a stable hemodialysis regimen for 8 years, and all his electrolytes are normal. Further evaluation reveals a reduced serum testosterone level. Measurement of which of the following will distinguish primary from secondary hypogonadism?

Select one:

- a. Aldosterone
- b. Cortisol
- c. Estradiol
- d. Luteinizing hormone**
- e. Thyroid-stimulating hormone

17) A 42-year-old female comes with 2 weeks history of épistaxis and hemoptysis. Urine analysis showed +2 proteinuria and RBC casts. Her PR3 ANCA is highly positive. The most likely diagnosis is:

Select one:

- a. Granulomatosis and polyangiitis.**
- b. Polyarteritis nodosa.
- c. Henock-Schonlein purpura.
- d. Good-pasteur syndrome
- e. SLE

18) 39-year-old male is found to have degenerative joint disease of 2nd and 3rd metatarsophalangeal joints, presents with newly discovered Diabetes, liver disease and bronze skin pigmentation. Which one of the following investigations is the most helpful to reach the diagnosis?

Select one:

- a. Rheumatoid factor.
- b. Anti-dsDNA.
- c. Serum ferritin level**
- d. Serum Uric acid.
- e. X-ray of both hands

19) This is a 55-year-old female patient presents with acute left knee mono-arthritis. The most likely diagnosis is:

- a. Septic arthritis.
- b. Hem-arthritis.
- c. Gouty arthritis.
- d. Early rheumatoid arthritis.
- e. Calcium pyrophosphate disease (Pseudo-gout).**

20) A 28-year-old woman with HIV on antiretroviral therapy complains of abdominal pain in the emergency department. Laboratory data show a creatinine of 3.2 mg/dL; her baseline creatinine is 1.0 mg/dL. Urinalysis shows large numbers of white blood cells and red blood cells without epithelial cells, leukocyte esterase, or nitrites. Which test is indicated to diagnose the cause of her acute renal failure?

Select one:

- a. Acid-fast stain of the urine
- b. Anti-GBM (glomerular base membrane) antibodies
- c. Renal angiogram
- d. Renal ultrasound**
- e. Urine electrolyt

21) A 55-year-old man is evaluated in follow-up after a recent routine screening for antibody to hepatitis C virus (HCV) was positive. His medical history is unremarkable; he has not used illicit drugs or had any history of blood transfusions. He currently feels well and takes no medications. Vital signs and physical examination are normal. Laboratory studies reveal a positive HCV antibody test, but HCV RNA testing is negative. The serum alanine aminotransferase level is normal. Which of the following is the most appropriate diagnostic test to perform next?

- a. Perform liver ultrasound
- b. Perform serial alanine aminotransferase monitoring
- c. Repeat HCV antibody testing
- d. Repeat HCV RNA testing
- e. No further testing**

22) All the followings are true about Unfractionated heparin EXCEPT.

- a. Safe in lactating women.
- b. Antidote for over dose is vit. K.**
- c. Can cause heparin induced thrombocytopenia (HIT)
- d. Prolong use can cause osteoporosis.
- e. Safe in pregnancy.

23) A 51 -year-old woman is evaluated in the emergency department for sudden-onset severe headache and right-sided weakness followed by temporary loss of consciousness that occurred 30 minutes ago. According to her husband, she has hypertension treated with amlodipine and a 20-pack-year smoking history; she stopped smoking 12 years ago. On physical examination, blood pressure is 158/68 mm Hg, pulse rate is 68/min and regular, and respiration rate is 10/min. Funduscopic examination findings are normal. Nuchal rigidity is noted. On neurologic examination, the patient does not follow commands and has flexor posturing to painful stimuli; pupils are reactive and symmetric in size and shape. An electrocardiogram shows normal sinus rhythm and no ischemic changes. Which of the following is the most appropriate next diagnostic test?

- a. Catheter-based cerebral angiography
- b. CT of the head without contrast**
- c. Lumbar puncture
- d. MRI of the brain without contrast
- e. Brain CT with contrast

24) A 29-year-old woman comes to see you in clinic because of abdominal discomfort. She feels abdominal discomfort on most days of the week, and the pain varies in location and intensity. She notes constipation as well as diarrhea, but diarrhea predominates. In comparison to 6 months ago, she has more bloating and flatulence than she has had before. She identifies eating and stress as aggravating factors, and her pain is relieved by defecation. You suspect irritable bowel syndrome (IBS). Laboratory data include: white blood cell (WBC) count 8000/DL, hematocrit, 32%, platelets, 210,000/ DL, and erythrocyte sedimentation rate (ESR) of 44 mm/h. Stool studies show the presence of lactoferrin but no blood. Which intervention is appropriate at this time?

Select one:

- a. Antidepressants
- b. Ciprofloxacin
- c. Colonoscopy**
- d. Reassurance and patient counseling
- e. Stool bulking agents

25) A 28-year-old woman is evaluated for an 8-week history of increasing lower abdominal crampy pain and diarrhea. She now has 6 to 10 bowel movements per day with one or two nocturnal stools. Stools are loose to watery with intermittent blood streaking. The pain is in the lower abdomen and has increased to 6 to 8 out of 10 in severity over the past week. She has anorexia and nausea but no vomiting or fever. She takes no medications, including NSAIDs. On physical examination, temperature is 37.8 °C (100.0 °F), blood pressure is 100/54 mm Hg, and pulse rate is 96/min. She appears thin, pale, and in moderate distress. The abdomen is distended with diffuse tenderness that is most prominent in the lower quadrants. There is no rigidity, guarding, rebound tenderness, masses, or organomegaly. Representative colonoscopy findings seen in a patchy distribution throughout the ascending, transverse, and descending colon. The terminal ileum and rectum show no inflammation. Which of the following is the most likely diagnosis? Select one:

- a. Collagenous colitis
- b. Crohn's colitis**
- c. Ischemic colitis
- d. Ulcerative colitis
- e. Colon CA

26) Which is False in a predominant "blue bloater' COPD patient?

Select one:

- a. They are overweight and have a chronic cough with sputum.
- b. They have an elevated carbon dioxide and low oxygen in the blood .
- c. Pulmonary hypertension does not complicate the disease.**
- d. The patients have polycythaemia and are cyanosed .
- e. Patients usually respond very well to long term oxygen therapy.

27) A patient is noted to have a crescendo-decrescendo mid-systolic murmur on examination. The murmur is loudest at the left sternal border. The patient is asked to squat, and the murmur decreases in intensity. The patient stands and the murmur increases. Finally, the patient is asked to perform a Valsalva maneuver and the murmur increases in intensity. Which of the following is most likely to be the cause of this murmur?

- a. Aortic stenosis
- b. Chronic mitral regurgitation
- c. Hypertrophic cardiomyopathy (HOCM)
- d. Mitral valve prolapse
- e. Pulmonic stenosis

28) In folic acid deficiency anemia, all the followings are true EXCEPT

Select one:

- a. Jaundice
- b. Increase lactate dehydrogenase
- c. Low reticulocyte count.
- d. Neurological signs and symptoms
- e. Thrombocytopenia

29) Which of the following factors is most strongly associated with risk of sudden death in the first six months after myocardial infarction?

- a. Ventricular ectopics
- b. Cigarette smoking
- c. 3-vessel coronary disease at angiography
- d. Low left ventricular ejection fraction
- e. High LDL (low density lipoprotein) cholesterol

30) A 27-year-old woman presents for review. She describes herself as having 'IBS' and for the past two years has suffered intermittent bouts of abdominal pain, bloating and loose stools. For the past two weeks however her symptoms have been much worse. She is now passing around 3-4 watery, grey, 'frothy' stools per day. Her abdominal bloating and cramps have also worsened and she is suffering from excessive flatulence. Judging by the fitting of her clothes she also feels that she has lost weight. Some blood tests are ordered Hb 10.9 g/dl Platelets $199 \times 10^9/l$ WBC $7.2 \times 10^9/l$ Ferritin 15 ng/ml Vitamin B12 225 ng/l Folate 2.1 nmol/l. What is the most likely diagnosis?

Select one:

- a. Crohn's disease
- b. Celiac disease
- c. Infective exacerbation of irritable bowel syndrome
- d. Ulcerative colitis
- e. Bacterial overgrowth syndrome

31) Splenomegaly is a common clinical physical signs in all the following diseases except. Select one:

- a. Sickle cell anemia.
- b. Typhoid fever.
- c. Brucellosis.
- d. Portal hypertension
- e. B-Thalassemia major.

32) A 54-year-old woman is referred to endocrinology for evaluation of osteoporosis after a recent evaluation of back pain revealed a compression fracture of the T4 vertebral body. She is perimenopausal with irregular menstrual periods and frequent hot flashes. She does not smoke. She otherwise is well and healthy. Her weight is 70 kg, and height is 168 cm. A bone mineral density scan shows a T-score of -3.5 SD and a Z-score of -2.5 SD. All of the following tests are indicated for the evaluation of osteoporosis in this patient except

Select one:

- a. 24-h urine calcium
- b. follicle-stimulating hormone and luteinizing hormone levels
- c. serum calcium
- d. renal function panel
- e. vitamin D levels (25-hydroxyvitamin D)

33) Which one of the following doesn't cause folic acid deficiency?

Select one:

- a. **Veganism.**
- b. Gluten sensitivity (Celiac disease)
- c. Hemolytic anemia.
- d. Pregnancy.
- e. Jejunal resection.

34) A 31-year-old man with a known history of alcoholic liver disease is reviewed following a suspected oesophageal variceal haemorrhage. He has been resuscitated and intravenous terlipressin has been given. His blood pressure is now 104/60 mmHg and his pulse is 84/min. What is the most appropriate intervention?

Select one:

- a. Transjugular Intrahepatic Portosystemic Shunt
- b. Surgical referral
- c. **Endoscopic variceal band ligation**
- d. Sengstaken-Blakemore tube
- e. Endoscopic sclerotherapy

35) You are a junior doctor covering the coronary care unit (CCU). You are called urgently to a 45-year-old man admitted yesterday following a non-ST-elevation myocardial infarction (NSTEMI). On arrival there are no signs of life and a cardiac arrest call has been put out. The senior nurse looking after him reports he was alert and talking moments ago before collapsing. You look up at the monitor and see rapid disorganised electrical activity in lead II compatible with VF. The nurse administers the first shock of 360J monophasic. The monitor still shows V.Fibrillation. What is the next correct action?

Select one:

- a. Feel for a carotid or radial pulse
- b. **Begin chest compressions at a ratio of 30:2**
- c. Begin uninterrupted chest compressions
- d. Administer amiodarone 300mg
- e. Give another shock

36) A 48-year-old woman is evaluated during a follow-up visit for hypertension. Blood pressure measurements taken at the past three visits have been in the range of 135 to 146 mm Hg systolic and 86 to 92 mm Hg diastolic. Twenty-four-hour ambulatory blood pressure monitoring shows an overall mean blood pressure of 136/84 mm Hg; daytime readings average 138/85 mm Hg, and nighttime readings average 130/82 mm Hg. She has no other pertinent personal or family history. She takes no medications. On physical examination, blood pressure is 146/92 mm Hg, and pulse rate is 76/min. BMI is 29. The remainder of the examination is unremarkable.

Laboratory studies show a normal chemistry panel; a urine dipstick demonstrates no protein. Which of the following is the most appropriate next step in management? Select one:

- a. **Begin ACE-inhibitor**
- b. Begin Ca-channel blocker
- c. Recheck blood pressure in the office in 6 months
- d. Recheck blood pressure in the office in 1 year
- e. Repeat 24-hour ambulatory blood pressure monitoring

37) A 55-year-old man with a history of gallstone disease presents with a two-day history of pain in the right upper quadrant. He feels 'like I have flu' and his wife reports he has had a fever for the past day. On examination his temperature is 38.1 °C, blood pressure 100/60 mmHg, pulse 102/min and he is tender in the right upper quadrant. His sclerae have a yellow-tinge. What is the most likely diagnosis?

Select one:

- a. Pancreatic cancer
- b. Biliary colic
- c. **Ascending cholangitis**
- d. Acute cholecystitis
- e. Acute viral hepatitis

38) A 53 year old patient presents to your office with pain and stiffness in both hands and knees of 6 months duration. All of the following findings on your physical examination may help with a diagnosis except?

- a. joint tenderness or effusions
- b. Maculopapular rash
- c. Iridocyclitis
- d. Hepatosplenomegaly

e. Distal joint involvement

39) A 28-year-old woman with HIV on antiretroviral therapy complains of abdominal pain in the emergency department. Laboratory data show a creatinine of 3.2 mg/dL; her baseline creatinine is 1.0 mg/dL. Urinalysis shows large numbers of white blood cells and red blood cells without epithelial cells, leukocyte esterase, or nitrites. Which test is indicated to diagnose the cause of her acute renal failure?

- a. Acid-fast stain of the urine
- b. Anti-GBM (glomerular base membrane) antibodies
- c. Renal angiogram
- d. Renal ultrasound
- e. Urine electrolytes

40) You are assisting for 1 month in a cardiology valvular heart disease clinic, detecting a variety of murmurs and associated features. Match the physical findings given below with the most likely valvular heart disorder Harsh systolic crescendo- decrescendo murmur, with low pulse pressure Select one:

- a. Mitral stenosis
- b. Tricuspid regurgitation
- c. Mitral regurgitation
- d. Aortic stenosis
- e. Aortic regurgitation

41) A 72-year-old woman is evaluated in the hospital for a 3-month history of increasing shortness of breath. Although she had previously been physically active, her ambulation is now limited to about 50 feet because of shortness of breath. Medical history is significant for rheumatic fever as a child, diverticulosis with gastrointestinal bleeding that required blood transfusions, hypertension, and hyperlipidemia. Medications are chlorthalidone and atorvastatin. On physical examination, the patient is afebrile, blood pressure is 140/70 mm Hg, pulse rate is 83/min, and respiratory rate is 16/min. Oxygen saturation breathing ambient air is 98%. There is no jugular venous distention. Lungs are clear. Cardiac examination reveals a regular rate and a grade 3/6 apical holosystolic murmur that radiates to the axilla. There is no lower extremity edema. Electrocardiogram shows normal sinus rhythm and evidence of left atrial enlargement. Echocardiogram shows severe eccentric mitral regurgitation with marked calcification of the valve leaflets; left ventricular systolic function is normal. Which of the following is the most appropriate treatment?

- a. Bioprosthetic mitral valve replacement
- b. Mechanical mitral valve replacement
- c. Oral vasodilator therapy
- d. Percutaneous mitral valvuloplasty
- e. Review in 1 year

42) Which of the following is NOT in the list of bedside severity assessment of bronchial asthma? Select one:

- a. Kussmaul's sign
- b. Pulsusparadoxus
- c. Silent chest
- d. Central cyanosis
- e. Confusion

43) A 17- year -old female presents with recurrent attacks of collapse. These episodes typically occur without warning and have occurred whilst she was running for a bus. There is no significant past medical history and the only family history of note is that her father died suddenly when he was 38-years-old. What is the likely cause?

- a. Vaso-vagal attacks
- b. anxiety.
- c. Epilepsy
- d. Cardiogenic syncope
- e. Malingering

44) An 84-year-old female nursing home resident is brought to the emergency department due to lethargy. At the nursing home, she was found to have a blood pressure of 85/60 mmHg, heart rate 101 beats/min, temperature 37.8°C. Laboratory data are obtained: sodium 137 meq/L, potassium 2.8 meq/L, HCO₃⁻ 8 meq/L, chloride 117 meq/L, BUN 17 mg/dL, creatinine 0.9 mg/dL. An arterial blood gas shows PaO₂ 80 mmHg, PCO₂ 24 mmHg, pH 7.29. Her urine analysis is clear and has a pH of 4.5. What is the acid-base disorder?

- a. Anion-gap metabolic acidosis
- b. Non-anion gap metabolic acidosis**
- c. Non-anion-gap metabolic acidosis and respiratory alkalosis
- d. Respiratory acidosis
- e. Respiratory alkalosis

45) Which of the following drugs is NOT used in acute severe asthma?

- a. Long-acting anti-cholinergic**
- b. Salbutamol
- c. Systemic Corticosteroids
- d. Ipratropium bromide
- e. Magnesium sulphate IV infusion

46) A 50-year-old man presented with an acutely painful and swollen left knee joint. He has a long history of hypertension and is on Diuretic therapy. The pain has been severe for the past few hours. On examination the knee is hot and tender. There is swelling with moderate effusion. The knee joint aspiration revealed Knee joint aspirate white cell count 18000/cuml. Which one of the following is the most likely diagnosis?

- a. Pseudo gout.
- b. Rheumatoid arthritis.
- c. Osteoarthritis
- d. Acute gouty arthritis.**
- e. Septic arthritis.

47) A 45-year-old male with a diagnosis of ESRD secondary to diabetes mellitus is being treated with peritoneal dialysis. This is being carried out as a continuous ambulatory peritoneal dialysis (CAPD). He undergoes four 2-L exchanges per day and has been doing so for approximately 4 years. Complications of peritoneal dialysis include which of the following? Select one:

- a. Hypotension after drainage of dialysate**
- b. Hypoalbuminemia
- c. Hypercholesterolemia
- d. Hypoglycemia
- e. Left pleural effusion

48) A patient with upper gastrointestinal symptoms tests positive for Helicobacter pylori following a urea breath test. Which one of the following conditions is most strongly associated with Helicobacter pylori infection?

- a. Gastric adenocarcinoma
- b. Gastro-oesophageal reflux disease
- c. Esophageal cancer
- d. Duodenal ulceration**
- e. Atrophic gastritis

49) A 55-year-old man is evaluated in the emergency department for a 20-minute episode of left eye visual loss without pain followed by a 5-minute episode of slurred speech. He has no residual symptoms. The patient has hypertension treated with amlodipine. He takes no other medication. On physical examination, blood pressure is 178/92 mm Hg, pulse rate is 78/min and regular, and respiration rate is 12/min. Carotid upstrokes are normal without bruits. Heart rate is regular, and no murmurs are heard. Other physical examination findings, including those from a neurologic examination, are normal. Findings on an electrocardiogram and a noncontrast CT scan of the head are normal. Which of the following is the most appropriate next diagnostic test?

- a. Carotid ultrasonography**
- b. CT angiography of the neck
- c. MRI of the brain
- d. Transesophageal echocardiography
- e. EEG

50) A 54-year-old man is investigated for dyspepsia. An endoscopy shows a gastric ulcer and a CLO test done during the procedure demonstrates H. pylori infection. A course of H. pylori eradication therapy is given. Six weeks later the patient comes to review with great improvement of symptoms. What is the most appropriate next step?

- a. Culture of gastric biopsy
- b. H. pylori serology
- c. Hydrogen breath test
- d. Urea breath test
- e. Counseling and medical follow up

51) A 65-year-old female with a known history of heart failure presents for an annual check-up. She is found to have a blood pressure of 170/100 mmHg. Her current medications are furosemide and aspirin. What is the most appropriate medication to add?

- a. Bendroflumethiazide
- b. Spironolactone
- c. Bisoprolol
- d. Verapamil
- e. Enalapril

52) A patient diagnosed by sputum culture for Acid-Fast Bacilli (AFB) as Multiple drug resistant (MDR) pulmonary tuberculosis. What is the treatment regimen of choice? Select one:

- a. levofloxacin, streptomycin, Ethambutol and pyrazinamide
- b. Isoniazid, streptomycin, pyrazinamide and ethambutol
- c. Rifampicin, pyrazinamide and ethambutol
- d. Isoniazid, rifampicin, ethambutol and pyrazinamide
- e. Isoniazid, levofloxacin, streptomycin and ethambutol

53) A 62-year-old woman is evaluated for an incidentally discovered left adrenal mass. Two weeks ago, the patient was evaluated in the emergency department for diffuse abdominal pain and vomiting. A CT scan was obtained that was normal except for the adrenal mass. Three hours after presentation to the emergency department, the pain resolved spontaneously. Her medical history is significant for diet-controlled type 2 diabetes mellitus diagnosed 1 year ago and osteoporosis diagnosed 4 years ago. Her only medication is alendronate. On physical examination, temperature is 37.0 °C (98.6 °F), blood pressure is 120/80 mm Hg, and pulse rate is 70/min. BMI is 26. The remainder of the physical examination is normal. Laboratory evaluation reveals a serum sodium level of 139 mEq/L (139 mmol/L) and serum potassium level of 4.1 mEq/L (4.1 mmol/L). The previously obtained CT scan shows a 2.0-cm well-circumscribed, left adrenal lesion with a density of 5 Hounsfield units. In addition to screening tests for pheochromocytoma, which of the following is the most appropriate diagnostic test to perform next?

- a. Adrenal vein sampling
- b. Low-dose dexamethasone suppression test
- c. Plasma renin activity and aldosterone concentration measurement
- d. ACTH stimulation test
- e. No further testing

54) A 65-year-old woman who is currently receiving chemotherapy for acute myeloid leukaemia is found on blood testing to have urea of 10.1 mmol/L (n 2.5-7.1), creatinine of 190 µmol/L (n 70-133); potassium of 6.1 mmol/L (n 3.5-5), phosphate of 8.5 mg/dL (n 3.4-4.5) and corrected calcium of 2.00 mmol/L (n 2.15-2.55). The patient is asymptomatic. Her electrolyte levels were normal prior to the start of treatment. What is the most likely SINGLE (ONE) cause of this electrolyte disturbance?

Select one:

- a. Tumour lysis syndrome
- b. Hypovolaemia
- c. Haemolytic uraemic syndrome
- d. Neutropenic sepsis
- e. Disease progression

55) A 31-year-old man with a known history of alcoholic liver disease is reviewed following a suspected oesophageal variceal haemorrhage. He has been resuscitated and intravenous terlipressin has been given. His blood pressure is now 104/60 mmHg and his pulse is 84/min. What is the most appropriate intervention? Select one:

- a. Transjugular intrahepatic portosystemic shunt
- b. Surgical referral
- c. Endoscopic variceal band ligation**
- d. Sengstaken-Blakemore tube
- e. Endoscopic sclerotherapy

56) A 59-year-old woman is evaluated for continued substernal chest pain. She presented with exertional chest pain 6 months ago that occurred with minimal ambulation. She was evaluated with a stress nuclear medicine myocardial perfusion study that showed no ST-segment changes but a small area of inducible ischemia in the lateral area of the left ventricle and an ejection fraction of 45%. She was initially treated medically but has continued to have chest pain with exertion despite the addition of multiple antianginal agents. Medical history is significant for hypertension, hypercholesterolemia, and type 2 diabetes mellitus. She has a 30-pack-year smoking history but quit 1 year ago. Medications are aspirin, lisinopril, simvastatin, metformin, metoprolol, and long-acting nitroglycerin. On physical examination, the patient is afebrile, blood pressure is 132/72 mm Hg, pulse rate is 68/min, and respiration rate is 16/min. BMI is 28. The remainder of her physical examination is normal. Electrocardiogram is unchanged from the time of her stress test. Which of the following is the most appropriate next step in management? Select one:

- a. Cardiac catheterization**
- b. CT angiography
- c. Dobutamine stress echocardiography
- d. Continued medical therapy
- e. Exercise stress testing

57) A 16-year-old female star gymnast presents to your office complaining of fatigue, diffuse weakness, and muscle cramps. She has no previous medical history and denies tobacco, alcohol, or illicit drug use. There is no significant family history. Examination shows a thin female with normal blood pressure. Body mass index (BMI) is 18 kg/m². Oral examination shows poor dentition. Muscle tone is normal, and neurologic examination is normal. Laboratory studies show hematocrit of 38.5%, creatinine of 0.6 mg/dL, serum bicarbonate of 30 meq/L, and potassium of 2.7 meq/L. Further evaluation should include which of the following? Select one:

- a. Urinalysis and urine culture
- b. Plasma renin and aldosterone levels
- c. Urine toxicology screen for opiates
- d. Urine toxicology screen for diuretics
- e. Serum magnesium level**

58) A 46-year-old man is admitted to the hospital for upper gastrointestinal (GI) bleeding. He has a known history of peptic ulcer disease, for which he takes a proton pump inhibitor. His last admission for upper GI bleeding was 4 years ago. After fluid resuscitation, he is hemodynamically stable and his hematocrit has not changed in the past 8 h. Upper endoscopy is performed. Which of the following findings at endoscopy is most reassuring that the patient will not have a significant rebleeding episode within the next 3 days?

- a. Adherent clot on ulcer
- b. Clean-based ulcer**
- c. Gastric ulcer with arteriovenous malformations
- d. Visible bleeding vessel
- e. Visible nonbleeding vessel

59) Which of the following statements regarding polycythemia vera is correct?

- a. An elevated plasma erythropoietin level excludes the diagnosis.**
- b. Transformation to acute leukemia is common.
- c. Thrombocytosis correlates strongly with thrombotic risk.
- d. Aspirin should be prescribed to all these patients to reduce thrombotic risk.
- e. Phlebotomy is used only after hydroxyurea and interferon have been tried.

60) An 18-year-old woman is evaluated for primary amenorrhea. Her cognitive function is normal, and she is not sexually active. Her personal and family medical history is unremarkable. She takes no medications. On physical examination, temperature is 36.1 °C (97.0 °F), blood pressure is 110/70 mm Hg, pulse rate is 72/min, and respiration rate is 16/min; BMI is 20. Her height is 147 cm (58 in). Physical examination and secondary sex characteristics are normal, with Tanner stage IV breast and pubic hair development. Pregnancy testing is negative. On subsequent laboratory studies estradiol level was undetectable, serum follicle-stimulating hormone level is 72 mU/mL (72 U/L), and serum luteinizing hormone level is 46 mIU/mL (46 U/L). Which of the following is the most appropriate management?

a. **Initiate estrogen and progestin therapy**

b. Measure serum prolactin

c. Measure thyroid-stimulating hormone

d. Perform pituitary MRI

e. Measure serum FSH and LH

61) All the followings are true in polycythemia rubra vera Except.

a. Splenomegaly.

b. Leukocytosis.

c. **Increase erythropoietin.**

d. Postive JAK-2 mutation.

e. Hydroxyurea is one of the treatment methods.

62) A 65-year-old man with liver cirrhosis of unknown cause is reviewed in clinic. Which one of the following factors is most likely to indicate a poor prognosis?

a. Alanine transaminase > 200 ufl

b. Caput medusae

c. **Ascites**

d. Gynecomastia

e. Splenomegaly

63) A 54-year-old woman is evaluated because of fatigue. Although she follows a daily 1400-kcal diet and exercises 3 to 4 nights per week for 30 minutes, she has gained 2.3 kg (5.0 lb) in the last month. She has hypercholesterolemia requiring statin therapy. Her mother was diagnosed with hypothyroidism shortly after the birth of her last child. On physical examination, blood pressure is 145/90 mm Hg, pulse rate is 80/min, and BMI is 25. The skin is dry. The thyroid is mildly enlarged with a diffusely nodular texture. No discrete thyroid nodules are palpated. Reflexes are normal. TSH 6.5 mU/L T4 0.9 ng/dL Thyroid peroxidase antibody positive Similar results for TSH and T4 were obtained 4 months ago. Which of the following is the most appropriate next step in management?

Select one:

a. **Initiate lévothyroxine therapy**

b. Measure thyroid-stimulating immunoglobulins

c. Repeat serum TSH measurement in 12 months

d. Schedule thyroid radioactive iodine uptake and scan

e. Measure serum T3 and calculate the T3:T4 ratio

64) A 25-year-old woman presented with polyarthropathy affecting her hands, shoulders and knee joints. She has recently complained of a rash on her face and upper chest. On examination she has a rash on her face involving nose and cheeks. Blood testing revealed positive antinuclear antibodies, positive anti-double stranded DNA and low C3/C4 levels. Which one of the following diagnoses fits best with this clinical picture?

Select one:

a. Mixed connective tissue disease

b. Flare of rheumatoid arthritis.

c. Drug-induced lupus

d. Drug-induced photosensitivity.

e. **Systemic lupus erythematosis.**

65) 34-year-old female with a history of alcoholic liver disease is admitted with frank haematemesis. She was discharged three months ago following treatment for bleeding oesophageal varices. Following resuscitation, what is the most appropriate treatment whilst awaiting endoscopy? Select one:

- a. Octreotide
- b. Omeprazole
- c. Propranolol
- d. Tranexamic acid
- e. Terlipressin**

66) A patient has the following laboratory results: HBsAg is positive, Anti-HBc IgM is positive, and HBeAg is positive. All other serologies are negative. She is diagnosed with acute hepatitis B. When interpreting hepatitis B serology results, the term "window period" refers to the time between which of the following?

Select one:

- a. Anti-HBs and anti-HBc positivity
- b. Clinical symptoms and anti-HBs
- c. HBsAg and anti-HBs positivity**
- d. HBsAg and HBeAg positivity
- e. Increased transaminases and HBs

67) One of the followings is INCORRECT about Rifampicin?

- a. Rifampicin is an effective antibiotic against gram-positive bacteria including mycobacteria.
- b. During concurrent treatment with prednisolone, rifampicin increased the plasma clearance of prednisolone.
- c. Concomitant administration of rifampicin and oral contraceptives leads to failure of the antifertility effect of the latter.
- d. During concomitant use of Rifampicin and hypoglycaemic agents, we should decrease the dose of the latter.**
- e. Rifampicin can be safely used during pregnancy.

68) A 59-year-old man is evaluated for hypercalcemia. He was recently diagnosed with multiple myeloma. He does not have anorexia, nausea, constipation, polydipsia, polyuria, or confusion. Medical history is otherwise unremarkable, and he takes no medications. On physical examination, temperature is 36.4 °C (97.5 °F), blood pressure is 134/80 mm Hg, pulse rate is 80/min, and respiration rate is 12/min. BMI is 30. The remainder of his physical examination is normal, and no weakness is noted on neurologic examination. Serum calcium level is 10.8 mg/dL (2.7 mmol/L). Which of the following is the most appropriate next laboratory test for evaluating this patient's hypercalcemia?

- a. 1,25-Dihydroxyvitamin D level
- b. Ionized calcium level**
- c. Parathyroid hormone level
- d. Parathyroid hormone-related protein level
- e. Anti-Parathyroid hormone antibodies

69) In temporal arteritis ONE of the followings is not true:

Select one:

- a. Typically affects young age groups.**
- b. Headache and jaw claudication are common symptoms.
- c. Can lead to blindness.
- d. Temporal artery biopsy usually shows characteristic pattern.
- e. Can present with fever and high ESR.

70) An obese 45-year-old male, with known hyperlipidemia and peripheral vascular disease, presents with a right parietal ischemic stroke. He reports trouble sleeping and laying flat at night that began after a flu-like illness 3 months ago, and reports some exertional dyspnea. Which of the following investigations are most likely to find the cause of the stroke? Select one:

- a. Echocardiogram**
- b. CT brain with angiography
- c. Magnetic resonance imaging / Magnetic resonance angiography (MRI/ MRA)
- d. Doppler of carotid vessels
- e. CT Chest with contrast

71) A 27-year-old woman is investigated for bloody diarrhoea. This started around six weeks ago. She is currently passing 3-4 loose motions a day which normally contain a small amount of blood. Other than feeling lethargic she remains systemically well with no fever or significant abdominal pain. A colonoscopy is performed which shows inflammatory changes in the ascending colon consistent with ulcerative colitis. Bloods show the following: Hb 14.2 g/dl Platelets $323 \times 10^9/l$ WBC $8.1 \times 10^9/l$ CRP 22 mg/l. What is the most appropriate first-line medication to induce remission?

Select one:

- a. Rectal aminosalicylate
- b. Oral aminosalicylate**
- c. Oral prednisolone
- d. intravenous corticosteroids
- e. Rectal corticosteroids

72) A 44-year-old woman presents with recurrent fever, pallor and shortness of breath. She has noticed a petechial rash on her skin. A blood test revealed pancytopenia. During examination you palpate a large spleen. Which one of the following investigations would differentiate between hypersplenism and aplastic anemia?

Select one:

- a. Reticulocytes count.**
- b. Direct Coomb's test.
- c. RBC G6PD enzyme level.
- d. Serum protein electrophoresis.
- e. Osmotic fragility test.

73) A 48-year-old woman returns for a follow-up visit for management of type 1 diabetes mellitus. She reports doing well since the last visit. Overall, she believes that most of her blood glucose levels are at goal, but is concerned about occasional episodes of hyperglycemia occurring in the morning before breakfast. She eats a bedtime snack every night that is not covered with mealtime insulin. Review of her blood glucose log demonstrates morning fasting blood glucose values from 80 to 190 mg/dL (4.4-10.5 mmol/L). Her other premeal and bedtime values range from 100 to 120 mg/dL (5.5-6.7 mmol/L). She exercises two to three times per week in the evening. Medical history is significant for hypertension and hyperlipidemia. Medications are insulin glargine, insulin lispro, ramipril, simvastatin, and aspirin. On physical examination, blood pressure is 130/72 mm Hg and pulse rate is 67/min. BMI is 24. The remainder of the examination is unremarkable. Results of laboratory studies show a hemoglobin A1c level of 6.9% and serum creatinine level of 1.0 mg/dL (88.4 $\mu\text{mol/L}$). Serum electrolytes are normal. Which of the following is the most appropriate management of this patient's occasional fasting hyperglycemia?

Select one:

- a. Add insulin lispro at bedtime
- b. Add metformin
- c. Increase insulin glargine dose
- d. Measure 3 AM blood glucose level**
- e. Continue current regimen

74) The most common class of immunoglobulin made by malignant cells in multiple myeloma is: Select one:

- a. IgG.**
- b. IgA.
- c. IgM.
- d. IgD
- e. IgE.

75) A 25-year-old woman is evaluated in the emergency department for a 3-day history of nausea with nonradiating epigastric burning. She also has had a 24-hour history of frequent black stools, fatigue, and lightheadedness. For the past 5 days she has been taking ibuprofen for migraine. She takes no other medications. There is no history of gastrointestinal bleeding, alcoholism, chronic liver disease, or bleeding disorders. On physical examination, temperature is 37.0 °C (98.6 °F), blood pressure is 110/65 mm Hg supine and 92/53 mm Hg standing, pulse rate is 85/min supine and 115/min standing, and respiration rate is 14/min. Abdominal

examination reveals epigastric tenderness without guarding or rebound. Rectal examination is positive for melena. Laboratory studies reveal a hemoglobin level of 9.2 g/dL (92 g/L) and a blood urea nitrogen level of 28 mg/dL (10 mmol/L); all other tests are normal. After intravenous fluid resuscitation, upper endoscopy is performed and reveals a 1.5-cm duodenal bulb ulcer with a central, nonbleeding visible vessel. Which of the following is the most appropriate management?

- a. Endoscopic therapy
- b. Immediate surgical intervention
- c. Octreotide infusion
- d. Observation

e. IV PPI's

76) A 59-year-old man is evaluated during a follow-up visit for a 6-year history of end-stage kidney disease and a 20-year history of hypertension. He had a kidney transplant 3 months ago with an unremarkable postoperative course. Current medications are tacrolimus, mycophenolate mofetil, nifedipine, losartan, valganciclovir, and prednisone, 5 mg/d. On physical examination, temperature is 37.0 °C (98.6 °F), blood pressure is 165/95 mm Hg, pulse rate is 86/min, and respiration rate is 14/min. BMI is 28. There are no oral lesions. There is no jugular venous distention. Heart sounds are normal. The lungs are clear. The abdomen is nontender with no bruits. There is a well-healed scar in the right lower abdomen over the kidney allograft. There is 1+ peripheral edema. Laboratory studies are notable for a serum creatinine level of 1.0 mg/dL (88.4 pmol/L). Monitoring for which of the following complications is indicated in this patient? Select one:

- a. Hyperphosphatemia
- b. Hyperthyroidism
- c. Hypoparathyroidism
- d. New-onset diabetes mellitus and dyslipidemia
- e. Hyperparathyroidism

77) Which of the following statements about the diagnosis of tuberculosis is INCORRECT

- a. Single morning sputum sample is enough for Ziel-Nelseenstaining.
- b. PCR for acid-fast bacilli cannot differentiate between living & dead bacilli
- c. Positive tuberculin skin test indicates tuberculousinfection with or without active tuberculosis.
- d. The presence of pulmonary cavity in chest X-ray is one of the signs of active tuberculosis.
- e. Lowenstein-Jensen medium culture for acid-fast bacilli (AFB) can distinguish Drug-susceptible from drug-resistant strains.

78) A 55-year-old man is admitted to the Emergency Department with 'tearing' chest pain radiating through to his back. Examination reveals a pulse of 96 / min regular, blood pressure of 130/ 85 mmHg and oxygen saturations of 97% on room air. A chest x -ray shows mediastinal widening.

A CT shows dissection of the ascending aorta. What is the most suitable initial management? Select one:

- a. IV sodium nitroprusside
- b. Oral verapamil
- c. Observe only
- d. IV labetalol
- e. Surgical repair

79) Which one of the following is true regarding bacterial exotoxins?

Select one:

- a. They are mainly produced by Gram positive bacteria
- b. Cholera toxin inhibits cAMP release in intestinal cells
- c. Diphtheria toxin necrosis is limited to the pharynx, nasopharynx and tonsils
- d. Staph, aureus exotoxins are not known to cause gastroenteritis
- e. 'Lockjaw' seen in tetanus is secondary to blockade of the neuromuscular junction by Botulinus Toxin

80) A 74-year-old woman is evaluated in the emergency department for several hours of altered mental status. She is from out-of-state and is visiting with relatives. One of her young relatives was recently ill with gastrointestinal symptoms. The patient developed anorexia 3 days ago and vomiting 2 days ago. She has been unable to tolerate any liquid or solid foods for the last 24 hours. Medical history is significant for type 2 diabetes mellitus, hypertension, hyperlipidemia, and hypothyroidism. Medications are aspirin, lisinopril, glimepiride, l-thyroxine, and atorvastatin. Her last dose of medications was 48 hours ago. On physical examination, her temperature is 37.5 °C (99.5 °F), blood pressure is 115/65 mm Hg, and pulse rate is 95/min. She is arousable but confused. Mucous membranes are dry. Her neck is supple. Cardiac examination reveals no murmurs. Her chest is clear to auscultation. Bowel sounds are present, and mild tenderness to palpation is noted throughout the abdomen. There is no rebound or guarding. There are no focal neurologic deficits. Laboratory studies are pending. Which of the following is the most likely cause of this patient's altered mental status?

Select one:

- a. Cerebrovascular accident
- b. Hypoglycemia
- c. Hypothyroidism
- d. Statin toxicity
- e. Dehydration related hypotension and hypoperfusion**

81) A 65-year-old man presents with progressive dyspnea and dry cough for 2 years. He is diagnosed as idiopathic pulmonary fibrosis. One of the following medications has **LIMITED** role in the treatment regarding this radiologic stage?

Select one:

- a. Heart lung transplantation.
- b. Oxygen therapy
- c. Pulmonary rehabilitation
- d. High dose corticosteroids**
- e. Anti-oxidants and anti-fibrotics

82) A 29-year-old man is evaluated during a routine examination. His medical history is significant for ulcerative colitis involving the entire colon, which was diagnosed 4 years ago. His symptoms responded to therapy with mesalamine and have remained in remission on this medication. His family history is significant for a maternal uncle who died of colon cancer at the age of 50 years. Physical examination is unremarkable. Serum alkaline phosphatase, alanine aminotransferase, and aspartate aminotransferase levels are normal. Which of the following is the most appropriate interval at which to perform colonoscopy with biopsies in this patient? Select one:

- a. Begin now and repeat annually
- b. Begin in 4 years and repeat every 1 to 2 years**
- c. Begin in 4 years and repeat every 10 years
- d. Begin in at age 50 and repeat every 10 years
- e. Begin at age 40 years and repeat every 5 years

83) A 76-year-old man with a history of uncontrolled diabetes presents for review. He has been unable to mobilize for 3 days due to a hot and swollen left knee associated with fever. Aspiration of the knee reveals that the synovial fluid is purulent and contains 100,000 white blood cells per cubic millimeter. Which one of the following is the most appropriate next intervention in this patient?

- a. Diclofenac injections.
- b. Drainage of the joint pain and Intravenous antibiotics.**
- c. Physiotherapy.
- d. Intravenous antibiotics.
- e. Drainage of the joint and oral codeine.

84) A 32-year-old female patient comes with tight skin and inability to open the mouth as usual with skin lesions over the face. She complains of progressive SOB. On examination the skin was thick with a mouth opening of 2 fingers with only. Auscultation revealed loud P2. Chest examination was clear with no crackles. The most likely cause of her shortness of breath is: Select one:

- a. Interstitial lung disease.
- b. Psychological
- c. Anemia
- d. Arrhythmias
- e. Pulmonary hypertension.**

85) One of the following criteria about Acute Respiratory Distress Syndrome (ARDS) is INCORRECT?

- a. Patients with an initial PaO₂/FiO₂ less than 300 mm Hg who were receiving continuous positive airway pressure (CPAP) of at least 5 cm H₂O.
- b. Respiratory failure should have developed within 1 week of a known clinical insult.
- c. Respiratory failure should not be fully explained by cardiac failure.
- d. Chest imaging should include bilateral opacities not fully explained by effusions, atelectasis, or nodules.
- e. Lower-tidal-volume ventilatory strategy and prone position have no role in treatment.

86) A 72-year-old woman is evaluated in the emergency department for progressive chest pain that began 2 hours ago. She has not had recent surgery or stroke. She takes amlodipine for hypertension. On physical examination, blood pressure is 154/88 mm Hg, and pulse rate is 88/min. Cardiac and pulmonary examinations are normal. Initial electrocardiogram shows 2-mm ST-segment elevation in leads V1 through V5 with reciprocal ST-segment depression in leads II, III, and aVF. Chest radiograph shows no cardiomegaly and no evidence of pulmonary edema. The patient is given aspirin, Clopidogrel, unfractionated heparin, and a β -blocker. Because the nearest hospital with primary percutaneous coronary intervention capabilities is more than 120 minutes away, she is also given a bolus dose of tenecteplase. Thirty minutes later, the patient's blood pressure has dropped to 85/58 mm Hg. Her chest pain persists, and she rates the pain as 8 out of 10. Pulmonary crackles are auscultated to the scapulae. Electrocardiogram shows 3-mm ST-segment elevation in leads V1 through V5 with reciprocal ST-segment depression in leads II, III, and aVF. Which of the following is the most appropriate management?

- a. Continued medical therapy
- b. Glycoprotein IIb/IIIa inhibitor
- c. Repeat tenecteplase
- d. Transfer for emergency percutaneous coronary intervention
- e. Urgent CABG

87) In lobar pneumonia, which is NOT true?

- a. Trachea deviated to the opposite side
- b. dullness on percussion
- c. Bronchial breath sound is heard
- d. Presence of whispering pectoriloquy
- e. Late inspiratory crepitations are present

88) A 57-year-old man comes to the emergency department with severe, central, crushing chest pain. By the time he arrives on the medical admissions unit he is pain-free. He had a myocardial infarction (MI) two years ago; additionally he has type 2 diabetes mellitus, hypertension and hypercholesterolaemia. His brother died of a MI at a similar age. His repeat prescriptions include aspirin, metformin, ramipril, amlodipine and atorvastatin. On examination he looks pale and sweaty. On auscultation he has vesicular breathing and normal heart sounds. He is overweight. His oxygen saturations are 98% on air; respiratory rate 14 breaths per minute; blood pressure 150/88 mmHg, heart rate 90 beats per minute. His blood sugar (BM) is 22.5. There are no ischemic changes on his ECG; however a 12 hour troponin is elevated. The admitting doctor has already given aspirin, clopidogrel and heparin. What is the next step in the management of this patient?

- a. IV GTN infusion
- b. 15L oxygen via non-rebreather mask
- c. Primary PCI within 4 hours
- d. Additional dose metformin
- e. Angiography within 96 hours

89) A 55-year-old female presented with 3-month history of difficulty climbing stairs. She also described nonspecific pain all over her joints. Several analgesics have been tried, but her symptoms are not improving. On examination there is slight tenderness on the arms and legs. Rest of the examination is normal. X-ray of the lower limbs shows defective mineralization, with 'Looser's zone'. Biochemistry showed low calcium, phosphate, vitamin D level and raised alkaline phosphatase. The most likely diagnosis is:

- a. Fibromyalgia
- b. Osteoarthritis.
- c. Osteoporosis.
- d. Osteomalacia.
- e. Polymyositis

90) A 58-year-old man presents with breathlessness and chest discomfort. He has diet controlled diabetes, hypertension and hyperlipidaemia. He has a weak rapid, regular pulse of 160bpm, blood pressure is 80/50mmHg, he is cold peripherally and crepitations are heard bibasally on auscultation of the chest. An ECG shows a regular broad complex tachycardia. What is the best initial management of this arrhythmia?

- a. Adenosine
- b. Amiodarone
- c. Diltiazem
- d. **Electrical cardioversion**
- e. Vagal manoeuvres

91) One of the following is false in iron deficiency anemia.

- a. Low serum ferritin.
- b. High soluble transferrin receptors.
- c. Low serum iron.
- d. **Low Red Cell Distribution Width(RDW).**
- e. Increased total iron binding capacity.

92) Pulsus paradoxus can be described by which of the following statements?

- a. Pulsus paradoxus can be seen in patients with acute asthma exacerbations in which the negative intrathoracic pressure decreases afterload of the heart with a resultant increase in systolic pressure during inspiration.
- b. Pulsus paradoxus has not been described in patients with superior vena cava syndrome.
- c. Pulsus paradoxus describes the finding of diminished pulses during inspiration, when the peripheral pulse is normally augmented during inspiration.
- d. A drop in systolic pressure during inspiration of more than 5 mmHg indicates the presence of pulsus paradoxus.
- e. **Pulsus paradoxus occurs during cardiac tamponade when there is an exaggeration of the normal decrease in the systolic blood pressure**

93) A 42-year-old woman is evaluated during an annual physical examination. She feels well. She has no pertinent personal or family medical history, and she takes no medications. On physical examination, vital signs are normal. Palpation of the thyroid reveals a possible nodule in the right lobe that is not mobile with swallowing. The remainder of the gland is unremarkable, and there is no palpable cervical lymphadenopathy. Other physical examination findings are normal. Laboratory studies reveal a serum thyroid-stimulating hormone level of 1.7 pU/mL (1.7 mU/L). Ultrasound of the neck shows a right 1.5-cm hypoechoic nodule with internal microcalcifications. Which of the following is the most appropriate next step in management? Select one:

- a. CT with contrast of the neck
- b. **Fine-needle aspiration of the nodule**
- c. Lévothyroxine therapy
- d. Measurement of serum thyroglobulin level
- e. Thyroid scan with technetium

94) A 25 year old Pregnant female in the second trimester. she recently complains of dyspnea. pleuritic chest pain and left calf swelling and redness. Examination reveals a sinus tachycardia and her blood pressure is 130/80 mmHg, O₂ saturation is 95% on room air. What is the best line of treatment?

- a. Intravenous cefotaxime and oral azithromycin
- b. Intravenous heparin and warfarin
- c. **Low molecular weight heparin**
- d. Thrombolysis with tenecteplase
- e. Intravenous cefotaxime alone.

95) A 66-year-old man, heavy smoker, presents with progressive shortness of breath and chronic cough and expectoration, for the past 3 years. Chest examination reveals a barrel chest, poor air entry bilaterally and wheezes. What is the gold standard for diagnosis of this case? Select one:

- a. High resolution Chest CT
- b. Sputum culture
- c. Bronchoscopy biopsy
- d. **Spirometry**
- e. Arterial blood gases (ABG)

96) A 43-year-old woman is evaluated for a 1-month history of chest discomfort. She states that she experiences a vague pressurelike sensation in her chest that occurs intermittently, with each episode lasting less than 5 minutes. She has had approximately two episodes each week, and several have seemed to be associated with exertion but also appear to have resolved after taking antacids. Her medical history is significant for hypertension. Her only medication is lisinopril. She is a current smoker with a 15- pack-year history. Family history is negative for coronary artery disease. On physical examination, the patient is afebrile, blood pressure is 132/78 mm Hg, pulse rate is 85/min, and respiration rate is 12/min. BMI is 32. Cardiopulmonary examination is unremarkable, as is the remainder of her physical examination. An electrocardiogram shows sinus rhythm, normal PR and QRS intervals, and no ST-segment or T-wave abnormalities or Q waves. An exercise electrocardiographic treadmill test is performed. The patient is able to exercise for 4 minutes to a heart rate of 82% of the maximum predicted and the study is discontinued because of fatigue. Testing did not reproduce her symptoms, and there were no significant electrocardiographic changes with exercise. Which of the following is the most appropriate next step in management?

Select one:

- a. Cardiac catheterization
- b. Pharmacologic stress testing**
- c. Switch lisinopril to metoprolol
- d. Clinical observation
- e. ECG and echocardiography

97) A 30-year-old woman is evaluated for a 2-month history of diarrhea with three to five loose stools per day. She has mild abdominal cramps, bloating, intermittent nausea, and mild anorexia that has resulted in the loss of 2.3 kg (5.0 lb). She has had no fever or blood in the stool. She works in a day care center and has not traveled recently or had exposure to antibiotics. She is otherwise healthy and takes no medications. On physical examination, temperature is 37.0 °C (98.6 °F), blood pressure is 112/74 mm Hg, and pulse rate is 70/min. The abdomen is soft with normal bowel sounds and mild distention but no tenderness. Which of the following is the most appropriate management?

Select one: السؤال واجابته من النت

- a. Colonoscopy
- c. Stool testing for ova and parasites**
- e. No further testing
- b. Stool cultures
- d. CT abdomen with contrast

98) A 66-year-old man has a history of ischemic cardiomyopathy. He undergoes right and left heart catheterization for evaluation of unexplained dyspnea on exertion and an equivocal result on noninvasive cardiac stress testing. Sample tracings from his right and left heart catheterization at rest and during exercise are shown. What abnormality is demonstrated in the pulmonary capillary wedge tracing?

Select one:

- a. Aortic stenosis
- b. Congestive heart failure
- c. Mitral regurgitation
- d. Mitral stenosis**
- e. Pulmonary arterial hypertension

99) 54-year-old female presented with a two-month history of symmetrical poly arthritis of hands and feet associated with morning stiffness more than two hours. Rheumatoid factor and Anti CCP are positive. Which one of the following is the treatment of choice?

Select one:

- a. Aspirin.
- b. Ibuprofen.
- c. Méthylprednisolone.
- d. Cyclophosphamide
- e. Methotrexate.**

100) A 72-year-old male patient is using 100 mg of aspirin because of a previous CVA. He is expected to have:
Select one:

- a. Aspirin is expected to impair excretion of uric acid.
- b. No effect on uric acid
- c. Reduces uric acid
- d. Increase chance of gout despite no change in uric acid
- e. Increases excretion of uric acid.

101) A 73 year-old man presents with progressive dyspnea on exertion over the past one year. He reports a dry cough but no wheezes. He is a non-smoker. His pulmonary function testing is as follows: Which one of the followings is a WRONG diagnosis?

Test	Pre-Bronchodilator (BD)		% Predicted
	Actual	Predicted	
FVC(L)	1.57	4.46	35
FEV, (L)	1.28	3.39	38
FEV ₁ /FVC (%)	82	76	
FRC	1.73	3.80	45
RV(L)	1.12	2.59	43
TLC(L)	2.70	6.45	42

Select one:

- a. kyphoscoliosis
- b. Idiopathic pulmonary fibrosis
- c. Pulmonary infarction
- d. Sarcoidosis
- e. Asbestosis

102) All the followings are true in active intravascular hemolysis EXCEPT.

- a. Decrease in hemoglobin.
- b. Decrease methemalbumin.
- c. Increase in lactate dehydrogenase
- d. Increase in urinary urobilinogen.
- e. Decrease in haptoglobin.

4th year 2021 - serotonin

1_ One of the following is not a complication of celiac disease

Select one:

- a, T-cell lymphoma
- b. Osteoporosis
- c. Aplastic anemia**
- d. Ulcerative jejunitis
- e Increased risk of esophageal carcinoma

2-The following statements are true regarding HOCMP except:

Select one:

- a. Non-dilated LV with systolic anterior motion of the mitral valve.
- b. Tachyarrhythmias are well tolerated in HOCM.**
- C. ischemic chest pain in HOCM is multifactorial.
- d. Patients with HOCM are usually asymptomatic.
- e. Betablockers are important in the management of HOCM.

3-The commonest cause of upper GI bleeding among the causes listed below is:

Select one:

- a. Vascular ectasia
- b. Mallory-Weiss tear
- c. Gastric adenocarcinoma
- d. Zollinger-Ellison syndrome
- e. Esophageal varices**

4-A55-year-old female comes with 2-week history of palpable skin lesions, cough and hemoptysis. Chest x-ray showed multiple cavitating lesions in both lungs. Urinalysis showed +2 proteinuria with RBC cast. The LEAST relevant investigation in this patient

Select one:

- a. Anti-GBM (Anti glomerular basement membrane) antibodies.**
- b. C-ANCA (Anti neutrophil cytoplasmic antibodies).
- c. CANA (Antinuclear antibodies).
- d. ESP (erythrocyte sedimentation rate).
- e Kidney biopsy.

5-A 47 year-old male farmer who has a 15-year history of ulcerative colitis presents to your clinic complaining of severe bloody diarrhea 10 times daily. He has lost 5 kg over the past 2 months and was brought to the ER twice in the last month for abdominal pain. His BP is 100/60 mmHg and his pulse rate is 120 beat/minute. He is only medication is mesalazine (5-ASA). What is the next step in management:

Select one:

- a. Infliximab IV
- b. Adalimumab S.C
- c. Oral corticosteroids
- d. Azathioprine (immunosuppression)**
- e IV corticosteroids

6-Which one of the following statements is NOT true in regard to polymyositis/dermatomyositis?

- a. Distal muscle weakness is characteristic.**
- b. Heliotrope rash is highly suggestive for dermatomyositis.
- c. steroid is a corner stone for treatment.
- d. Statins may cause a similar presentation.
- e. Subcutaneous calcification is a frequent manifestation in juvenile dermatomyositis.

7-if Methicillin-resistant Staphylococcus aureus (MRSA) is suspected in patients with S. aureus infection. What is the most appropriate antibiotic in their case?

Select one:

- a: Tetracycline.
- b. Erythromycin
- c Clindamycin.
- d. Vancomycin.**

8-All of the following are essential features of the metabolic syndrome, EXCEPT

Select one:

- a. Impaired glucose tolerance test
- b. High triglycerides
- c. Central obesity
- D. Hypertension
- e. Ischemic heart disease**

9_In systemic arterial hypertension. One statement is false

Select one:

- a. Kidneys regulate blood pressure by controlling intravascular volume.
- b. Cardiac complications of HTN include diastolic dysfunction and coronary artery disease.
- c. HTN is generally asymptomatic and easily diagnosed.
- d. Secondary hypertension HTN is usually familial**
- e. Hyperglycemia is a known side effect of furosemide

10_A 67 year old patient diagnosed as lobar pneumonia, in the ED. The patient has a respiratory rate of 32/min, No confusion, a systolic blood pressure of 100 mmHg and a Urea nitrogen of 9 mmol/L. which of the following is TRUE in arterial blood gases?

Select one:

- a. Hypoxemia and hypercapnia
- b. Hypoxemia and hypocapnia**
- c. Hypoxemia and normal PaCO₂
- d. Normal PaO₂ and hypercapnia
- e Normal ABG

11-Indications to use cytoreductive drug (hydroxyurea) in patient with essential thrombocythemia include all the following except:

Select one:

- a. Age under 30 years**
- b. Patient has Hypertension
- c. Patient has ischemic heart disease
- d. History of thrombosis
- e. Positive JAK-2 mutation

12-All of the following are indications for hemodialysis except one

- a. Oliguria with GFR < 60**
- b Metabolic acidosis
- d. Pulmonary edema
- e. Symptomatic uremia

13-A 45-year-old male patient presents with painless gross hematuria. He reports an URTI 2 weeks earlier. He reports a similar episode 2 years ago. BP is 130/75. Urine analysis shows RBC casts with +2 proteinuria. Creatinine is normal. IgA level is elevated. The most likely diagnosis is:

Select one:

- a. Interstitial nephritis.
- b. post-streptococcal glomerulonephritis.
- c. Urinary bladder malignancy.
- d. Ureteric stones.
- e. IgA nephropathy.**

14_ A 22 year old student is diagnosed with Grave's disease. She enquires about the long term complications of radioactive iodine, which is being considered What side effect is most likely?

Select one:

- a. Hypothyroidis
- b. Hyperthyroidism
- c. Hyperparathyroidism
- d. Thyroid malignancy
- e. Recurrent laryngeal nerve damage

15_ Huge splenomegaly is a characteristic physical sign in only One of the following.

Select one:

- a. Iron deficiency anemia.
- b. Pernicious anemia.
- c. Idiopathic (immune) thrombocytopenia.
- d. Multiple Myeloma.
- e. chronic myeloid leukemia

16_ A 17-year-old female patient presents to your clinic complaining of hair loss. She was diagnosed with celiac disease at the age of 6 years with duodenal biopsy after having frequent upper respiratory and ear infection. Deficiency of which immunoglobulin is frequently encountered in celiac disease?

Select one:

- a. IgA
- b. IgE
- c. IgM
- d. IgG
- e. Complement system

17-The most common cause of traveler's diarrhea is

Select one:

- a. Campylobacter jejuni
- b. Entamoeba histolytica
- c. enterotoxigenic Escherichia coli
- d. Giardia lamblia
- e. Vibrio cholerae

18-In mitral stenosis one of the following is true

Select one:

- a. The commonest cause is mitral annular calcification.
- b. Left ventricular dilatation indicates severe disease.
- c. Hemoptysis indicates pulmonary hypertension.
- d. Longer S2 to opening snap interval indicates severe MS.
- e. Cardiac catheterization is the gold standard for diagnosis.

19-A 33-year-old female patient reports to the outpatient clinic 6 weeks after completion of eradication therapy. She complains of epigastric pain and persistent vomiting. You conduct a urea breath test that comes back positive for H. pylori. One of the following is not a common cause of failure of eradication therap

Select one:

- a. Noncompliance
- b. Bacterial resistance
- c. Presence of complications
- d. Re-infection
- e. Heavy smoking

20-A 26-year-old woman seeks preconception counseling. She has a 3-year history of rheumatoid arthritis and she is on methotrexate, hydroxychloroquine, low dose prednisolone, and folic acid. Currently her disease is under excellent control. Which of the following is the most appropriate next step in the management?

Select one:

- a. Discontinue hydroxychloroquine
- b. Discontinue methotrexate
- c. Discontinue prednisolone?
- d. Discontinue hydroxychloroquine, methotrexate, and prednisolone
- e. Keep the treatment unchanged

21_ In heart failure, the following statements are true except:

Select one:

- a. About 10% of population worldwide suffer from heart failure after the age of 70 years.
- b. Stage D heart failure requires specialized treatment strategies.
- c. 60% of patients with NYHA class 3 die because of sudden death.
- d. The most common cause of CHF is ischemic heart disease.
- e. Important compensatory mechanism is sympathetic nervous system inhibition

22_ The best choice to start resuscitation in a patient who presents to the ER with hematemesis and melena and a blood pressure of 90/50 mmHg is

Select one:

- a. Colloids (hemaccel or gelofusine)
- b. Normal saline 0.9%⁹
- c. Dextrose 10%
- d. Packed Red Blood Cells transfusion (PRBC's)
- e. Administer vasopressors (e.g. noradrenaline)

23_ During normal cardiac cycle, all of the following are FALSE except:

Select one:

- a. Initial myocardial depolarization occurs at a site near the junction of the right atrium and inferior vena cava
- b. There is no time when all cardiac chambers are simultaneously in diastole
- c. The dicrotic notch of the aortic pressure trace coincide with the second heart sound
- d. A third heart sound is never heard
- e. The majority of coronary artery flow occurs during ventricular systole

24_ Which of the following is FALSE about Graves' disease?

Select one:

- a. Low TSH, High FT4 and/or FT3
- b. Diagnosis is mainly made by the symptoms including eye symptoms and signs
- c. Family history is common
- d. Depression and weight gain are common symptoms
- e. It is associated with autoimmune disorders

25_ All the following are causes for immune thrombocytopenia (ITP) except.

Select one:

- a. B-cell lymphocytes malignancies.
- b. HIV
- c. Heparin.
- d. Systemic lupus erythematosus.
- e. Folic acid deficiency anemia.

26_A 25-year-old woman, known to have systemic lupus erythematosus presents with edema of lower limbs. Laboratory studies showed proteinuria of 1.2 gm/24 hour. On examination she had BP 130/85 with mild pitting edema of lower limbs. Creatinine 0.9 mg/dl. Renal biopsy was arranged and showed: mesangial proliferative glomerulonephritis. The best treatment option for this patient is:

Select one:

- a. Increase dose of Hydroxychloroquine
- b. Intravenous diuretics alone.
- c. Prednisolone 1mg/kg/day.
- d. Mycophenolate mofetil.
- e. Plasmapheresis.

27_A 50 year old intravenous drug user has been referred to the medical ward. He has a chronic productive cough, loss of weight, and night sweats. His trachea is deviated to the left and there are crepitations over the apex of the left lung. CXR shows fibrosis and cavitation in the left apex. The investigation most likely to confirm the diagnosis would be?

Select one:

- a. CT chest
- b. Gastric lavage
- c. Sputum for acid and alcohol fast bacilli
- d. Mantoux test
- e. Fibreoptic bronchoscopy

28_All of the following are ECG findings in acute inferior STEMI:

- a. Sinus tachycardia
- b. Sinus bradycardia
- c. Second degree Mobits type two AV block.
- d. Junctional rhythm
- e. LBBB

29_A 15-year-old girl presents with complaints of discoloration of urine with reduced urine output for the previous 2-3 days, 1 week earlier she had a sore throat, examination reveals that her BP is 150/95, on urinalysis which of the following strongly supports the diagnosis of Glomerulonephritis

Select one:

- a. RBC more than 5/HPF
- b. Leucocytes more than 10/HPF
- c. Presence of Dysmorphic RBCs
- d. Proteinuria + on dipstick
- e. Presence of Muddy brown casts

30_COPD differs from asthma in one of the following aspects?

Select one:

- a. COPD is characterized by irreversible airway obstruction.
- b. Airway inflammation with many eosinophils renders COPD highly responsive to inhaled steroids
- c. COPD is NOT considered as a preventable or treatable disease
- d. COPD usually presented by intermittent symptoms of wheezing, chest tightness, and coughing
- e. COPD is common at any age.

31_In which of the following is more likely to have positive anti-centromere antibody.

- a. CREST syndrome
- b. Diffuse Scleroderma.
- c. Mixed Connective Tissue Disease
- d. SLE (systemic lupus erythematosus)
- e. Vasculitis.

39_ In coarctation of the aorta, all are true except:

- a. Usually congenital and maybe required
- b. Usually situated just distal to the origin of left subclavian artery
- c. Associated with increased incidence of bicuspid aortic valve
- d. It is an uncommon cause of hypertension in adults
- e. It is a cause to left to right shunting of blood

40_ In dilated cardiomyopathy one of the following is true:

- a. Pathologically in DCMP the left ventricle is dilated with significant fibrosis and normal weight.
- b. Recovery from DCMP with treatment is common.
- c. Peripartum CMP always carries poor prognosis.
- d. Endomyocardial biopsy is sensitive and specific for diagnosis.
- e. LBBB is a common finding in DCMP.

41_ A 60 year old asthmatic lady is admitted with sudden onset left sided pleuritic chest pain and shortness of breath. Arterial blood gases are as follows: pH of 7.30, pO₂ 77 mmHg, and pCO₂ 28 mmHg. Chest X-ray is normal. She is commenced on oxygen. What is the most appropriate immediate action?

- a. Chest CT scan
- b. Request D-dimer
- c. Start low molecular weight heparin and request CT pulmonary angiography
- d. Start low molecular weight heparin and request echocardiography
- e. Broad spectrum antibiotics

42_ A 14-year-old female patient comes with 2 months history of purpuric skin rash over the lower limbs with abdominal pain. Urinalysis showed +1 proteinuria. He reports URTI 2 weeks before the illness. ANA and ANCA were both negative. The most likely diagnosis is:

- a. Henock-Schonlein purpura
- b. Polyarteritis nodosa
- c. Polyangitis and granulomatosis
- d. Systemic lupus erythematosus.
- e. Drug eruptions.

43_ All the followings are true about pernicious anaemia except

- a. It is a disease of old age.
- b. Can be associated with other autoimmune diseases.
- c. Intrinsic factor antibodies are specific but not sensitive.
- d. Treated with oral vitamin B12.
- e. Parietal cell antibodies are sensitive but not specific.

44. only one of the following is true , the most common increased IG in MM is:

- a. IgG
- b. IgA
- c. IgD
- d. IgE
- e. IgM

45_ Which of the following features favors inflammatory back pain over non-inflammatory back pain?

- b. Morning stiffness
- a. Worsening with activity.
- c. Onset at > 40 years.
- d. Sudden onset
- e. Radiates to the lower limbs

46_ Which one of the following medications is well known to cause drug induced systemic lupus erythematosus:

- a. Oral contraceptive pills.
- b. Procainamide.**
- c. Prednisolone.
- d. Hydroxychloroquine.
- e. Rifampicin.

47. risk factors for CAD EXCEPT:

- a. morbid obesity
- b. DM
- c. elevated HDL**
- d, elevated LDL
- e. elevated homocysteine

48. in macrocytic megaloblastic anemia , one of the following is true

- a. hypersegmented neutrophil**
- b .high reticulocytes count
- c .increased direct bilirubin
- d .high WBCs
- e. low LDH

49. First line drug in treatment of ITP include one of the following:

- a. splenectomy
- b. prednisolone**
- c. thrombopoietin
- d. azathioprine
- e. rituximab

50. one of the following dietary restriction measures is necessary in all cirrhosis patients:

- a. low salt diet**
- b .low protein diet
- c. high fat diet
- d .low fat diet
- e. high protein diet

52_ All the followings are true in iron deficiency anemia except

- a. Low serum ferritin.
- b. High serum soluble transferrin receptors.
- c. Low serum iron.
- d. Low Red Cell Distribution Width(RDW).**
- e. Increased total iron binding capacity

53_ The following statements are correct for cardiac muscle except:

- a. Cardiac muscle differs from smooth and striated muscle because of its inherent rhythmicity
- b. Depolarization of cardiac muscle is the result of any initial calcium influx**
- c. Repolarization of cardiac muscle is the result of K efflux
- d. Calcium ions are required for electromechanical coupling of the cardiac myocyte
- e. The energy for contraction of the cardiac myocyte is provided as ATP.

54_ Treatment with thiazide diuretics may lead to all of the following except:

- a. Increase in K loss
- b. Precipitate uremia in patients with impaired renal function
- c. Precipitate gout
- d. Increase in circulating renal level
- e. Improve carbohydrate tolerance**

55_ All of the following drugs can cause hyperkalemia EXCEPT:

- a. Spironolactone
- b. Amiloride
- c. Enalapril
- d. Salbutamol
- e. Valsartan

56_ In aortic stenosis all are true except:

- a. Symptoms occur when aortic valve area is ≤ 1 cm².
- b. Pressure gradient decreases when LV systolic function declines.
- c. Grade 5/6 systolic murmur indicates severe disease.
- d. The onset of angina indicates poor prognosis.
- e. LV ejection fraction < than 50% is class 1 indication for AVR.

57_ Which of the following is NOT a Side effect of B2-agonists

Select one:

- a. tachycardia, arrhythmia,
- b. Hand tremor,
- c. headache, nervousness,
- d. hyperglycemia,
- e. hyperkalemia, and hypomagnesemia.

58_ One of the following metabolic and neurohormonal effect is seen in patients with congestive heart failure:

Select one:

- a. Compensatory reduction in basal metabolic rate
- b. Increased in circulating rennin concentration
- c. Increased responsiveness of the heart to circulate catecholamines
- d. Polycythemia
- e. Increased oxygen carrying capacity of the blood

60_ Celiac patients are instructed to report to clinical follow up every 3-6 months. What is the best way to ensure strict diet if you suspect that your patient is not compliant on the requested dietary program?

- a. Anti Endomysial antibodies
- b. Anti Tissue Transglutaminase antibodies
- c. Endoscopy with duodenal biopsy
- d. Detailed history of what he eats
- e. Anemia and it's markers (iron, vitamin B12, folate...etc)

_61 Which of the following studies is most sensitive for detecting diabetic nephropathy?

- a. Serum creatinine level
- b. Creatinine clearance
- c. Urine albumin
- d. Glucose tolerance test
- e. Ultrasonography

62_ 56 year-old man reports tingling sensation in his limbs and that his arms sometimes feel heavy. He was recently diagnosed with pulmonary tuberculosis and has been receiving isoniazid, rifampin, pyrazinamide and ethambutol for two months. Which of the following drugs would be most appropriate to treat his current symptom

- a. Folic acid
- b. vitamin B1 (thiamin)
- c. Cyanocobalamin
- d. Vitamic C
- e. pyradoxin

63_ A 73-year-old male patient known to have Diabetes and hypertension presents to your clinic with lower abdominal pain. You request blood and urine workup which shows a normal CBC but an increased WBC count in the urine with mildly elevated RBC's what management step would you suggest?

- a. Antibiotics?
- b. TV fluids
- c. Referral to urology for possible renal stones
- d. CT without contrast
- e. Referral to nephrology for renal biopsy

64_ An otherwise healthy 75-year-old man presents with severe hematochezia and moderate abdominal pain since this morning. On examination, his blood pressure is 120/78 and pulse is 100 while lying: when standing, the blood pressure is 110/76 and pulse is 136. His Hb is 12. What is the most likely cause of bleeding?

- a. Diverticular bleed
- b. Duodenal ulcer
- c. inflammatory bowel disease
- d. Esophageal varices
- e. Mallory-Weiss tear

65_ Which of the following is NOT a sign of lung collapse?

- a. Physical examination reveals a dull note on percussion
- b. Bronchial breathing sounds over the affected area.
- c. on chest x-ray, the atelectatic section of the lung appears opaque
- d. On chest x-ray, an elevated diaphragm and mediastinal shift to the affected side
- e. Chest retraction by inspection at the same affected side

66_ A 50 year old woman presents with pleuritic chest pain and breathlessness that become gradually worse over a few weeks. After physical examination and chest x-ray, she is found to have a large left sided pleural effusion. Which of the following diseases is LEAST likely to cause this type of pleural effusion?

- a. Community acquired pneumonia
- b. Pulmonary embolism
- c. Left sided heart failure
- d. Bronchogenic carcinoma
- e. Pulmonary tuberculosis

67_ A 46 years old woman with persistent asthma comes to the emergency department with Tachycardia 120 b/min Tachypnea 28 breaths/min she cannot complete one sentence with Bilateral generalized inspiratory and expiratory rhonchi. Which of the following drugs is NOT used in this situation?

- a. Leukotriene modifiers
- b. Nebulized salbutamol
- c. Systemic Corticosteroids
- d. Nebulized ipratropium bromide
- e. intravenous magnesium

68_ One of the following statements is considered WRONG about massive hemoptysis?

- a. Coughing of fresh blood about 600 ml over a 24-h period.
- b. Coughing of 150 ml of fresh blood per time
- c. Coughing of 80 ml of fresh blood per time
- d. It is considered life-threatening hemoptysis with increased patient mortality.
- e. Post-pulmonary tuberculosis complications are of its common causes.

69_ The most common cause of acute tubular necrosis is:

- a. Aminoglycoside antibiotics
- b. Rhabdomyolysis
- c. Renal artery stenosis
- d. Ischemia
- e. Renal artery thrombosis

71_ In pulmonary hypertension. One of the following is false:

- a PHTN starts when pulmonary artery pressure exceeds 60 mmHg at rest.
- b. Elevated pulmonary artery pressure leads to decrease PO₂ and constriction of pulmonary arteries.
- c Polycythemia and pulmonary embolism are known complications.
- d COPD and lung fibrosis are common causes of the disease.
- e. High altitude climbing without first acclimated results in pulmonary HTN.

72_ All of the following features are seen in Cushing's syndrome except one

- a. Hyperglycemia
- b. Hyponatremia
- c. Hypokalemia
- d. Hypocalcemia
- e. Central obesity

73- Primary causes of hypoadrenalism include all of the following except

Select one:

- a. Addison's disease
- b Hypopituitarism
- c. intra-adrenal hemorrhage
- d. Congenital adrenal hypoplasia
- e Tuberculosis affecting the adrenal glands

74_ A 35-year-old man presented with severe pain and swelling of the right 1st metatarsophalangeal joint. Aspirate of the joint revealed intracellular, needle shaped, negatively birefringent crystals. Which one of the following statements is correct regarding the underlying disorder?

Select one:

- a. There is a strong female predominance in the reproductive age.
- b. The most common presentation is acute polyarthritis.
- c. Prevalence is around 10% of the population
- d. Renal handling of uric acid is abnormal in the vast majority of patients.
- e. Serum urate concentration is usually high during the acute attacks.

75_ One of the following is a suitable regimen to eradicate H. pylori in a 25-year-old female patient that presented to you with epigastric pain, nausea, and a positive H. pylori stool antigen test.

Select one:

- a Amoxicillin, clarithromycin and lansoprazole for 14 days
- b. Lansoprazole alone for 30 days
- c Amoxicillin and lansoprazole for 21 days!
- d. Clarithromycin and lansoprazole for 21 days
- e Omeprazole, amoxicillin and metronidazole for 5 days

76- In mitral regurgitation. All of the following are true except:

- a. Mild MR is seen in 80% of normal population.
- b. The commonest cause of acute MR is acute MI.
- c. Tachycardia in acute MR is harmful and beta blockers should be used to improve prognosis.
- d. Myxomatous degeneration is the commonest cause for chronic MR.
- e. Both right atrium and left atrium are dilated in chronic MR.

77- Regarding the clinical features of celiac disease. One is false

- a. Can be diagnosed after the age of 60
- b. Can appear in infancy upon weaning from milk to solid foods
- c. Has a peak of incidence in the fifth decade
- d. Patients can be asymptomatic and present only with laboratory abnormalities
- e. Mouth ulcers and angular stomatitis are indicators of very severe disease

78-All of the following are indications for the use of insulin instead of oral hypoglycemic agents except one

Select one:

- a. Diabetic retinopathy
- b. Diabetic nephropathy
- c. Diabetic foot
- d. A 46-year-old male with HbA1C 10.5% despite 2 years of treatment with oral agents
- e. A 40-year-old female newly diagnosed type 2 DM with no other medical illness

79-Positive JAK 2 mutation characteristically occurs in only One of the following:

- a. Folic acid deficiency anaemia due to celiac disease.
- b. Pernicious anemia.
- c. Hodgkin's diseases
- d. Essential thrombocytosis.
- e. Multiple Myeloma.

80-One of the following is true in hepatitis C infection.

Select one:

- a. Hepatitis C vaccine is usually given to medical staff
- b. HEV DNA testing is standard for viral replication measurement
- c Cirrhosis develops in 85% of those patients
- d. It is associated with polyarteritis nodosa (PAN)
- e Patients who already reached cirrhosis should be treated for hepatitis c infection

81-One of the following is not a feature of Addison's disease

Select one:

- a. Hyperpigmentation
- b. Eosinophilia
- C. Hypotension
- d. Hyperglycemia
- e Depression

82-Which one of the followings statements is correct about patients with SLE:

Select one:

- a. ANA (Antinuclear antibodies) is positive in almost all patients.
- b. Hydroxychloroquine is an enough treatment for discoid lesions on the face.
- c. Renal involvement occurs in 90% of patients.
- d. Arthritis is usually erosive and deforming.
- e. Psychosis is always a manifestation of CNS involvement.

83-Myxoedema coma is NOT characterized by?

Select one

- a. Hypotension
- b. Brachycardia
- d. Typel respiratory failure
- e Typell respiratory failure

84-The type of endocarditis most commonly found in patients who are intravenous drug abusers is?

- a. Staphylococcus aureus infection of the tricuspid valve
- b. S.aureus infection of the mitral valve
- c Haemolytic streptococcal infection of the tricuspid valve
- d. Hemolytic streptococcal infection of the mitral valve
- e. Pseudomonas aeruginosa infection of the pulmonic valve

86-A 66-year-old male patient is brought by paramedics to the emergency department. He complains of fatigue, abdominal discomfort and lower limb swelling. Laboratory investigation shows a low hemoglobin level and thrombocytopenia. He was diagnosed 6 months ago with liver cirrhosis and was admitted twice since then for the treatment of hepatic encephalopathy. All of the following are important measures when it comes to assessing this patient's mortality except one:

Select one:

- a. INR
- b. Severity of ascitis
- c. Severity of jaundice
- d. Bilirubin levels
- e Severity of encephalopathy

87-The disease that is most strongly associated with H. pylori infection is

Select one:

- a Gastric ulcers
- b. Zollinger-ellison syndrome
- c.MALT-ymphoma
- d. Duodenal ulcer
- e.Gastric adenocarcinoma

88-The natural history of arthritis in patients suffering from rheumatoid arthritis with no regular treat

Select one:

- a. Progressive
- b. Intermittent
- c. Migratory
- d. Regressive
- e Stable with occasional exacerbation

89-All of the following are true in hepatitis A infection, except:

Select one:

- a. Doesn't lead to cirrhosis
- b. Creates no risk of hepatocellular carcinoma
- c. Transmitted feco orally 4 weeks before the appearance of symptoms
- d. HAV particles can be demonstrated in feces by electron microscopy
- e 1-2 weeks after the onset of the viremic phase jaundice appears

90-A 22-year-old female is evaluated for a 2-year history of recurrent painful oral and genital ulcers. One of the following is the least relevant in her history?

Select one:

- a.Painful red eye
- b Red indurated sin lesions.
- c.History of hemoptysis
- e.Pantul swollen jeft lower limb

ollege

91.18 year old patient presents with periorbital edema, tea coloured urine, with past history of sore throat 3 week ago, the most likely diagnosis is?

Select one:

- a. Nephritic syndrome
- b. UTI
- c. Acute tubulointerstitial nephritis
- d. Minimal change glomerulonephritis
- e. Post streptococcal glomerulonephritis

92-What test is typically used for the confirmation of Covid-19 infection?

Select one:

- a. Deep nasal swab for bacterial load
- b. Viral load by polymerase chain reaction**
- c. Viral load by ELISA
- d. Viral cultures
- e. Serology for anti SARS COV 2 antibodies

93.A 30-year-old man is evaluated for a 6-month history of pain and swelling in the right ankle. History is also significant for a 3 year history of intermittent left eye uveitis On physical examination there is tenderness over the sacroiliac joints. Which of the following is the most appropriate test to perform to reach a diagnosis?

Select one:

- a. Anti-cyclic citrullinated peptide antibody assay
- b. Anti-neutrophil cytoplasmic antibody assay
- c. Antinuclear antibody assay
- d. HLA-B 27 testing**
- e. Erythrocyte sedimentation rate

94_ Which of the following is NOT a characteristic chest X-ray finding in a patient with sarcoidosis?

Select one:

- a. Bilateral reticular abnormality with honeycombing
- b. Bilateral hilar lymphadenopathy
- c. bilateral Patchy infiltrates
- d. Cardiomegaly**
- e. Pleural effusion

95-A 25-year-old male patient with no previous medical illnesses, presented with 2-day history off right knee pain, swelling, and severe limitation of movement. He gave history of fever, chills, and was not able to attend his work.

One of the following is correct

Select one

- a. Streptococcus pyogenes is the most likely causative microorganism.
- b joint drainage is a very crucial step in the management.**
- c. The presence of rash and tenosynovitis should direct evaluation to the possibility of non-gonococcal arthritis
- d. joint aspiration is needed only at diagnosis.
- e. Treatment should include antibiotics to cover both Gram positive and Gram-negative organisms

96-One of the following is false in Non Hodgkins lymphoma:

Select one:

- a. Disease of old age group
- b. Lymphocytes are of B and T cells.
- c. High grade type has a cure treatment.
- d. Low grade type runs a very short and aggressive course.**
- e. May cause immune thrombocytopenia.

97-One of the following is considered a stage 4 chronic kidney disease in a patient who has a serum creatinine of 3.2 mg/dL

Select one:

- a. GFR 15
- b. GFR 25**
- c. GFR 40
- d. GFR 60
- e. GFR 90

99-Philadelphia chromosome is a characteristic finding in one of the following.

Select one:

- a. Acute myeloblastic leukemia.
- b. Chronic myeloid leukemia.**
- c Chronic lymphocytic leukemia.
- d. Hodgkins lymphoma
- e Non Hodgkins lymphomas.

100-The most common HLA subtype seen in celiac disease is:

Select one:

- a. HLA DR3
- b. HLA DR4
- c. HLA DQ2**
- d. HLA DQ8
- e. HLA B27

1- Which of the following is not associated with thyroid disease?

- a. Dermatitis herpetiformis
- b. Urticaria
- c. Porphyria cutaneatarda**
- d. Vitiligo
- e. Alopecia areata

2 - Radiofemoral delay present in one of the following condition?

- a. In Angina pectoris
- b. Coarctation of the aorta**
- c. Renal artery stenosis
- d. Heart failure
- e. secondary hypertension**

3 - A patient presents with a decreased level of consciousness and visual difficulties. Bloodwork reveals an anion gap of 22 and an osmolar gap of 24. Which of the following is most likely responsible?

- a. Ethanol
- b. Salicylates
- c. Renal tubular acidosis type I
- d. Methanol**
- e. Diabetic ketoacidosis

4 - congestive heart failure includes all of the following except ?

- a. Jugular venous distention
- b. S3
- c. Inspiratory rales
- d. Enlarged liver
- e. Splenomegally**

5 - At what CD4 count are HIV patients at increased risk of developing PCP?

- a. CD4 count $>500 \times 10^6$
- b. CD4 count $200-499 \times 10^6$
- c. CD4 count $<200 \times 10^6$**
- d. CD4 count $< 500 \times 10^6$
- e. CD4 count $<100 \times 10^6$

6 - Which finding is not frequently found in Chronic Myelogenous Leukemia (CML)?

- a. Elevated WBCs
- b. Elevated vitamin B12 level
- c. Elevated LDH
- d. Translocation between chromosomes 9 and 14**
- e. Increased uric acid level

7 - Examination of ascitis all are true except?

- a. Presence of fluid thrill
- b. Presence of percussion dullness
- c. Treatment needs lasix and aldactone
- d. Presence of flapping tremors
- e. Ballotment can be present**

8 - All of the following can inhibit the absorption of ingested non-heme iron except?

a. Alcohol

- b. Achlorhydria
- c. Phosphate (as found in milk)
- d. Phytates (as found in cereals)
- e. Antacids

9 - The most significant cause of morbidity in the elderly?

a. Arthritis

b. Dementia

c. Heart disease

d. Stroke

e. Hearing impairment

10 - Which of the following is not an age-related change?

a. Impaired myocardial diastolic dysfunction

b. Increased gastric acid secretion

c. Decreased drug clearance

d. Increased nocturnal sodium and fluid excretion

e. Decreased baroreflex sensitivity

11 - Major manifestations of acute rheumatic fever include all of the following except?

a. Arthralgia

b. Subcutaneous nodules

c. Carditis

d. Chorea

e. Erythema marginatum

12 - Strongyloides spp. is transmitted to humans by?

a. Ingestion of infective eggs

b. Ingestion of cysts

c. Ingestion of animal tissue that contains the larva

d. Penetration of the skin by infective larva

e. Ingestion of adult form

13 - In renovascular hypertension the following statements are true except ?

a. Mechanism of hypertension is increased renin levels

b. Etiology is fibromuscular dysplasia or atherosclerosis

c. Onset < 30 years and > 55years without family history or recent onset

d. Increase in vanilmandilic acid (VMA)

e. Recurrent pulmonary oedema is a clue for diagnosis

14 - Diagnosis of acute symptomatic pulmonary embolism can be excluded when which of the following is normal?

a. Chest x-ray

b. Ventilation-perfusion lung scan

c. Bilateral leg venograms

d. PaO₂ and A-a O₂ gradient

e. CT scan of the pulmonary arteries

15 - the causative organism in rheumatic fever is?

a. Echo virus

b. B Haemolytic Streptococcus group A

c. Streptococcus viridians

d. E coli

e. Staph aureus

16 - Which of the following are not consistent with primary(spontaneous) bacterial peritonitis?

- a. Abdominal discomfort and fever
- b. Ascitic fluid neutrophil count of $> 250 \times 10^6$ cells/L
- c. Ascitic fluid WBC count of $> 500 \times 10^6$ cells /L
- d. Multiple organisms on culture and sensitivity of ascitic fluid**
- e. Deterioration of clinical case

17 - Entamoeba histolytica is transmitted to humans by?

- a. Ingestion of infective eggs
- b. Ingestion of cysts**
- c. Ingestion of animal tissue that contains the larva
- d. Penetration of the skin by infective larva
- e. Ingestion of adult form

18 - Schistocytes on blood film examination are unlikely to be seen in which of the following?

- a. Thrombotic thrombocytopenia purpura (TTP)
- b. Thalassemia**
- c. Vasculitis
- d. Glomerulonephritis
- e. Hemolytic uremic syndrome

19 - The biosynthesis of fungal ergosterol is inhibited by?

- a. Amphotericin B
- b. Griseofulvin
- c. Flucytosine
- d. Nystatin
- e. Ketoconazole**

20 - All are true in mitral regurgitation except?

- a. Pansystolic murmur at the apical area
- b. Transmitted to axilla
- c. The murmur may be short ESM**
- d. Apex is deviated laterally and downwards
- e. Is common in dilated cardiomyopathy

21 - Diastolic Murmur are all true except?

- a. Occurs after the S2
- b. It is divided into an early, mid, and late diastolic murmur
- c. The murmur of tricuspid regurgitation is a diastolic murmur**
- d. In aortic regurgitation the murmur is called early diastolic
- e. Murmur of mitral stenosis is a diastolic murmur

22 - All of the following are treatments for non-scarring alopecia except?

- a. Spironolactone
- b. Minoxidil
- c. Hair transplantation
- d. Intralesional triamcinolone**
- e. Finasteride

23 - Which of the following is true with respect to proteinuria?

- a. All proteinuria is secondary to glomerular disease with $2 \text{ g}/24 \text{ h}$ mean nephrotic syndrome
- b. Is always abnormal and indicative of serious renal disease
- c. It may be normal for an individual to have $\leq 150 \text{ mg}$ per day of proteinuria**
- d. If a patient has 1.5 g of protein in 24 h they must have tubular-interstitial disease
- e. Can be caused by prolonged fasting

24 - Which of the following is the most important justification for population screening programs for a specific disease?

- a. Early detection of the disease of interest is achieved
- b. The specificity of the screening test is high
- c. The natural history of the disease is favourably altered by early detection**
- d. Effective treatment is available
- e. The screening technology is available

25 - Testosterone?

- a. Is a steroid hormone**
- b. Acts via cell surface receptors
- c. Acts via g-protein second messengers
- d. Is manufactured through breakdown of oestradiol
- e. In the circulation mostly bound albumin

26 - Oral therapy , which of the following may cause galactorrhoea?

- a. Bromocriptine
- b. Cabergoline
- c. Spironolactone
- d. Cimetidine**
- e. Domperidone

27 - Nitroglycerin administered sublingually may contribute to the relief of myocardial ischemic pain by each of the following mechanisms except?

- a. Coronary vasodilation
- b. Decreased venous pooling resulting in increased cardiac preload**
- c. Reduced systemic vascular resistance
- d. Reduced ventricular volume
- e. Reducing resistance in the coronary arteries

28 - Consequences of immobility include which one of the following?

- a. Diarrhea
- b. Maintenance of muscle mass
- c. Urinary retention
- d. Pneumonia**
- e. Hastened wound healing

29 - All are true in Aortic stenosis except?

- a. Murmur is ejection systolic
- b. Transmitted to the carotid
- c. Second heart sound is diminished in intensity
- d. Presence of sustained apex
- e. Presence of right ventricular heave**

30 - In which of the following conditions would one not expect a Trans-Tubular Potassium Gradient greater than 4?

- a. Primary hypoaldosteronism
- b. Acute vomiting
- c. Renin-secreting tumour
- d. Unilateral renal artery stenosis
- e. Gordon syndrome**

31 - A 55 year-old woman with asthma is on systemic steroids for one year. She develops a recent right-sided pleural effusion. She feels unwell and tires easily. Aspiration reveals a turbid fluid, a high lymphocyte count, high LDH, low glucose, and a pH of 7.4. The most compatible diagnosis is?

- a. Pulmonary embolism
- b. Empyema
- c. Tuberculosis**
- d. Subphrenic abscess
- e. Pancreatitis

32 - In Systolic murmurs one of the following is true?

- a. Murmur occurs between S1 and S2**
- b. Murmur occurs after S2
- c. Murmur occurs before S1
- d. Aortic stenosis is a diastolic murmur
- e. Murmur of mitral stenosis is a systolic murmur

33 - Which of the following is a feature of Cushing's syndrome?

- a. Fibrous dysplasia
- b. Vertebral collapse**
- c. Calcium pyrophosphate arthropathy
- d. Osteomalacia
- e. Osteoarthritis

34 - In the treatment of Type I Diabetes, which of the following is true?

- a. Sulfonylureas are useful as an adjunctive therapy to insulin
- b. Most patients are adequately controlled with one type of insulin (non-mixed) only**
- c. Once diagnosed with Type I, patients must immediately be assessed for retinopathy
- d. During periods of illness or infection, patients may require additional insulin
- e. The most common initial presentation is visual disturbance

35 - The following drugs need dose adjustment in renal failure except?

Select one:

- a. Carbamazepine
- b. Erythromycin**
- c. Digoxin
- d. Acyclovir
- e. Vancomycin

36 - A 70 year-old woman presents with acute knee arthritis. Radiographs show meniscal calcification (chondrocalcinosis). Analysis of the synovial fluid reveals weakly positive birefringent rhomboid-shaped crystals. The crystals are most likely?

- a. Monosodium urate
- b. Calcium hydroxyapatite
- c. Cholesterol
- d. Calcium pyrophosphate dihydrate**
- e. Dicalcium phosphate dihydrate (Brushite)

37 - Angina pectoris all are true except?

- a. Retrosternal chest pain
- b. Comes on exertion
- c. Relieved by rest and Nitroglycerine
- d. Lasts from 5-10 min
- e. Pain increases by deep breathing and by movement**

38 - Each of the following is a correct statement about COPD except?

- a. The type of emphysema associated with smoking is usually centrilobular
- b. Clubbing is not a clinical feature
- c. Long-term oral steroids should be avoided
- d. Smoking cessation does not lead to improvement of pulmonary function
- e. The aim of supplemental O₂ therapy is to provide relief of shortness of breath**

39 - The occurrence of an illness at a rate of above that expected is called?

- a. Hyperendemic
- b. Epidemic**
- c. Endemic
- d. Enzootic
- e. Pandemic

40 - In hyperthyroidism Atrial fibrillation is best treated with?

- a. Quinidine
- b. Digitalis
- c. Digitalis and quinidine
- d. Pronesty

e. Antithyroid drugs

41 - Examples of secondary prevention would include all of the following except?

- a. Pap smear for cervical cancer
- b. Chemoprophylaxis in a recent TB converter
- c. Proctoscopy for rectal cancer

d. Immunization for Haemophilus influenzae B

- e. Mammography for breast cancer

42 - Edema, ascites , enlarged liver, increase in venous pressure suggest?

- a. Laennec's cirrhosis

b. Congestive failure

- c. Inferior vena cava obstruction
- d. Acute glomerulonephritis
- e. Aortic stenosis

43 - About the organism responsible for subacute endocarditis, one is true?

- a. Streptococcus pyogenes
- b. B haemolytic streptococcus

c. Streptococcus viridians

- d. Staphylococcus aureus
- e. H pylori

44 - Which of the following is true of Myasthenia Gravis?

- a. In patients older than 60, A. Thymic hyperplasia is a common etiology

b. Often associated with thyroid disease

- c. Antibodies that are produced against acetylcholinesterase
- d. Associated with small cell lung carcinoma
- e. Can lead to renal failure

45 - The following drugs have adverse effects on the developing fetus except?

- a. Sodium valproate
- b. Lisinopril
- c. Losartan

d. Methyldopa

- e. Warfarin

46 - Which of the following is associated with thyroid disease?

- a. Neurofibromatosis

b. Vitiligo

- c. Erythema nodosum
- d. Pemphigus vulgaris
- e. Icthyosis vulgaris

47 - After a crush injury the following features may be present except?

- a. Hypovolaemic shock

b. Polyuria

- c. Urine stick test for haemoglobin may be positive
- d. Acute renal failure may occur if creatine kinase exceeds 50,000 IU/L
- e. Urine microscopy showing casts

48 - Which of the following is false in terms of falls in the elderly?

- a. They are the most common cause of mortality due to injury
- b. Environment plays a significant role
- c. Fractures most commonly involve the humerus
- d. Age-related sensory changes make the elderly more susceptible
- e. Fear of falling contributes to self-protection immobility**

49 - In acute pyelonephritis, which of the following is most commonly associated with bacteremic spread from a distant focus?

- a. Escherichia coli
- b. Proteus sp.
- c. Staphylococcus aureus**
- d. Serratia sp.
- e. Enterococcus sp.

50 - LAD in EKG ,all are true except?

- a. In LAD the vector is between 0 and -30
- b. Maximum deflexion of QRS in lead II is negative
- c. Maximum deflexion of QRS in AVF lead is negative
- d. Maximum deflexion of lead III is negative
- e. Maximum deflexion Of lead AVF is positive**

51 - Aviral genome that does not replicate in the cytoplasm of the infected cell is?

- a. Poliovirus
- b. Rabies virus
- c. Cytomegalovirus**
- d. Rubella virus
- e. Mumps virus

52 - A 30 year-old patient with asthma complains of daily wheezing and occasional waking at night with cough and chest tightness for three weeks. His usual medication is salbutamol. The next step in management is?

- a. Add long-term theophylline
- b. Increase salbutamol
- c. Add ipratropium bromide
- d. Add beclomethasone**
- e. Discontinue salbutamol and begin prednisone and taper over 2 weeks

53 - All of the following are vitamin-K dependent proteins except?

- a. Protein C
- b. Antithrombin III**
- c. Factor IX
- d. Factor II
- e. Factor VII

54 - A 25 year-old man is admitted with a history suggesting seizures. Which of the following would not support this diagnosis?

- a. Urinary incontinence
- b. The sound of voices preceding events
- c. Drowsiness and weakness following the event
- d. Rarely occur when recumbent**
- e. Stool incontinence

55 - An elevated level of hemoglobin A2 in a patient with mild microcytic anemia suggests the diagnosis of?

- a. Alpha thalassemia
- b. Sickle trait
- c. Beta thalassemia**
- d. Hereditary spherocytosis
- e. Hereditary persistence of fetal hemoglobin

56 - A21 year old bisexual man has a 4 week history of intermittent diarrhea, urethral discharge, and pain in the right knee and left second toe. He has several oral ulcers, a clear urethral discharge, a scaly papular rash on palms and soles, onycholysis, sausage-like swelling of the left second toe, and heat and swelling of the right knee. The results of Gram stains and cultures of urethral discharge are negative. Rheumatoid factor is not present. The most likely diagnosis is?

a. Reiter's syndrome

- b. Gonococcal arthritis
- c. Behcet disease
- d. Acquired immune deficiency syndrome
- e. Psoriatic arthritis

57 - A53 year old patient presents to your office with pain and stiffness in both hands and knees of 6 months duration. All of the following findings on your physical examination may help with a diagnosis except?

- a. Joint tenderness or effusions
- b. Maculopapular rash

c. Iridocyclitis

- d. Hepatosplenomegaly
- e. Distal joint involvement

58 - A28 year old black male comes in with an asymptomatic erythematous eruption characterized by oval patches with collarette scaling. It is distributed as a "Christmas tree" pattern on the back. Father states that there was originally one lesion on the abdomen a few weeks prior. What is the most likely diagnosis?

a. Pityriasis rosea

- b. Tinea corporis
- c. Lichen planus
- d. Psoriasis
- e. Pyoderma gangrenosum

59 - Which of the following is a feature of secretory diarrhea?

- a. Small stool volume (< 1L/day)
- b. Increased stool osmotic gap
- c. Persistent diarrhea despite fasting**
- d. Blood and/or pus in stools
- e. Malodorous, often floating stools

60 - Which of the following is not a common infectious cause of acute diarrhea?

- a. Escherichia coli
- b. Shigella
- c. Norwalk virus
- d. Vibrio cholerae

e. Helicobacter pylori

61 - Which of the following would not be part of your plan for the treatment of acute ventricular fibrillation?

- a. Electrical defibrillation
- b. Lidocaine
- c. Epinephrine
- d. Bretylium

e. Manganese

62 - A58 year-old man with a past history of a parathyroidectomy for primary hyperparathyroidism is now in your office complaining of headaches worse in the AM (made worse by a small MVA he credits to a loss of peripheral vision). You plan to?

- a. Send to the Emergency Department for an immediate CT head
- b. Check his calcium to ensure there's no remaining parathyroid tissue
- c. Check for a pheochromocytoma (which you know causes H/As) because you are concerned he has MEN I syndrome
- d. Check for a homonymous hemianopia because you are worried about a pituitary tumor

e. check for a bitemporal hemianopia because you are worried about a pituitary tumor???????

63 - Which is not a feature of asbestosis?

- a. Increased risk of cancer
- b. Pleural thickening and effusion
- c. Interstitial fibrosis
- d. Obstructive pattern on pulmonary function tests**
- e. Pleural fibrosis

64 - A 18 year old patient is brought to the office because his mother is concerned he is entering puberty already. You examine him and note the beginnings of facial hair, axillary hair and Tanner stage 2 external genitalia. Choose the set of investigations you initially want to do?

- a. CBC, electrolytes, testosterone, bone age, CT head
- b. FSH, LH, testosterone, electrolytes, bone age, DHEA-S** ?????????????????????????????????????????
- c. FSH, LH, testosterone, cortisol, DHEA-S, 11-OH progesterone, bone age
- d. Electrolytes, testosterone, DHEA-S, 17-OH progesterone, cortisol, bone age
- e. CT brain, kidney function, bone densitometry

65 - All the following are true statements about viruses except?

- a. They are obligate intracellular parasites
- b. They are filterable agents
- c. They are simply organized
- d. They are devoid of enzymes**
- e. They may contain double stranded DNA

66 - Adult growth hormone deficiency is associated with all except?

- a. Reduced exercise capacity
- b. Central adiposity
- c. Spontaneous hypoglycaemia
- d. Peripheral oedema** ??????????
- e. Deranged metabolism of lipids

67 - Which of the following is true about serologic testing in SLE?

- a. A positive ANA is specific for SLE
- b. Ds-DNA level correlates with disease activity in SLE**
- c. Anti-histone antibodies are seldom positive in non-drug induced SLE
- d. The majority of patients with SLE have anti-Sm antibodies
- e. Anti-Ro antibody is specific for SLE

68 - Hemolytic anemia is characterized by all of the following except?

- a. Increased LDH
- b. Increased reticulocytosis
- c. Increased unconjugated bilirubin
- d. Increased haptoglobin**
- e. Lead poisoning

69 - The treatment of choice for thrombotic events in the antiphospholipid antibody syndrome is?

- a. Intravenous steroids
- b. High-dose oral steroids with a rapid taper
- c. Penicillamine
- d. Aspirin
- e. Warfarin**

70 - Impaired coronary flow reserve is associated with each of the following conditions except?

- a. Severe aortic stenosis
- b. Severe systemic hypertension with left ventricular hypertrophy
- c. Severe mitral stenosis in the presence of atrial fibrillation
- d. A totally occluded coronary artery but with excellent collateral supply from the contralateral coronary artery
- e. An isolated 30% diameter stenosis of a coronary artery**

71 - An 11 year old male comes in with erythematous pustules, inflamed nodules and cysts with some scarring distributed on the face predominantly. Diagnosis of acne vulgaris was given. Topical erythromycin was used for 2 weeks, several months ago, with no response. What treatment would you prescribe now?

- a. Accutane immediately
- b. Topical tretinoin
- c. Topical benzoyl peroxide
- d. Topical antibiotic other than erythromycin

e. Oral antibiotic and topical tretinoin

72 - Radiographic features of osteoarthritis of the knee include which of the following?

- a. Marginal erosions
- b. Juxta-articular osteopenia
- c. Loss of articular cartilage with narrowing of the radiologic joint space**
- d. Osteonecrosis of the medial femoral condyle
- e. High riding patella

73 - A 65 year-old male with back pain, nephrotic syndrome and anemia present to the ER. Ultrasound shows normal kidney size. His creatinine is 500. Which diagnosis best fits the scenario?

- a. Polycystic kidney disease
- b. Chronic GN
- c. Multiple myeloma**
- d. Diabetic nephropathy
- e. Analgesic abuse

74 - A 27 year-old man is brought into the ER after a bicycling accident. A car door suddenly opened in front of him, of which he smashed into and was thrown 15 feet. On examination, he is drowsy and confused. He opens his eyes when his name is called. He mumbles words that you understand but the sentences do not make sense. He moves all four limbs but does not respond to any commands. He is able to pull both hands away when pinched and squirms, when his sternum is rubbed, making no effort to stop you. What is his Glasgow Coma Scale score?

- a. 10**
- b. 11
- c. 9
- d. 8
- e. 7

75 - A 74 year-old, right-handed man presents with a past medical history of hypertension and dyslipidemia for 30 years. He is a retired banker who recently has had trouble calculating his restaurant bill. He also notices that his writing has deteriorated. On physical exam, he has difficulty naming his fingers and is confused with distinguishing left from right. The lesion is most likely in which part of the brain?

- a. Right parietal
- b. Left parietal**
- c. Left temporal
- d. Right temporal
- e. Frontal

76 - A patient complains of a non-tender mass over the thyroid region on the left side of her neck. Concerned about a thyroid disorder, you order the appropriate investigations. The results are as follows: TSH: 6.0, Free T4: 20.2, Thyroid antibodies: none, RAIU: No "hot" spots seen. The next investigation(s) you choose to do are?

- a. Watch and wait for 3-6 months
- b. FNA**
- c. Surgical biopsy
- d. Trial of L-thyroxine therapy for 6 months
- e. Start propranolol

77 - Avirus that is not inactivated by mild detergents that solubilize phospholipid membranes is?

Select one:

- a. Poliovirus**
- b. Variola virus
- c. Cowpox virus
- d. Vaccina virus
- e. Hepatitis C

78 - Psychiatric symptoms may be a presenting feature of the following disorders?

- a. Hypothyroidism
- b. Vitamin B12 deficiency
- c. Bronchial carcinoma
- d. Cushing's disease**
- e. Crohn's disease

79 - In the course of DKA, serum potassium levels?

- a. Remain unaffected
- b. Can appear normal but total body potassium may actually be low**
- c. Can appear normal but total body potassium may actually be high
- d. Will naturally be corrected by insulin administration
- e. Can't be corrected if the patient presents late

80 - Which of the following pulmonary function tests most reliably discriminates "pure" chronic bronchitis from emphysema?

- a. Total lung capacity
- b. Functional residual capacity
- c. Residual volume
- d. Single breath diffusing capacity**
- e. Flow at 50% vital capacity

81 - Which of the following is least likely to contribute to myeloma?

- a. Hypercalcemia
- b. Amyloidosis
- c. Infiltration of the kidney by myeloma cells**
- d. Hyperuricemia
- e. Intratubular light chain deposition

82 - It is unlikely to see macrocytosis in a patient with anemia in which of the following?

- a. Reticulocytosis
- b. Vitamin B12 deficiency
- c. Folate deficiency
- d. Myelodysplastic syndrome
- e. Sideroblastic anemia**

83 - A55 year-old man with a history compatible with chronic bronchitis presents to your office with shortness of breath. In the history, all of the following would be anticipated except?

- a. A20-year history of smoking
- b. Worsening of symptoms with exposure to smog
- c. Worsening of symptoms with acute respiratory infections
- d. Recurrent episodes of pleurisy**
- e. Increased incidence of chronic respiratory disease in familymembers

84 - Drugs that affect platelets include all except?

- a. Low molecular weight heparin
- b. Aspirin
- c. Isoniazid
- d. D-penicillamine
- e. Bendrofluazide ???**

85 - A63 year-old woman develops intermittent dizziness. Examination discloses diminished corneal light reflex and mild hearing loss in the right ear. The most likely diagnosis is?

- a. Cerebellopontine angle tumour**
- b. Benign paroxysmal positional vertigo
- c. Lateral medullary syndrome
- d. Ménière disease
- e. Celiac disease

86 - The various species of Campylobacter can cause diseases ranging from acute enteritis to bacteremia. Which of the following modes of transmission does not apply to Campylobacter?

- a. Contact with infected animals
- b. contaminated food and water
- c. Improperly cooked poultry
- d. Aerolized droplets**
- e. Person to person spread via fecal-oral route

87 - Which of the following is not an aggravating factor of congestive heart failure?

- a. Hypertension
- b. Thyrotoxicosis
- c. Alcohol
- d. Inactivity**
- e. Arrhythmia

88 - Which is more often associated with hospital acquired pneumonia than community acquired pneumonia?

- a. Streptococcus pneumoniae
- b. Hemophilus influenza
- c. Legionella**
- d. Chlamydia pneumoniae
- e. Mycoplasma pneumoniae

89 - The subendothelium is the most vulnerable segment of the heart from an ischemic standpoint. The major reason for this is?

- a. The highest oxygen utilization is in the subendocardium
- b. Coronary flow to the subendocardium occurs almost completely during diastole whereas other regions receive some flow during systole as well**
- c. The subendocardium has a diminished aerobic capacity
- d. There is less potential for collateralization to the subendocardium??
- e. The ratio of capillary to myocyte is less in the subendocardium

90 - Each of the following are risk factors for colon cancer except?

- a. Low fiber diet
- b. Severe diverticular disease**
- c. Familial adenomatous polyposis
- d. Ulcerative colitis
- e. High fat diet

91 - A18 year old female with initial onset of pruritic rash characterized by excoriations, scaling and crusting and distributed on the extremities, neck and eyelids. Past medical history is significant for asthma and hayfever. The most likely diagnosis is?

- a. Scabies
- b. Atopic dermatitis**
- c. Contact dermatitis
- d. Shingles
- e. Dyshydrotic eczema

92 - Intestinal complications more common to Crohn's disease than ulcerative colitis include each of the following except?

- a. Fistula formation
- b. Perianal disease
- c. Intestinal obstruction
- d. Toxic megacolon**
- e. Post surgical recurrence

93 - A30 year old female comes in with a soft smooth erythematous nodule on her lower lip. She states that a few weeks prior she had some chapped lips with occasional bleeding. Now, the lips have healed but this lesion arose suddenly in its place. It is occasionally tender on pressure. The most likely diagnosis is?

- a. HSV1
- b. Cherry hemangioma
- c. Pyogenic granuloma**
- d. Dermal nevus
- e. CMV infection

94 - Which of the following is true with respect to diabetes and kidney disease?

- a. Primarily affects the tubules
- b. Earliest sign is decreased GFR
- c. Microalbuminuria is a late sign of DM nephropathy
- d. Threshold for dialysis is same as other CRF patients
- e. BP control slows progression of DM nephropathy**

95 - Highly infective chronic hepatitis B is suggested by?

- a. Elevated liver enzymes, HBeAg+, anti-HBc IgM+
- b. Normal liver enzymes, HBeAg+, anti-HBc IgG+
- c. Normal liver enzymes, HBeAg-, anti-HBc IgG+
- d. Elevated liver enzymes, HBeAg+, anti-HBc IgG+**
- e. Elevated liver enzymes, HBsAg, HBsAb

96 - A40 year-old woman develops recurrent papules and pustules in a symmetrical pattern on her cheeks, nose, chin and forehead. She blushes easily, especially when consuming hot liquids, alcohol, or spicy foods. The most likely diagnosis is?

- a. Acne vulgaris
- b. Perioral dermatitis
- c. Acne rosacea**
- d. Seborrheic dermatitis
- e. carcinoid syndrome

97 - Endocarditis in an I.V. drug user?

- a. Is equally prevalent to that of the normal population
- b. Is commonly located in the mitral valve
- c. Is typically caused by S. pneumoniae
- d. Is typically found on the tricuspid valve**
- e. Is typically found on the aortic valve, producing a systolic ejection murmur

98 - Which of the following pair of CNS lesions and corresponding visual field defects is incorrect?

- a. Temporal lobe tumour – superior quadrantanopia
- b. Frontal lobe tumour – altitudinal field defect**
- c. Pituitary tumour – bitemporalhemianopsia
- d. Occipital lobe tumour – homonymous hemianopsia
- e. Multiple Sclerosis – central scotoma

99 - Which of the following is true about congenital heart block in neonatal lupus erythematosus?

- a. It is associated with maternal anti-Ku autoantibodies
- b. It is transient
- c. The majority of patients will require a pacemaker**
- d. There is no increased risk of connective tissue disease in adulthood
- e. The risk of mortality is small

100 - Which of the following are indications for dialysis in acute renal injury?

- a. Severe alkalosis unresponsive to medical therapy
- b. Severe acidosis unresponsive to medical therapy**
- c. Severe hypokalemia unresponsive to medical therapy
- d. Severe hypercalcemia unresponsive to medical therapy
- e. Severe hypomagnesemia unresponsive t

4th year 2020- watan

1. A 36 year old female has been unwell for several days with a viral illness . she then developed chest pain and shortness of breath . on examination she is hypotensive and tachycardic . there is bilateral crackles . an ecg reveals non specific st-t changes and bloods revealed raised inflammatory markers and a raised troponin I . echo reveals dilated and hypokinetic chambers . what is the most likely diagnosis ?

- a- Myocarditis
- b- Pericarditis**
- c- Infective endocarditis
- d- STEMI
- e- Acute mitral regurgitation

2. in the treatment of COPD ? except ?

- a- Most patients require maintenance of oral corticosteroid
- b- The dosage of oral theophylline needs to be reduced in patients commenced on erythromycin
- c- Long term oxygen therapy is indicated in a stable patient with a PaO₂ of 63 mmHg
- d- Long acting beta2 agonists are a first line treatment for breathlessness**
- e- Non invasive ventilation should be part of the first line treatment of exacerbation

3. All the following are true about hereditary spherocytosis except one ?

- a- Splenomegaly
- b- Gall bladder stone
- c- Hemolytic anemia
- d- Howell Jolly bodies inside RBC**
- e- Positive osmotic fragility test

4. the most common cause of traveler's diarrhea is ?

- a- Staph aureus
- b- Clostridium perfringens
- c- E . coli**
- d- Bacillus cereus
- e- Rotavirus

5. which one of the following is least recognized as an adverse effect of taking bendroflumethiazide ?

- a- Hypokalemia
- b- Hyponatremia
- c- Pseudogout**
- d- Impaired glucose intolerance
- e- Impotence

6. all of the following investigations should be done for patients newly diagnosed hypertension except?

- a- Urinalysis
- b- Renal profile
- c- Ecg
- d- Chest x ray
- e- Brain natriuretic peptide**

7. one of the following is not a cause of pericarditis ?

- a- TB
- b- SLE
- c- Lymphoma
- d- COPD**
- e- Uremia

8. the type of endocarditis most commonly found in patient who are intravenous drug abuser ?
- Staph aureus infection of tricuspid valve**
 - Staph aureus infection of mitral valve
 - Haemolytic streptococcal infection of tricuspid valve
 - Haemolytic streptococcal infection of mitral valve
 - Pseudomonas aeruginosa infection of the pulmonic valve
9. The difference between latent TB and TB disease is that ?
- People with latent TB infection are not infectious whereas people with TB disease are sometimes infectious**
 - Only TB disease can be detected by a tuberculin skin test , latent TB can not
 - People with latent TB sometimes have acid fast bacilli smear positive
 - Latent TB is curable but TB disease is not
 - No need for treatment of latent TB infection as it is inactive disease
10. pruritus is a clinical manifestation to only one of the following disease ?
- Polycythemia vera**
 - Iron deficiency anemia
 - Folic acid deficiency anemia
 - AML
 - CML
11. which of the following ECG changes is an indications for thrombolysis in a patient presenting with chest pain ?
- New onset Left bbb
 - Q wave in any leads
 - 2 mm st depression in all chest leads**
 - New onset right bbb
 - T wave inversion in chest leads
12. A50 year old women obese is found to have DM . diet alone can not achieve adequate glycemic control . which of the following drug would be the ttt of choice ?
- Gliclazide
 - Metformin**
 - Glibenclamide
 - Insulin
 - Rosiglitazone
13. A30 year woman complains of hands joint pain , recurrent mouth ulcer , shortness of breath , anemia . blood tests reveal raised ESR and normal CRP. What is most likely diagnosis ?
- SLE**
 - Systemic sclerosis
 - Sjorgens syndrome
 - Discoid lupus
 - Bechets disease
14. Auer rods are found in which one of the following?
- AML**
 - ALL
 - CLL
 - CML
 - Sickle cell anaemia

15. A 27 year women suffer from mitral stenosis develop atrial fibrillation. She placed on warfarin treatment what is the most appropriate target INR range?
- a- Less than 1.0
 - b- 1.0 -2.0
 - c- 2.0-3.0**
 - d- 3.0-4.0
 - e- More than 5.0
16. A 30 old man with urethritis, conjunctivitis and arthritis. What is the most likely diagnosis?
- a- Septic arthritis
 - b- Gout
 - c- Ankylosing spondylitis
 - d- RA
 - e- Reiters syndrome**
17. Patient with aortic stenosis frequently develop?
- a- Exertional dyspnea and angina**
 - b- Wide pulse pressure
 - c- Systemic embolization
 - d- Atrial fibrillation
 - e- Right ventricular hypertrophy
18. The following statements about potassium balance is true except?
- a- 85% of the daily potassium intake is excreted in urine
 - b- Intracellular potassium ion concentrations are about 150 mmol/l
 - c- Cellular uptake of potassium is enhanced by adrenaline and insulin
 - d- Alkalosis predispose to hyperkalemia**
 - e- The normal dietary potassium is about 100 mmol/day
19. Massive splenomegaly is characteristic in one of the following disease?
- a- Infectious mononucleosis
 - b- Thalassemia minor
 - c- Chronic myeloid leukemia**
 - d- Typhoid fever
 - e- Bacillary dysentery
20. A 30 years old lady have history of weight gain and hoarseness of voice . On examination her pulse 60 beat per minute and pale, dry skin. The most important investigation is?
- a- ACTH
 - b- Cortisol level
 - c- Gonadotropin levels
 - d- Insulin like growth factor
 - e- Thyroid function test**
21. A 27 year old women present with sudden onset of SOB. Pleuritic pain and haemoptysis. With past history of 3 miscarriage and DVT most likely diagnosis is?
- a- SLE
 - b- Antiphospholipid syndrome**
 - c- Raynauds disease
 - d- Systemic sclerosis
 - e- Bechet disease

22. A 55 year old women, with past history of rheumatoid arthritis , presents with progressive shortness of breath and dry cough a few months ago , on examination bilateral fine inspiratory crackles . whats the Dx ?

- a. Pulmonary odema
- b. Consolidation
- c. Pleural effusion
- d. Pulmonary fibrosis**
- e. Lung cancer

23. In the management of dilated cardiomyopathy all are true except ?

- a. Salt and water retention
- b. ACE inhibitors
- c. Diuretics
- d. Beta blockers
- e. Complete bed rest**

24. A 40 year old women who has never had significant respiratory disease is hospitalized for hemoptysis. urinary reveals proteinuria and microscopic hematuria, serological findings include normal complement level and negative assay for fluorescent antinuclear antibodies, renal biopsy reveals granulomatous necrotizing vasculitis with scattered immunoglobulin and complement deposits, the most likely diagnosis in this case is ?

- a. Mesangial lupus glomerulonephritis
- b. Henoch schonlein purpura
- c. Microscopic polyarteritis
- d. Wegener granulomatosis**
- e. Goodpasture syndrome

25. Which of the following is least likely to be a precipitating factor in digoxin toxicity ?

- a. Hypokalemia
- b. Hypocalcemia**
- c. Increasing age
- d. Renal failure
- e. Hypothyroidism

26. What characterizes ARDS (adult respiratory distress syndrome)?

- a. P_{aO_2}/F_{iO_2} and $gt : 200$ mmhg
- b. P_{aO_2}/F_{iO_2} and it :200 mmhg**
- c. P_{aO_2}/F_{iO_2} and it : 300mmhg
- d. F_{iO_2}/P_{aO_2} and it :200 mmhg
- e. F_{iO_2}/P_{aO_2} and it :300 mmhg

27. A blood test shows a prolonged bleeding time and activated partial thromboplastin time, while platelet count and prothrombin times are all normal, the most likely diagnosis is ?

- a. Von Willebrand disease**
- b. Liver disease
- c. Disseminated intravascular coagulation
- d. Antiphospholipid syndrome
- e. Hemolytic uremic syndrome

28. Which of the following patients is most likely to develop destruction of renal papillae with concomitant tubule interstitial damage ?

- a. A middle aged man who has consumed alcohol
- b. An older man with early stage prostate adenocarcinoma
- c. A young adult women with thalassemia
- d. An older women who uses analgesics for chronic headaches**
- e. A middle aged women with her first episode of UTI which is associated with pyuria

29. A 50 year old patient presents with pneumonia , received standard treatment, 4 days later on , developed diarrhea , which of the following organism responsible for this diarrhea ?

- a. Campylobacter jejuni
- b. Clostridium difficile**
- c. E. coli
- d. Staph. aureus
- e. Enterococcus

30. Increases reticulocytes count is found in all of the following except ?

- a- Thalassemia major
- b- Hereditary spherocytosis
- c- G6PD deficiency
- d- Aplastic anemia**
- e- Autoimmune hemolytic anemia

31. Normal serum complement levels would be seen in patients with hematuria, abdominal pain, and hypertension resulting from which of the following ?

- a. Mixed essential cryoglobulinemia
- b. Hepatitis c associated membranoproliferative glomerulonephritis
- c. Diffuse proliferative lupus nephritis
- d. Henoch schonlein purpura**
- e. Post streptococcal glomerulonephritis

32. What is the approximate risk of acquiring HIV following needle prick ?

- a. 0.003%
- b. 0.03%
- c. 0.3%**
- d. 3%
- e. 30%

33. Which of the following is not a cause of GI bleeding ?

- a. Esophageal varices
- b. Use of NSAIDs
- c. H pylori related erosive gastritis
- d. Gastric malignancy
- e. Celiac disease**

34. A 25 year old intravenous drug abuser with fever has blood cultures report from the microbiology laboratory indicates the presence of gram positive cocci in clusters , the identification of the organism and sensitivities are pending , the most appropriate antibiotic choice would be ?

- a. Penicillin
- b. Nafcillin
- c. Vancomycin**
- d. TMP/SMZ
- e. Ciprofloxacin

35. The treatment of choice for thrombotic events in the antiphospholipid antibody syndrome is ?

- a. Intravenous steroid
- b. High dose oral steroids with a rapid taper
- c. Penicillamine
- d. Aspirin
- e. Warfarin**

36. A patient is given aspirin 300 mg after developing an acute coronary syndrome, what is the mechanism of action of aspirin to achieve an antiplatelet effect?

- a. **Inhibit the production of thromboxane A₂**
- b. Inhibit ADP binding to its platelet receptor
- c. Inhibit the production of prostaglandin H₂
- d. Glycoprotein IIb/IIIa receptor antagonist
- e. Inhibit the production of prostacyclin (PGI₂)

37. Which of the following studies is most sensitive for detecting early diabetic nephropathy?

- a. serum creatinine level
- b. creatinine clearance
- c. **urine albumin**
- d. glucose tolerance test
- e. Ultrasonography

38. Radiofemoral delay present in one of the following ?

- a. Angina pectoris
- b. **Coarctation of the aorta**
- c. Renal artery stenosis
- d. Heart failure
- e. COPD

39. Warfarin is an oral?

- a. **Anticoagulant which inhibits the reduction of vitamin K to its active form**
- b. Anticoagulant which acts as a direct antithrombin III inhibitor
- c. Anticoagulant which inhibits the activated factor X
- d. Antiplatelet which acts as an ADP receptor inhibitor
- e. Antiplatelet which inhibit GPIIb/IIIa

40. A 30 year old man presented with a history of transient loss of consciousness and palpitation . his ECG showed ventricular tachycardia , which one of the following treatment should be avoided?

- a. Adenosine
- b. Amiodarone
- c. DC cardioversion
- d. Flecainide
- e. **Verapamil**

41. A 65 year old woman who is currently receiving chemotherapy for myeloid leukemia is found on blood testing to have urea of 10.1 mmol/l (n 3.4-4.5), creatinine of 190 micro mol/l (n 70-133), potassium of 6.1 mmol/l, (n 3.5-5), phosphate of 805 mg/dl (n 3.4-4.5) and corrected calcium of 2.00 mmol/l (n 2.15-2.55), the patient is asymptomatic, her electrolyte levels were normal prior to the start of treatment, what is the most likely single cause of this electrolyte disturbance?

- a. **Tumor lysis syndrome**
- b. Hypovolemia
- c. Hemolytic uremic syndrome
- d. Neutropenic sepsis
- e. e. Disease progression

42. Which of the following statements is not true concerning the management of pneumonia?

- a. Chest X ray is used to confirm diagnosis
- b. **Antibiotics therapy should only start once the infecting organism is identified after culture**
- c. WBC count 4000 cells/mm³ is a criterion for severe community acquired pneumonia
- d. O₂ therapy is commonly used to maintain saO₂ 90%
- e. Streptococcus pneumonia is the most common cause of community acquired pneumonia

43. A 70 year old women has a history of dyspnea and palpitations for six months, an ECG at that time showed atrial fibrillation, she was given digoxin, diuretics and aspirin. She now presents with two short lived episodes of altered sensation in the left face, arm and leg, there is poor coordination of left hand, ECHO was normal as was a CT head scan. What is the most appropriate next step in management?
- Anticoagulant**
 - Carotid endarterectomy
 - Clopidogrel
 - Corticosteroid
 - No action
44. Which of the following is not associated with an anion gap metabolic acidosis?
- Diabetic ketoacidosis
 - Tissue hypoxia
 - Renal failure
 - Diuretics therapy**
 - Isoniazid toxicity
45. Which of the following autoantibodies is least likely to be present in a patient with systemic lupus erythematosus?
- Anti-dsDNA
 - Antinuclear antibodies
 - Anti-La(ss-B)
 - Antiphospholipid
 - Anti-centromere antibodies**
46. Child pugh classification of liver disease doesn't include which one of the following?
- Bilirubin
 - Liver enzymes**
 - Albumen
 - Ascites
 - Encephalopathy
47. All of the following are possible complications of celiac disease except?
- Weight loss
 - Anemia
 - Infertility**
 - Osteoporosis
 - High ESR and CRP
48. Which of the following is not a recognized complication of celiac disease?
- Lactose intolerance
 - Esophageal cancer
 - Subfertility
 - Hypersplenism**
 - Osteoporosis
49. Complications of chronic renal failure include all of the following except?
- Normocytic or microcytic anemia
 - Peripheral neuropathy
 - Bone pain
 - Uremic pericarditis
 - Metabolic alkalosis and hypokalemia**

50. To decrease the likelihood of drug toxicity, the theophylline dose should be reduced in a patient with asthma in which of the following circumstances?
- Active tobacco user
 - Azithromycin use for mycoplasma pneumonia**
 - Augmented use for recurrent otitis media
 - Marijuana abuse
 - Phenobarbital use for a seizure disorder
51. The most common cause of peptic ulcer disease worldwide is?
- NSAID use
 - Use of warfarin
 - Pylori infection**
 - Varices from hepatitis B
 - Gastric benign tumors
52. In polycythemia rubra vera, one of the following is true?
- Low erythropoietin and low red cell mass
 - Normal erythropoietin and normal red cell mass
 - Raised erythropoietin and low red cell mass
 - Raised erythropoietin and raised red cell mass
 - Low erythropoietin and raised red cell mass**
53. A 30 year old women who was 20 weeks pregnant, presents to ambulatory care with pleuritic chest pain and breathlessness, which had been present for 2 days, she had no past medical history, was a non smoker, on exam there was nothing abnormal to find, her creatinine, electrolytes, liver test and baseline clotting results were normal, a chest x ray was also normal, what is the most appropriate next investigation in this case?
- CT pulmonary angiogram
 - Doppler ultrasound of both lower limbs**
 - MR pulmonary angiogram
 - Perfusion scan of the lungs
 - Ventilation perfusion scan of the lungs
54. A 35 year old patient presents with painful ulcer on genitalia, with mild fever and myalgia. What is the most appropriate treatment?
- Oral acyclovir**
 - Gentamycin
 - Oral flucloxacillin
 - Paracetamol
 - Glyceryl trinitrate
55. A patient with upper gastrointestinal symptoms tests positive for H pylori following a urea breath test, which one of the following conditions is most strongly associated h pylori infection?
- Gastric adenocarcinoma
 - Gastro esophageal reflux disease
 - Esophageal cancer
 - Duodenal ulcer**
 - e. Atrophic gastritis
56. Radiographic features of osteoarthritis of knee include, which of the following?
- Marginal erosion
 - Juxta articular osteopenia (demineralization)
 - Loss of articular cartilage with narrowing of the radiologic joint space
 - Osteonecrosis (avascular necrosis) of the medial femoral condyle
 - High riding patella (patella alta)**

57. Which of the following statements concerning the use of captopril is true?
- Decrease plasma renin activity
 - Increase the degradation of circulating bradykinin
 - Increase the formation of angiotensin II
 - Cannot be used safely in combination with beta blocking agent
 - Contraindicated in patients with bilateral renal artery stenosis**
58. Recognized causes of dysphagia include all of the following except?
- Esophageal CA
 - Esophageal stricture
 - Gastric ulcer**
 - Myasthenia gravis
 - Achalasia
59. An adult female present with a sore throat and dry cough . she has had a low grade fever for 3 days. She says her colleagues at work have had similar symptom. The CXR is unremarkable. She has a WBC of 14.6/mm³. The provider thinks she has community-acquired pneumonia . which of the following would be the best first choice ?
- Azithromycin**
 - Ampicillin
 - Trimethoprim-sulfa
 - Tetracycline
 - 3rd generation cephalosporin
60. A 45 Y/O man with Hx of alcohol excess is diagnosed as having grade 3 esophageal varices, during an outpatient endoscopy. Of the following options, what is the most appropriate management to prevent variceal bleeding?
- Propranolol**
 - Isosorbide mononitrate
 - Endoscopic sclerotherapy
 - Terlipressin
 - Lansoprazole
61. In a patient with central chest pain at rest, all of the following are true except?
- Interscapular radiation suggest the possibility of aortic dissection
 - Postural variation in pain suggest the possibility of pericarditis
 - Chest wall tenderness is not suggestive of cardiac pain
 - Relief of pain by nitrates points toward a cardiac causes and excludes an esophageal cause**
 - Reduction to the jaw is a suggestive of cardiac pain
62. All of the following are correct regarding the anti-arrhythmic drug amiodarone, except:
- Prolongs the plateau phase of the action potential
 - Potentiate the effect of warfarin
 - Is useful in prevention of both ventricular and supraventricular tachycardia
 - May cause corneal deposits
 - Has a significant -ve inotropic action**
63. Which one of the following is least useful in assessing the severity of patient with liver cirrhosis :
- ANA positivity**
 - PT
 - Bilirubin
 - The presence of ascites
 - The presence of encephalopathy

64. Recognized cause of the 2ry HTN include all of the following except :

- a) Conns syndrome
- b) 1ry hypoaldosteronism**
- c) Acromegaly
- d) Estrogen-containing oral contraceptive
- e) Thyrotoxicosis

65. In the ER is a 59 Y/O patient with chest pain and SOB. She just had appendectomy 8 days ago, chest examination reveals dullness to percussion on the Rt side, decrease tactile fremitus, and asymmetrical chest expansion on the Rt side . which one of the following is most likely?

- a) Pneumothorax
- b) Pleural effusion**
- c) Pneumonia
- d) PE
- e) Lung abscess

66. Hypochromic microcytic anemia is a feature of one of the following disease:

- a) Thalassemia minor**
- b) Hereditary spherocytosis
- c) Autoimmune hemolytic anemia
- d) Pernicious anemia
- e) Folic acid deficiency anemia

67. Which of the following statement about chronic bronchitis is false?

- a) Its defined as presence of chronic productive cough for 3 mon. during each of 2 consecutive years
- b) It usually occur after 35 years of age
- c) It associated with periodic exacerbation
- d) Its associated with a reduction in total lung capacity and residual volume**
- e) It is commonly complicated by central cyanosis

68. All the following are causes of monoarthritis except one :

- a) Gout
- b) Trauma
- c) Septic arthritis
- d) Pseudogout
- e) **RA**

69. The least likely condition to be associated with risk of malignancy is :

- a) Gastric ulcer
- b) DU**
- c) Ulcerative colitis
- d) H. pylori infection
- e) Colonic polyps with dysplasia

70. Philadelphia chromosome is characteristically positive in one of the following:

- a) AML
- b) CML**
- c) CLL
- d) Hodgkin's lymphoma
- e) Non-Hodgkin's lymphoma

71. Which of the following is the most common extra articular manifestation of ankylosing spondylitis:

- a) **Anterior uveitis**
- b) Aortic insufficiency
- c) Inflammatory bowel disease
- d) Pulmonary fibrosis
- e) Third degree heart block

72. As regards treatment of pulmonary TB, which statement is correct:

- a) Corticosteroid are prescribed to all patient
- b) **An impo factor is patient compliance with therapy**
- c) Drug treatment is maintained for 2 months in uncomplicated cases
- d) Pyridoxine is given with isoniazid to limit liver dysfunction
- e) Ethambutol is used routinely in children

73. A 31 Y/O man with ulcerative colitis (isolated proctitis) present with a worsening of his symptoms , he is passing around four loose stool a day which do not contain blood . he has also experienced some urgency and tenesmus but is otherwise systemically well. What is the most appropriate management ?

- a) **Rectal 5ASA**
- b) Oral corticosteroid
- c) Rectal corticosteroid
- d) Observe with review in 7 days time
- e) Oral loperaamide

74. A 42 Y/O dentist is reviewed in the medical clinic complaining of persistent lethargy . routine blood show abnormal live function test so hepatitis screen is sent, the result are shown, Anti-HAV IgG negative , HBsAg negative , Anti-HBs positive , Anti-HBc negative , Anti-HCV positive . what do these results most likely demonstrate?

- a) Hep. B infection
- b) Hep. C infection
- c) Previous vaccination to hepatitis B and C
- d) **Hepatitis C infection with previous hepatitis B vaccination**
- e) Hep. B and C infection

75. A 67 Y/O woman suffered a fracture to her hip during a fall and undergoes a successful hip replacement. After 2 weeks, the pt complains of pain in her leg, particularly on movement. On examination, the leg is swollen below the knee, erythematous and tender on palpation. The most appropriate one management is :

- a) Aspirin
- b) **Low molecular weigh heparin**
- c) Warfarin
- d) Early ambulation
- e) Thrombolytic therapy

76. Low dose aspirin is used in all of the following except one :

- a) Polycythemia rubra vera
- b) Essential thrombocytosis
- c) Angina pectoris
- d) Antiphospholipid syndrome
- e) **Thrombotic thrombocytopenic purpura**

77. In inflammatory bowel disease, the most specific method of diagnosis is :

- a) **Colonoscopy with biopsy**
- b) CT abdomen
- c) Open surgical biopsy
- d) Barium colonography
- e) Positive serology of ANA, p-ANCA, c-ANCA

78. Beta blocker may be used in RX of all the following except one:

- a) Thyrotoxicosis
- b) Angina pectoris
- c) Migraine
- d) Atrial fibrillation
- e) **Ventricular fibrillation**

79. All the following joint are usually affected at onset of RA except one :

- a) Proximal interphalangeal joints
- b) **Distal interphalangeal joints**
- c) Metacarpophalangeal joints
- d) Wrists
- e) Metatarsophalangeal joints

80. Most sensitive and specific diagnostic method for typhoid fever is :

- a) Urine culture
- b) Stool culture
- c) Blood culture
- d) **Bone marrow culture**
- e) C reactive protein

81. Which of the following statement is incorrect :

- a) Cough can be the only presenting complaint in patient with asthma
- b) Asthma control should be assessed at every clinic visit
- c) Dx of asthma should be considered in patient who present recurrently with wheezing following upper respiratory tract infection
- d) Salbutamol tablets should not be prescribed to asthmatics
- e) **Patient with stable asthma do not need follow up**

82. Typical feature of the nephrotic syndrome include one of the following:

- a) Bilateral renal angle pain
- b) **Generalized edema and periorbital edema**
- c) Hypoalbuminaemia and proteinuria > 2g/day
- d) Hypertension and polyuria
- e) Elevated serum creatinine

83. A 38 year old man known to be infected with HIV presents with a week of fever and tachypnea.

Chest x-ray reveals bilateral alveolar infiltrates , Bronchoalveolar lavage is positive for methenamine silver staining material . Which of the following statements is correct concerning the current clinical situation ?

- a) Transbronchial biopsy should be carried out to confirm the diagnosis
- b) Glucocorticoids are contraindicated , given the risk of other opportunistic infections
- c) Pentamidine therapy by the aerosolized route would be appropriate if the patient had a known allergy to sulfa drugs
- d) TMP/SMZ and pentamidine should be administered in combination
- e) **TMP/SMZ alone should be administered**

84. A 65 year old man with liver cirrhosis of unknown cause is reviewed in clinic. Which one of the following factors is most likely to indicate a poor prognosis?

- a) Alanine transaminase > 500 u/l
- b) Caput medusae
- c) Ascites**
- d) Gynecomastia
- e) Splenomegaly

85. What is the leading cause of death in patients with chronic kidney disease?

- a) Cardiovascular disease**
- b) Hyperkalemia
- c) Infection
- d) Malignancy
- e) Uremia

86. A patient reports that he is using a high dose inhaled steroid along with a short acting beta-agonist for asthma, but continues to experience shortness of breath and wheezing. Which of the following should be added to this patient's treatment regimen?

- a) Zafirlukast
- b) Theophylline
- c) Long acting beta-agonist**
- d) Omalizumab (Anti-IgE)
- e) Oral steroids

87. Which of the following statements concerning acute rheumatic fever is true? Select one:

- a) Migratory polyarthritis occurs in 10% of patients
- b) Sydenham's chorea typically occurs early in the course of the disease
- c) Erythema marginatum is a common finding , occurring in 50% of cases
- d) Secondary prophylaxis should be initiated in order to decrease recurrent episodes of rheumatic fever**
- e) Group A streptococci can usually be recovered in the upper respiratory tract of patients with rheumatic fever

88. In ulcerative colitis, cure can be completely achieved by?

- a) Total colectomy**
- b) Gastrectomy
- c) Colonoscopy every 2 years
- d) Immunosuppressive therapy
- e) Special diets

89. Microscopic hematuria would be an expected finding in all of the following except?

- a. urinary tract infection
- b. Renal papillary necrosis
- c. Minimal change nephropathy**
- d. Infective endocarditis
- e. Renal infarction

90. A 25year old man presents with bloody diarrhea associated with systemic upset. Blood tests show the following, Hb 13,4 g/dl, Platelets 467,000/dl, WBC 3,200/dl, CRP 89 mg/l, A diagnosis of ulcerative colitis is suspected. Which part of the bowel is most likely to be affected?

- a. Sigmoid colon
- b. Rectum**
- c. Ascending colon
- d. Descending colon
- e. Terminal ileum

91. The chief opportunistic infection in HIV patient is?

a. Candidiasis

- b. CMV infection
- c. Toxoplasmosis
- d. Pneumocystis Jiroveci
- e. Tuberculosis

92. the most common presentation in patients with malabsorption is?

a. Hyperkalemia

b. Anemia

- c. Incidental finding of positive anti TTG
- d. Melena
- e. High ESR

93. All of the following are possible complications of celiac disease except?

a. Weight loss

b. Anemia

c. Infertility

d. Osteoporosis

e. High ESR and CRP

94. Which of the following is not a recognized complication of celiac disease?

a. Lactose intolerance

b. Oesophageal cancer

c. Subfertility

d. Hypersplenism

e. Osteoporosis

95. Skin rash after taking amoxycillin is a characterisitic feature in one of the following?

a. Infectious mononucleosis

b. Typhoid fever

c. Brucellosis

d. Pneumococcal pneumonia

e. Streptococcal infection

96. For a patient with suspected pulmonary embolism.What is the least appropriate strategy?

a. Thrombolytic therapy if cardiogenic shock is present

b. Initiation of anticoagulation treatment while diagnostic workup is ongoing

c. CT angiography if cardiogenic shock is present .

d. D dimer level measurement if shock is present

e. Bed side transthoracic echocardiography if the patient is in cardiogenic shock and CT angiography is not immediately available

97. All of the following are characteristic extra-articular manifestations of rheumatoid arthritis except?

a) Anemia

b) Cutaneous vasculitis

c) Pericarditis

d) Caplan,s syndrome

e) Thrombocytopenia

98. In the emergency room is a 59-year old patient with chest pain and shortness of breath. She just had appendectomy 8 days ago. Chest examination reveals dullness to percussion on the right side, decreased tactile fremitus, and asymmetrical chest expansion on the right side. Which one of the following is most likely?

- a. Pneumothorax
- b. Pleural effusion**
- c. Pneumonia
- d. Pulmonary embolism
- e. Lung abscess

99. A 52-year old man presents to accident and emergency after collapsing at home. He appears pale on appearance with cold extremities. Blood pressure is 97/73 mmHg, heart rate 110 bpm, temperature 36.9°C and an ECG shows normal findings. Blood culture and urine culture are negative for any findings. He reports returning from 10 days holiday break abroad, but forgot to take his medication for Crohn's disease with him. The most likely one diagnosis is?

- a. Addisonian crisis**
- b. Sepsis
- c. Myocardial infarction
- d. Abdominal aneurysm rupture
- e. Nelson's syndrome

Final MCQ 6th year 2019

Head of department : Dr. Rami Dwairi

Dr. Rami questions :

1. Celiac disease is followed up by : **Anti TTG antibody**
2. One of the following not a part of child PUGH classification : **Platelet count**
3. Diagnosis of Hepatitis E : **Anti Hepatitis E titers**
4. Wrong about crohn: rose thorn ulcer **caseating granuloma**
5. Most common route of transmission for hep B worldwide : **vertical**
6. Treated hep c follow up by : **viral load**
7. All true except :
**some thing about treatment of IBD and mentions TPMT enzyme related to methotrexate لهذا الزعيم لل
azthioprine**
8. wrong about Mx of irritable bowel: **barium follow through for all pt**
9. hemochromatosis wrong about it : **congestive ?**

Dr. Basil questions:

1. hypokalemia didn't give : **Sine wave**
2. Dyspnea, syncope and chest pain in 70 yo patient and has early diastolic murmur
:
aortic stenosis aortic dissection mitral valve prolapse
spontaneous pneumothorax
3. B blocker effect of heart all except : **increases cardiac contractility**
4. Factors play role in increasing oxygen demand in angina pectoris patient except: **ventricular size**
5. Emergent drug in ACS except : **digoxin**
6. ECG with ST elevation in lead 2, 3, avf : **right Ventricular infarction**
7. Eye manifestation in infective endocarditis : **Roth spot**
8. cardiac tamponade : **increase in JVP**
9. Raised JVP in SLE patient : **constrective pericarditis**

Dr. Noha questions :

1. eye complaint and abnormal color perception in HIV pt due to : **Cmv retinitis**
2. Chloramphenicol for prevent : **typhoid relapse**
3. Pt come with presentation of Addison Dx by : **ACTH stimulation test**
4. Pregnant with lower UTi : **Ampicillin**
5. Brucella resistant to flouroquinolone due to : **DNA gyrase**
6. Pt with HIV on Rx and prophylactic Ab CD4 was 25 If raised to 250 , what to do : **Stop anti- HIV medication**
7. Drug not given in pregnancy : **Doxycyclin**
8. Dysuria, frequency , urine analysis shows WBCs , leukocyte esterase on stain (not culture) no organism was found , diagnosis :
TB , lower UTI
9. Cause of death in malta fever : **infective endocarditis**
10. kaposi Sarcoma : **HHSV8**

Dr. Samah questions :

1. 80 year old patient in hospital develops pneumonia 3 days after hospitalization , what is the treatment : **anti psuodomanous beta lactam +anti pseudo quinolone + vancomycin**
2. Patient with mass in chest x ray and hyponatremia : **SIADH with small cell**
3. ASA causes metabolic acidosis RS alkalosis ???
4. pt on high dose inhaled steroid and long acting beta agonist for 6 months: **step down for low dose inhaled steroid and keep long acting beta agonist**
5. TB drug that cause problem in vision : **ethambutol**
6. MDR TB is resistant to :
both isoniazid plus rifampicin irrespective to other drugs
7. lung fibrosis biopsy :
subpleural fibrosis + cystic lesion
8. flial chest is :
2 or more rib fracture in 2 or more places

Dr. Jeries questions :

1. Question indicating Churg-strauss (Eosinophilia and asthma in history) : **P-anca**
2. one of the following is not seen in RA :
Bouchard nodules
3. Gottren Rash :
dermatomyositis
4. case scenario and you are asked to how many SLE criteria are present : **5**
5. Recurrent abortion , sle , long ptt low platlets :**anti phospholipid**
6. All are seen in RA except : **boucherds**
7. One of the following involves the DIP :**Psoriasis**
8. we use RF for follow up except :
9. antibody not in dermatomyositis : **anti RNP**

10. All cause erythema nodosa except :

TB - OCP - beta hemolytic strep – leukemia , RA

11. Pt with gout ,, what is the goal uric acid level :

<8 <7 <6 <5 <4

Dr. Mdallal questions :

1. Causes glomerulosclerosis :

DM nephropathy

Dr. AL3ani questions :

1. polycythemia RV what is wrong :

It is myelodysplastic

2. Prophylaxis for DVT is needed In all except :

normal vaginal delivery

3. All in DIC except :

increase fibrinogen level

4. Disease with decrease clotting factor :

christmas disease (hemophilia b)

5. Wrong about CLL :

Disease of children

6. PT is not elevated in :

intrinsic pathway

Final Exam 2019 4th year (Ihsan)

DR. Rami – GI :

1- Which of the following not side effect of ribavirin?

- A. Hemolysis
- B. Hirsutism
- C. Pruritus
- D. nasal congestion
- E. Teratogenic in Pregnancy

2-Most common cause of cirrhosis in our region?

- A. Viral hepatitis
- B. Autoimmune hepatitis
- C. Budd–Chiari syndrome
- D. Alcohol
- E. Wilson’s disease

3-Not used in diagnosis of hepatitis?

- A. HBsAg
- B. HBV DNA
- C. Anti-HBc
- D. HBcAg
- E. Anti-HBe

4- What Anti-HBs mean?

- A. indicates immunity
- B. increased severity and infectivity
- C. continual viral replication
- D. recent HBV infection

5- commonest cause of GI bleeding in the following?

- A. GI cancer
- B. esophagitis
- C. Dieulafoys lesion
- D. Mallory Weiss tears
- E. Esophageal varices

6- Does not used in long term control of bleeding?

- A. Non selective B antagonist
- B. TIPS
- C. Banding
- D. Sclerotherapy ???

7- All the following are components of Child's criteria of liver disease except?

- A. Serum albumin
- B. Serum bilirubin
- C. Ascites
- D. varices
- E. Hepatic encephalopathy

8-False about risk of rebleeding?

- A. Advanced age
- B. HR 130 and BP 80/50
- C. Absence of liver disease sign

- D. Comorbidity
- E. Endoscopic diagnosis reveal bleeding

9-Wrong about Crohn's disease?

- A. Caseating granuloma
- B. chronic inflammatory condition that may affect any part of the gastrointestinal tract
- C. There are deep ulcers and fissures in the mucosa, producing a cobblestone appearance
- D. the inflammation extends through all layers of the bowel
- E. involve multiple areas with relatively normal bowel in between skip lesions

10-All correct about transfusion except?

- A. pallor, cold peripheries,
- B. systolic BP below 100 mmHg,
- C. pulse > 100/min
- D. Transfusion with Hb 9 g/dl without bleeding

11-Patient has history of multiple fractures he is known case of celiac disease best diagnostic imaging for bone ?

Answer: **bone densitometry (DXA)**

12-Wrong regarding crohn disease management?

Answer: **the key enzyme in biological agent is TPMT**

Explanation: The key enzyme involved in AZA and 6MP metabolism is thiopurine methyl transferase (TPMT)

13-All about bleeding correct except?

Answer: **All patient with cirrhosis will develop variceal bleeding**

Explanation: Approximately 90% of patients with cirrhosis will develop gastroesophageal varices, over 10 years, but only one third of these will bleed from them

DR. Samah – RS :

1-Not side effect of B2 agonist :

- A. Tachycardia
- B. Arrhythmias
- C. Tremor
- D. Hyperkalemia
- E. hypokalemia

2-most common clinic presentation of PE ?

- A. acute onset dyspnea
- B. chest pain
- C. cough
- D. syncope
- E. hemoptysis

3-67 years old male patient complain from chest pain, productive cough and fever, on examination the patient confused and RR=33, BP=100, on laboratory investigation blood urea = 9 mmol/L (not mg/dl as in slides so to convert mmol/l to mg/dl = mmol/l X 18), calculate CURP-65 score?

- A. 2
- B. 3

- C. 4
- D. 5
- E. 6

4-A medical student while taking the internal medicine exam suffered from tachypnea and anxiety, in the emergency laboratory investigation Ph=7.52, co2=22, HCO3=24, which of the following is correct ?

- A. Acute Metabolic alkalosis
- B. Chronic Respiratory alkalosis
- C. chronic Metabolic alkalosis
- D. Acute Respiratory alkalosis

5-Patient taking anti TB and warfarin started feeling (arrhythmia?) ?

Answer: **Increase warfarin dose**

Explanation: The Rifampin is hepatic microsomal enzymes inducer so increase the dose

6-True about pneumothorax?

Answer: **Decrease or absent breath sound**

7-Fever, myalgia, headache, dry cough, the causative organism is?

Answer: **Mycoplasma pneumonia**

8-Drug of choice for MRSA?

Answer: **vancomycin**

9-False about consolidation?

Answer: **Decrease tactile vocal fremitus**

Explanation: in consolidation increase tactile vocal fremitus

10- Wrong about TB management ?

Answer: **anti tb stopped after 4 weeks**

Explanation: according to DOTS Strategy is recommended continued anti-TB drugs to 6 months

11- Wrong regarding to TB ?

answer: **microscope used to differentiate between resistance and sensitive bacteria for anti-TB**

explanation: Cultures on L J media used as Sensitivity tests for anti-TB drugs

12- interstitial lung fibrosis ?

Answer: **CT ????**

13- Not part of hyperventilation syndrome:

Answer: **PE**

1- Patient come with loin pain & fever and costovertebral angle tenderness what's your diagnosis :

- A. Pyelonephritis
- B. kidney stones
- C. Nephrotic syndrome
- D. Nephritic syndrome

2-Drugs that Cause hyperkalemia except :

- A. Salbutamol
- B. Insulin
- C. ACEI
- D. ARBs
- E. SPIRONOLACTONE

3 - Pt with ventricular tachycardia and after few days serum creatinine increased what type of kidney injury :

- a. pre-renal
- b. renal
- c. post renal

4- One of the following doesn't cause secondary nephropathy ?

- A. HSP
- B. DM
- C. congenital glomerulonephritis
- D. NSAIDs
- E. cryoglobulinemia

5- wrong about AKI

- A. Associated with oliguria
- B. Uncompensated cases has poor prognosis and high mortality ?
- C. May lead to life threatening electrolyte disturbance

6- Not an indication of dialysis:

- A. Acidosis not responding to treatment
- B. Pulmonary edema not responding to treatment
- C. Hyperkalemia not responding to treatment
- D. Uremia pericarditis
- E. To remove anti hyper tensive drug in renal failure

7- True about FSGN:

- A. 90% pediatrics
- B. Resistant to steroid
- C. Never develop to ESRD
- D. is a Nephritic syndrome
- E. Low protein in urine

8- Drug cause prerenal uremia:

- A. ACE inhibitors
- B. Beta blocker
- C. Calcium channel blocker
- D. Potassium sparing diuretics

9- Wrong about nephrotic:

Answer: Cause of hyperlipidemia due to decrease loss of LDL and VLDL

10- male came with urethritis and a diplococci bacteria ?

Answer: Neisseria gonorrhoea

DR. Mohammed – HEMATOLOGY

1- All of the following “B” symptom of non-Hodgkin lymphoma except :

- A. drenching sweat
- B. Fever
- C. Weight loss
- D. itching

2- ITP not affect

- A. Pt /Ptt
- B. Platelets count
- C. Bleeding time

3- All are acquired causes of platelet disorders except?

- A. Bernard soulier syndrome (Autosomal recessive)
- B. ITP
- C. TTP
- D. Trombocytosis
- E. Uremic thrombocytopenia

4- anemia of chronic disease all false except?

- A. Low serum ferritin
- B. Macrocytic
- C. High total iron binding capacity
- D. High Fe saturation
- E. has high hepcidin

5- 35 year old male complaining from fatigue. He denied hx of melena, trauma ... cbc shows decrease in Hb, MCV, .. normal RDW ; next step :

- A. Occult stool test
- B. Iron measurement
- C. Hb electrophoresis
- D. Lead level

6- Wrong about DIC :

- A. thrombocytosis
- B. Decrease fibrinogen
- C. Burn can cause it

7- Pt have serum ca 14.3 and serum creatinine is 2.3 and on X-Ray have compression Fracture of vertebrae what is next step :

Answer: Serum immune electrophoresis

8- Drug act on thrombin ?

Answer: Argatroban (direct thrombin inhibitor)

9- 1st choice treatment for ITP ?

Answer: IVIG

10- All true except ?

Answer: Fe deficiency has low RDW

1- first test to diagnose Cushing?

- A. Synacthen test
- B. Saliva
- C. High dose dexamethasone ?
- D. CT brain

2-patient with weight gain what is the most appropriate test ?

- A. TSH
- B. T3
- C. T4

3-diabetic patient type 1 had kussmaul breathing , what most likely happen to him ?

Answer: **DKA**

4-patient present with perioral numbness & carpopedal spasm what most likely diagnosis ?

Answer: **Hypocalcemia**

5-diabetic patient type 1 missed a meal what will happen to him ?

Answer: **DM type 1 patient take insulin so missed a meal will cause hypoglycemia**

6- patient present with nausea ,vomiting & Bradycardia + continuous fever for 4 weeks what most likely causative organism ?

answer: **Salmonella typhi**

7- HIV patient with dry cough bilateral hilar lymphadenopathy + fever ?

Answer: **Pneumocystis jiroveci**

8- what is the disease that cause malta fever ?

Answer: **Brucellosis**

9- patient present with eccentric target sign (ring sign) on MRI , what is the most likely diagnosis?

Answer: **Toxoplasmosis**

➤ DR. Cardio :

1- All increase HOCM except ?

- A. Valsalva
- B. Standing
- C. Squatting
- D. Exercise
- E. Nitrate

2- patient presented to the clinic 5 days post STEMI , he complained of pleuritic chest pain increased when lying down friction rub , ECG showed diffuse ST- elevation what is the DX?

- A. STEMI
- B. Dressler syndrome
- C. Myocarditis
- D. PE
- E. Pneumonia

3- most common cause of death in HTN?

Answer: MI

4- Previous MI patient with increase cholesterol level what is next step ?

Answer: describe statin drug

5- young female with left ankle and knee swelling and hx of sore throat ?

Answer: rheumatic fever

6- female with ECG showed : narrow QRS complex with regular HR of 170bpm what is next step ?

Answer: IV adenosine

➤ DR. jeries – ROMATOLOGY :

✓ Most of the questions are same to past years questions

4th year Final exam 2018

GIT & Liver :

1- 69 year old patient with jaundice and mild fatigue only , Direct bilirubin is elevated(more than 80%) with high Alkaline phosphatase and normal AST ALT, proper diagnostic tool for this patient :

CT Scan (suggestion of malignancy)

(there was ERCP as other choice but not the correct answer Approved by dr. waleed)

2- 59 year old patient with upper abdominal and nausea with vomiting , least essential tool for dx :

CT scan (Cardiac enzymes , ECG , Amylase , other ??).

3- Patient complaining of jaundice and the urine analysis revealing positive bilirubin: (**obstructive jaundice cause**) so it is **Dubin–Johnson syndrome**

4- Patient diagnosed with crohn's disease complaining of multiple perianal fistulas and the treatment that given is infliximab which is :

Anti TNF monoclonal antibodies

5- Patient with liver cirrhosis come with tense ascitis and bilateral lower limb edema and diffuse abdominal pain , ascetic fluid analysis was : 750 wbc with 90% polymorphonuclear cells and 3 g/dl albumin , what is treatment and negative gramstain

? Ceftriaxone IV (spontaneous bacterial peritonitis)

6- 40 years old patient complaining of intermittent dysphagia (نسيته ذكروني)

7- Patient with liver cirrhosis complaining of esophageal varicies and the banding therapy is given , what drug we should put patient on : **Propranolol**

8- not risk factor of poor prognosis gi bleeding :
onset of bleeding during hospitlization ?????!!! (not sure)

9- 20 year old female diagnosed as Irritable bowel syndrome with pain predominance, what is treatment not used for her :

Narcotic analgesia (the other choices:tricyclic antidepressant , high fiber diet , antispasmodic)

10- At liver cirrhosis the level of which substance with low level :

urea (impairment of urea cycle which occur at liver)

11- true regarding hepatitis D :

infection with that virus should be associated with hepatitis B patient (there was other true choice??? that Hep. D and Hep. B coinfection lead to increase chronicity ?)

12- Drug of choice for patient with ulcerative colitis that reach segmoid colon : **Oral 5-ASA (suppository if it is limited to rectum)**

13- Risk factor for Ulcerative colitis to develop malignancy : **pancolitis**

1- Nerve roots for Biceps reflex : **c5 , c6**

2- Site of Chemotrigger zone for vomiting : **Medulla**

3- Father with his two sons come to ER at cold weather . They are complained of dizziness and headache and confusion what is most likely diagnosis :

Mono oxide toxicity

4- young adult complaint of sudden headache with neck rigidity and without fever , most likely diagnosis :

Subarachnoid hemorrhage (approved by dr, waleed)

Hematology :

1- wrong regarding CLL : **It is disease of adults**

2- not cause of DIC : **essential thrombocytosis**

3- True regarding polycythemia vera : **?????**

4- True regarding Sickle cell disease : **Hand-foot syndrome is associated with swelling and pain at fingers and toes for children and cause disability ?????!!!**

5- Patient with history of treatment of pneumonia (he took co-triamethaxazole) complaining of sign and symptoms of anemia with splenomegaly , CBC : Hb: 9 , MCV : 90 , reticulocytes count : 7% what is most likely diagnosis :

G6pd (co-trimethaxazole is one of the drug which cause hemolytic crisis) 6- PT prolongation doesn't occur at : **intrinsic pathway**

7- one is coagulation disease : **Hemophilia B**

Infectious :

- 1- Passive immunization with immunoglobulin as prophylaxis :
Hep. B (راجعنا الدكتور فيهِ و حكي بجرع ندوقه الـذه فيهِ لكم ان نيناس نوکسويد)
- 2- IV drug user complaining of scenario of infective endocarditis , blood gram stain reveals G+ bacteria in cluster , what is treatment of choice :
Vancomycin (approved by dr. waleed)
- 3- Patient with history of cough and sputum with fever and SOB , xray reveals non homogeneous opacity at middle lung , after few days complained of Spontaneous pneumothorax what is most likely organism :
This is scenario of narcotizing pneumonia >> Staph aureus
- 4- Contraindicated antibiotic at pregnancy :
doxycycline
- 5- Not a drug used for treatment of TB : bismuth
- 6- Wrong regarding high risk patient with pneumonia : Respiratory rate is 22
- 7- True regarding catheter induced UTI :
Patient with more than 2 weeks on catheter without changing reveals bacteriuria
- 8- Egyptian farmer with scenario of mass at junction between bladder and ureter , true regarding this patient :
He has schistosomiasis ??!!!!
- 9- true regarding typhoid fever : rose spot comes with fever ???!

Endocrinology :

- 1- Wrong about Acromegaly : exophthalmous
- 2- Longest insulin half life : Glargine
- 3- Thyroid disease without nodule : hashimoto's thyroiditis
- 4- Not cause of cushing : Adrenal hemorrhage
- 5- Best diagnostic test for addison's : Synacthen ACTH test ???!
- 6- Fasting blood sugar : 120 , postprandial blood sugar : 180 , what is true :
impaired FBS & postprandial blood sugar tolerance
- 7- DM drug which cause weight loss : ???
- 8- Elderly came with HF , what drug deteriorate her condition :
pioglitazone
- 9- Wrong regarding treatment of Grave's disease :
Methimazole used at pregnancy
- 10- Wrong regarding SIADH :
there is signs of overload in that patient ??! actually there is no significant signs ??!!!
- 11- adverse effect او اشـي زي هـيك for Methimazole:
Agranulocytosis

1- young complained of repetitive attack of syncope in the morning after he shaves his beard :
(He pressed on carotid body during shaving) So it is Carotid body syncope

2- Patient come to clinic due to attack of syncope and doctor approved that his new drug is the real cause of these attack of syncope , which less likely drug :
Aminoglycoside (all of them are HTN drugs + procainamide)

3- Anaphylactic shock true :

Stridor (due to edema of laryngeal mucosa) or dry hot skin ??? 4- ECG question ???!!

5- Young female patient with palpitation and regular pulse with 120 Beat per minute, Treatment :
Adenosine IV ???!

6- Case of 2nd degree heart block treatment of choice : pacemaker ???! 7- wrong regarding antidote :
Calcium gluconate for digoxin toxicity

8- patient with early diastolic murmur at left sternal area with high volume pulse (water hammer pulse) :
Aortic regurgitation

9- One is presentation of hypertrophic cardiomyopathy :
sudden death

10- True regarding mitral stenosis :
hemoptysis is due to pulmonary hypertension

11- Shifted apex beat to anterior axillary line to 6 or 7th intercostal space indicative of :
Left ventricular dilatation

12- wrong regarding Pulmonary HTN :
onset of HTN is above 60 mmHG

13- drug improve mortality rate in HF :
Enalapril

14-contraindication for enalapril :
bilateral renal artery stenosis

Rheumatology :

- 1- known Patient of renal failure complaining of monoarthritis (swelling , pain , signs of inflammation) with no previous history , after aspiration microscopic picture reveals intracellular needle shape crystals ,
Treatment of choice :
intra-articular corticosteroid (Voltaren is contraindicated in renal impairment)
- 2- True regarding SLE :
azathioprine & other immunosuppressive drugs decreasing need for long term corticosteroid
- 3- Wrong regarding scleroderma :
there is vegetation on the heart valves
- 4- True regarding Rheumatic fever :
need secondary prophylaxis of antibiotic to decrease possibility to recurrent rheumatic fever
- 5- Antistreptolysin Q ????!!
- 6- common manifestation at ankylosing spondylitis
- 7- 60 year old patient with headache and tenderness over temporal region and she suffers from tiredness during mastication and talking , what is the diagnostic test
- 8- wrong regarding inclusion body myositis :
female more than male
- 9- Not feature of osteoarthritis at xray : ?????!!
- 10- signs and symptoms of glomerulonephritis after upper respiratory tract infection, on histopathology of biopsy what is the finding :
IgA nephritis
- 11- case with hemoptysis and hematuria with proteinase 3 positive (c-ANCA positive) :
Wegner granulomatosis
- 12- Case of young patient with monoarthritis at ankle what is true :
* **erythema over dorsum of foot suggestive of gout (most like answer)**
* **Recurrency and 1st metatarsal involvement suggestive of gout (may be the answer)**

Nephro & electrolytes :

- 1- True regarding management of chronic renal failure :
we use calcitriol for treatment of hypocalcemia
- 2- It's not a cause of hypokalemia :
adrenal insufficiency
- 3- Cause of hypercalcemia at malignancy :
bone involvement (i think) or PTH secreting tumor ?????!!
- 4- Hyperkalemia changes on ecg :

5- Not normal anion gap acidosis :

renal failure

6- Corrected calcium equation :

7 mg/dl

7- Not used for treatment of hyperkalemia :

Magnesium sulphate

8- Low CO_2 , Low HCO_3 & $\text{pH} = 7.1$:

metabolic acidosis

9- cause of osteodystrophy at chronic renal failure : ????

10- cause of papillary necrosis due to tubulointerstitial disease :

elderly using chronic analgesia

11- wrong regarding type 4 tubular acidosis : **hypokalemia**

12- wrong regarding type 1 tubular acidosis : ?

Pulmonary :

1- Wrong regarding physical examination findings of Right sided obstruction of main stem bronchus :

bronchial breathing at right side

2- stony dull on percussion , decrease TVF , loss of auscultatory sounds:

Pleural effusion

3- في سؤال pneumothorax فيزيكال اكزامنيشن ؟

4- Best diagnostic test for cystic fibrosis :

Gene analysis

5- scenario of asthma exacerbation one is true regarding of this patient:

flattening of diaphragm ??!?!

6- one is wrong regarding severe asthma attack :

kPa of O_2 is more than 10

7- True regarding ARDS :

شايفين كلهن غلط (الويدج برشر دايركتلي ريليتد للبولموناري برشر ؛ فأى جواب من ال2 بأكد الثاني ، ولا مش صحيح ؟

8- True regarding sarcoidosis :

increase absorption of calcium from intestine (Vitamin D effect due to hydroxylase activity of epitheloid activity of granuloma

- 1) Most common cause of death in Jordan --->
heart attacks RTA STROKE
- 2) Complete heart block
- anti ssa
- 3) Treatment for eradication of h pylori
- omeprazole, clarythromycin, amoxicillin
- 4) Cause of galactorrhea,
primary hypothyroidism
- 5) Furesamide
- loop diuretic
- 6) *Av node aw conduction abnromality following MI
- right Coronary artery
- 7) Deforaxamine
- iron overdose
- 8) Retinal vasculitis
- behcet*
- 9) A cause of clubbing
-abscess
- 10) Most uti bacteria
- e. Coli
- 11) Metformin
- lactic acidosis
- 12) Urti with hematuria
- iga nephropathy
- 13) Elevated Bleeding time and PTT
- von disease
- 14) Cause of HTN
- coarctation of the aorta

15) Adults AS

- bicuspid aortic valve

16) X-ray negative finding with positive MRI

- none of the above

17) Diabetes except

- first neurological manifestation is muscle weakness

18) UTI with knee joint inflammation-

A,B,D

19) Not a bronchogenic associated paraneoplastic syndrome

- hypoglycemia

20) Not an inherited thrombophilia

- anti-phospholipid

21) Not hepatitis C mode of transmission

- feco oral

22) *All cause hyperuricemia except ?

- large doses of aspirin

23) *Hodgkin 1a? Which is wrong;

involves 2 nodes

24) Celiac disease

- anti-tissue transglutaminase antibody

25) Not related to hypertension treatment aw hek eshi

- statin

26) Peripheral neuropathy ..

vit b12

27) Positive direct coomb test .

.AIHA

28) early finding in hepatitis b ...

HBsAG

29) electrophoresis...

Thalasemia

30) X-linked..

G6PD

31) All cause hyperurecimea exept ...

Hige dose aspirine

32) Finger clubbing ..

Lung abscess

33) Gallbladder contraction ..

CCK

34) non lymphoid organ..

.liver

35) M.C cause of urinary infection.

.E-coli

36) M.C cause of CAP ...

s.pneumonia

37) Frusamide..

loop of henle

38) Retinal vasculitis..

behcet

39) Celiac ...

Anti-endomysium

40) M.C cause of death in jordan ..

Heart attac

41) M.C cancer in jordan .

.colorectal

42) Rt sternal" مش ذاكر النص"

... aortic regurg

43) M.C cause of End stage renal failure.

.DM

44) HLA-B27... AS

45) inclusion body myositis "all true except" ..

Femal > male

46) DIP involvment ..

.a+c+d "psoriatic/osteo"...../

47) Q"diarrhea"

.. نسيتہ salmonela/shigella/uroplasma..."a+b+d"

48) Warfarin..

INR

49) heparin antidote ..

Protamine sulfate

50) Body mass index 27..

overweight

51) Q about sle criteria ..

I think 4

1- Common organism cause Community acquired pneumonia ? >>>>

strep.pneumonia

2- Common organism cause pneumonia. In alcoholic. Pt >>>

klebsiella

3- About Ulcerative colitis except ??

Deep fissure ulcer

4- About crohn disease except? ?

. Ceaseation granuloma

5- Inheritance bleeding ??

Vwf

6- Systolic murmur ??

Between s1 and s2

7--Temporal pain wt to do nxt?>>>>>

high dose steroid

8-patechia with no other complain-----

ITP

9--how much criteria of SLE is present in this pt?

SLE criteria 4

10--asthma, eosinophilia wts the diagnosis>

chug strauss

11-gottorn rash>

dermatomyositis

12--inclusion body myositis

most common in men

13--LT upper Q pain radiat to sholder, diagnosis? ? 14--most common sign in eye in RA??

15-1st manifestation of AS??

A+b+C

16- best for diagnosis skeletal involvement in AS>

MRI??

17- one is wrong about psoriatic arthritis -----

chronic posterior uveitis

18- DM , Correct :

Fasting blood glucose < 126

19- Heparin therapy , wrong ?

Skin necrosis

20- Most common transmission mode in Hep B ?

Vertical or needle stick ???

21- Not used in hep B diagnosis?

HbCAg

22- Not used for H.Pylori eradication success ?

Serology

23- Most common cause of death in hypertensive pts ?

CVA , MI

24- achilles enthesitis seen in :

reactive arthritis ?

24- Triad of portal vein thrombosis + pancytopenia + hemolysis ?

PNH

25- CASE : low platelet count , WBC count 30000 , 50% blast ?

AML , M3 type

26- B12 def anemia ? Wrong ?

Commonly caused due to Diet deficiency

27- radiofemoral delay where ?

Coartication of aorta

28- h.pylori mode of transmission ?

Feco oral

29- one of these is not a cause of malabsorption?

Contact dermatitis

30- cause of hypothyroidism ?

Auto immune or iodine def.

31- systolic murmur ?

between s1-s2

32- which of these is not a primary cause of nephrotic syndrome ?

Amyloidosis

33- high blood urea is due all of these except ?

Low urea intake

34- all of these make hyperparathyroidism except ?

pancreatitis

35- a patient come with pain in left upper quadrant for with a history of infectious mononucleosis what is the diagnosis ?

Splenic rupture

36- Akhilis tendinitis where we find it ?

Reactive artheritis

37- Most common hormone secreted by adenoma

(prolactin)

38- Most common adenoma

(prolactinoma)

39- All are present on ecg for hyperaklema except

(prominent p wave)

40- All are present in behcet's disease except

**(behcet's disease (headache " pulmonary thrombosis DVT..erythema nodosum
...chronic post uveitis)**

41- Patient presents with confusion ;high creatinin and urea ,fever

(HUS" TTP)

42- One of the following are found in renal tubular necrosis

(hyperphosphatemia)

43- On of the following is true regarding to nephrotic syndrome

**(increase HDL". decrease LDI ..derease lipoproteinglomerular basemt membrane
injury)**

44- Signs of CHF include all of the following except :

a) Jugular venous distention

b) S3

c) Inspiratory rales

d) Displaced and sustained apical impulses

e) S4

45In pericarditis the chracterstic EKG changes ;

A:T wave inversion*

B; ST segment depression C Atrial fibrillation
D; ST segment elevation convex upwards
E; ST segment elevation with concave downwards

46- the causative organism in rheumatic fever is

- A. Staph aureus
- B. B Haemolytic Streptococcus group A***
- C. Streptococcus viridians
- D; E coli E; virus

47- Patients with aortic stenosis frequently develop:

- A. Exertional dyspnea and angina ***
- B. Wide pulse pressure
- C. Systemic embolization
- D. Atrial fibrillation
- E. Right ventricular hypertrophy

48- Radiofemoral delay present in one of the following conditions;

- a- in Angina pectoris
- b- Coarctation of the aorta***
- c- Renal artery stenosis
- d- Heart failure
- e- COPD

49- In hyperthyroidism Atrial fibrillation is best treated with :

- A. Quinidine
- B. Digitalis
- C. Digitalis and quinidine
- D. Pronestyl
- E. Antithyroid drugs***

50- Ulcerative colitis all true except
(deep ulcer fissure)

51- Crohn's disease all true except
(caseating granuloma)

52- Most common thyroid cancer
(papillary)

53- Howell Jolly body
(hyposplenism)

54- Most common bleeding disorder
(von Willebrand disease)

55- Most common cause of thromboembolism
(protein C deficiency)

56- Most common cause of endemic goiter
(iodine deficiency)

57- antibiotic for whipple disease.....
ceftriaxone

58-. DKA all except..

No change in anion gap

58-.ECG in hypercalemia 60-.SS In ...

SLE +sjougren "not sure"

61-. Howell jolly body. Target cell ...

Hyposplnism

62-.SE Of rifamicine ...

Hersutism

63-. Most common bleeding disorder...

vWF

64-.Most common eye finding in RA ??---

sjogren or sicca syndrome???-episcleritis

65-. All about heparin true except??

cause shin necrosis

66--.commonest ca in thyroid..

papillary

67-.Case Cushing Diagnostic test ??—

24h urine free cortisol

68-. Case .. k7.3 what give ...

Ca gluconate

69-. Community acquired pneumonia . . .

strepto

70-..pneumonia in alcoholic ..??-----

klebsiella

71 HLAB27 ...

SPA

72- SE Of statine

(HmgCoa reductase)??

73-. DM ..

insulin not use firstly for type 2DM

74-. Commonest pituitary Tumar .. prolactinoma / commonest hurmone .. prolactine

75-. Definitions ...

erosion superficial layer

76-.1st manifestations in blood transfusion rejection ...

nausea and vomiting

78- Side effect of statin include followings except

pulmonary fibrosis

79- In hyperthyroidism Atrial fibrillation is best treated with :

- . Quinidine
- . Digitalis
- . Digitalis and quinidine
- . Pronesty
- . Antithyroid drugs xxx

80- the causative organism in rheumatic fever is ?

A. staph aureus

B. B Haemolytic Streptococcus group A xxxx C streptococcus viridians

D; E coli E; virus

81- In renovascular hypertension the following statements are true except :

- a) Mechanism of hypertension is increased renin levels
- b) Etiology is fibromuscular dysplasia or atherosclerosis
- c) Onset < 30 years without family history or recent onset >55 years
- d) Treatment is usually by ACE-inhibitors if bilateral xxxx
- e) Recurrent pulmonary oedema is a clue for diagnosis

82- -Which of these is not found in sarcoidosis ??

Finger clubbing

83- Most common cause of upper GI bleeding>)

E.esophageal varices

84--not of management of varicies>

ppl

1. Least needed investigation for pulm. Embolism diagnosis :

ABGs 7asab step up ma3 enni mu mjawbe sa77 🤖

2. smudge cells seen in :

CLL

3. patient who doesnt need subcut. Heparin :

21 yrs old female after Normal vaginal delievery

4. immediate management in patient coming to ER with hx of nsaid intake and ugib :

administer 2 units of pRBCs (resuscitate)

5. tumor lysis syndrome causes all but which of the following :

hypercalcemia

6. Anti smooth muscle antibodies highest in

autoimmune hepatitis

7. patient with hx of Barette's esoph .first approach is :

endoscopy with biopsy

8. most common organism causing septic arthritis :

staph aureus

9. Non infectious disease

(legionella)

10. Malar rash and postive ANA

(lupus)

11. AB doesn't cover pseudomonas

(ceftriaxone)

12. Azithromycin

doesn't cover pseudomonal

13. Associated with Raynoud

(systemic sclerosis)

- 14. Not associated with anemia of chronic disease**
(essential HTN)
- 15. About Graves disease :**
decrease iodine uptake
- 16. most common cause of cushing other than pituitary adenoma :**
pituitary adenoma
- 17. Most common cause of FOU**
(infections)
- 18. Indications of thrombolytics**
(new onset LBBB)
- 19. Most common cause of meningitis**
(strep pneumonia)
- 20. Most common cause of pneumonia**
(strep)
- 21. Patient with positive blood dipstick but no RBCs on microscope**
(rhabdomyolysis)
- 22. Drug of choice for SVT**
(IV adenosine)
- 23. Diastolic blowing murmur**
(aortic regurg)
- 24. All true about FMF except**
(autosomal dominant)
- 25. Calculate BMI**
(25)
- 26. All are true about DKA except**
(high insulin)
- 27. Irregularly irregular pulse after alcohol**
(A fib)
- 28. Patient with bilateral infiltrates after H1N1**
(ARDS)

29. Patient has symptoms of hypothyroid how to confirm

(TSH)

30. Drugs that affect mortality in HF except

(frusemide)

31. Asthma exacerbation

we don't use antibiotics for acute management

32. wrong about COPD answer

(o2 doesn't affect life expectancy)

33. hepatitis A doesn't cause

HCC

34. fulminant hep all except

A

35. wrong about side effects of these drugs :

thiazide/thrombocytosis

36. thiazide not use in

acute liver failure

37. low antibodies in Coeliac >>

IgA

38. aortic dissection

jawabo elHX el charactaristic pain

39. which indicates a life threatening attack of athma,,

the answer is cyanosis

40. Most common cause of death in HTN

=MI

41. patient with Mutiple Myloma & nephrotic ;

membranoproliferative

42. true about PE :

negative D-dimers can exclude low probablity

43. Most cause cause of gout

decrease renal excretion

44. Kan fe kman gout o renal stones

45. Most common pathophysiology l eshe respiratory k2nu hypoxia>>

VQ mismatch

46. case male with URTI infection and gastroenteritis o sar 3ndu hematuria.. Etc i guess

IgA nephritis

47. Mechanism of action for aspirin >>

decrease el TA2

48. Mechanism of action for warfarin>>

Vit K ..etc.

49. Not a cause of macrocytic anemia ;

thalassemia b

50. Doesn't cause lymphadenopathy ;

CML , brucellosis (e5taf el 3olama2 😊)

51. Manage Asyatole ;

compression

52. Mechanism of action for imatinib >>

tyrosine kinase inhi9

53. Hb 4.6 w retic 3% parvovirus ans.

Hemolytic crisis

الصح aplastic crisis pages334

54. 60 yrs old diabetic female with knee pain Septic arthritis kan 3ndha pyrexia o 3ayfeh 7alha

55. Acromegaly not associated with??!!

Osteomalacia

56. Least associated with ANCA =

giant cell artirites

57. hyperlipidemia o 7atet el level bl mmol k2nu kan 9 unsure emoticon o 3ndu CVA bs ma 3ndu MI esh el management?!

Simvastatin

58. Right sided headache

Giant cell artiritis

59. 7.51 .. PaCO₂ : 24...calculated bicarb 24 ABG

respiratory alkalosis

60. Minimum time to repeat HBA1C

i guess 3 months

61. the measurement used for re-infarction diagnosis :

CK-MB

62. Pt on dialysis o sar 3ndu nausea o blurred vision..

Et Disequilibrium syndrome

63. Wrong about hypokalemia on ECG >>

Delta wave

64. Wrong about ECG of hyperkalemia >>

peaked p wave

65. Adverse effects of chronic use of steroid excep

hyperkalemia

66. hypercalcemia causes except >>

long q-t

67. Female with syncopial attacks o 3ndha murmur radiating to the carotids
>>

aortic stenosis

68. ACS ma mna3ty

digoxin

69. Not side effect of heparin –

skin necrosis.

70. kant SLE o ejat b chest pain o diffuse ST elevation >>

Pericaditis

71. el RA eja b decrease el voltage sa7?! O hypotension o raised JVP

cardiac temponade

72. Which one of cases of UGIB associated with

the worst outcome 75 male with liver cirrhosis and variceal bleeding

73. patient 3endo non hodgkin lymphoma ...shu el renal manifestation elo?

74. he question was about CHADVASc score and the answer was

COPD

75. IV drug user in the 1990s and asked for Hep C test. Which test to do?!
76. pt. with prev. hx of rheumatic heart disease history but with new murmur what's the cause?

strep. Viridins

77. not a risk factor for osteoporosis?

Obesity

78. all true about influenza except:

high fever

79. heliotrope rash :

dermatomyocitis

80. recurrent miscarriages:

anti-phospholipid syndrome

81. all true about pernicious anemia except:

response to iron treatment

82. case SOB o absar shu 3l CXR kan bat wings .etc Dx is

pulmonary edema

83. wrong about ulcerative colitis >>

Fistulas usually happens or hek she

84. wrong about crohns >>

causes polyps..

85. aldosteronism wrong >>

hyperreninemia

86. adrenal insufficiy wrong >

metablic alkalosis

87. most common cause of MI mortality >> ventricular arrhythmias

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 - Doctors who wrote the questions:
 - Dr. Rami Dwearee (GI + RS)
 - Dr. Muhammad Abo Farah (Hematology)
 - Drs. Khaleel Sweese and Hussein Amarat (Cardiology)
 - Dr. Jereas Al-Doood (Rheumatology)
 - Dr. Muhammad Goneemat (Nephrology)
 - Dr. Nadeem Jarah (Endocrine)
-

• Dr. Rami GI lectures ☑ A good number of questions are word by word statements from his lectures. You need to have learnt them by heart.

1) Wrong about mitral stenosis:

- a. Atrial fibrillation is associated with presystolic accentuation of the murmur
- b. The later the opening snap, the less severe the stenosis

2) 75 year-old female patient, blood pressure 160/90, best treatment:

- a. ACEI

3) 35 year-old woman with BMI of 35 kg/m² was found to have a blood pressure of 150/90, the best step in management:

- a. ACETI
- b. BB
- c. CCB
- d. ARB
- e. Weight reduction

4) Not used in acute left ventricular failure:

- a. Disyprimadole
- b. Mechanical ventilation
- c. Dobutatmine
- d. Diuretics

5) Wrong about pseumomembranous colitis:

- a. Develops two weeks after treatment with antibiotics
- b. Normal rectal mucosa
- c. Characterized by profuse bloody diarrhea
- d. There can be relapses after treatment with vancomycin

6) Woman with... and RNP antibody +ve, diagnosis is:

- a. MCTD
- b. Systemic sclerosis
- c. Dermatomyositis

7) **Management of a patient how have a fever of 3 month duration. Has typical signs, symptoms, and laboratory findings consistent with SLE. She present to hospital with hematuria with dysmorphic RBCS. Next step in management:**

- a. Renal biospys
- b. Intravenous methylprednisolone
- c. pulse cyclophosphamide
- d. IV methylprednisolone + pulse cyclphosmaide
- e. Monitoring c3 level

8) **Correct about calcium hemostasis :**

- a. Vitamin D deficiency causes Hypocalcemia + Hypophosphatemia
- b. Vitamin D deficiency causes Hypocalcemia + Hyperphosphatemia
- c. Hyperparathyroidism causes metabolic acidosis
- d. In primary hyperparathyroidism in primary PTH decreases 24 hour urine calcium
- e. None of the above

9) **JAK2 mutation is found in?**

- a. CML
- b. Polycythemia rubra vera
- c. Essential thombocytomia

10) **Not a complication of mycoplasma pneumonia:**

- a. Erythema multiforme
- b. Diarrhea and vomiting
- c. Thrombocytopenia
- d. Leucocytosis
- e. Pericarditis

11) **Wrong about ulcerative colitis complications:**

- a. Renal stones and gallstones
- b. Malignancy
- c. Amyloidosis
- d. Ascending cholangitis

12) **Wrong about FAP:**

- a. Unlikely to present with cancer before the age of 40
- b. Autosomal recessive
- c. Clinically apparent before age 20
- d. Associated with osteomas and mucous fibromas

13) **History of a man with retrosternal chest pain. ECG reveals ST segment depression in I and aVL. diagnosis:**

- a. Posterior MI
- b. Inferior MI
- c. Lateral MI

14) Not part of child purgh score in liver cirrhosis:

- a. Encephalopathy
- b. **Partial thromboplastin time**
- c. Ascites
- d. Albumin

15) Anti-TB drugs and side effect, correct answer is:

- a. **streptomycin and renal failure**
- b. Pyrazinamide and hepatitis
- c. Optic neuritis and...
- d. Vestibular neuritis and ethambutol

16) Not a cause of atrial fibrillation:

- a. Core pulmonale
- b. Alcoholic cardiomyopathy
- c. Hypertension
- d. Acute rheumatic fever
- e. Rheumatic heart diseases

17) All are causes of chronic interstitial nephritis, except:

- a. Sickle cell
- b. Wilson's disease
- c. NSAIDs

18) RA, patient in pain, he takes indomethacin, next step:

- a. **Methotrexate**
- b. Corticosteroid therapy

19) All are causes of upper zone infiltrate, except:

- a. RA
- b. Ankylosing spondylitis
- c. TB
- d. Sarcoidosis

20) All cause cavitation in lungs, except:

- a. Pneumocystic carini
- b. Aspiration pneumonia
- c. Invasive Aspergillosis
- d. Septic emboli

21) Young male, 20 years, fever, weight loss 10 kg, x-ray show anterior mediastinal mass , diagnosis is:

- a. Lymphoma
- b. Coccidiomycoma
- c. Histoplasmosis

- 22) **All are risk factors for legionella pneumonia, except:**
- Surgery
 - Tobacco use
 - Hospital stay
 - HIV
 - Steroids
- 23) **One is true about COPD:**
- Prophylactic antibiotics reduce the incidence of exacerbations
 - A patient with PaO₂ <60 who want to air travel, must have O₂therapy
- 24) **A joint deformity that is not present in RA:**
- Heberden
 - Botnunnier
 - Z-deformity
- 25) **A patient who presented with typical signs and symptoms of PMR, next step in management:**
- Low dose steroids
 - High dose steroids
- 26) **Correct about PAN:**
- Association with hepatitis C
 - Pathology in small and medium arteries at site of bifurcation
 - Associated with leukocytoclastic necrosis
- 27) **Not causes by fungus:**
- Leprosy
- 28) **Defect in C5-C8 predispose to infection with which of the following organisms:**
- Nisseria meningitides
 - Streptococcus pneumonia
 - Salmonella
 - ????
- 29) **MRSA treated by ?**
- Vancomycin
- 30) **Not in management of bronchiectasis:**
- Surgery
 - Postural drainage and CPT
 - Maintenance of normal BP
 - Prophylactic antibiotics
- 31) **Not a complication of HIV:**
- Idiopathic pulmonary fibrosis
 - Lymphoid interstitial pneumonia

- 32) Wrong about IBS:**
a. All need barium enema and meal
b. Patient with diarrhea-prominent disease can be treated by loperamide

- 33) Not indication for renal biopsy ?**
isolated proteinuria and normal shaped RBCs

- 34) A cause of respiratory failure I:**
a. Guillain bare
b. ARDS
c. Kyphosis
d. Foreign body in a major brochus

- 35) Correct about psoriasis:**
a. Can cause sacroilitis
b. Psoriatic arthritis present in 60% of patients

- 36) Not part of criteria to diagnose Behcet:**
a. Arterial aneurysms
b. Uveitis
c. Pethargy test positive

- 37) Correct about Cushing syndrome:**
a. Loss of diurnal variation is a reliable sign for diagnosis
b. ACTH level elevated

- 38) Correct about hypothyroisim:**
a. T4 and T3 can be normal while TSH is the first to be elevated
b. Weight gain is not a sensitive parameter

- 39) Wrong about hypothyroidism:**
a. Antibodies are positive only in 70% of patients with Hashimotoo thyroidits.

- 40) Not side effects of interferon TT hepatitis B:**
a. Irreverislbe hair loss
b. Depression
c. ?

Answer: A (*it is a reversible hair loss*)

- 41) **Wrong about management of upper GI bleeding:**
- a. Ligation and sclerotherapy is more effective than medical therapy
 - b. Most bleeding stop temporarily
 - c. Somatostatins and terlipressin reduce portal pressure
 - d. Ballon tamponade after upper GI Endoscopy

42) **Not biological agent in ??:**

- a. IL 6
- b. Infliximab
- c. Etanercept

43) **Wrong about hemochromatosis:**

- a. Has a male predominance
- b. Autosomal recessive
- c. Congestive cardiomyopathy
- d. Patients have gray skin pigmentation from iron deposition

44) **Not a cause of thrombocytosis:**

- a. Iron deficiency anemia
- b. Myelodysplasia
- c. Pernicious anemia

45) **Another marker that is used to diagnose vitamin B12 deficiency:**

- a. Elevated methylmalonic acid level
- b. Decrease methylmalonic acid level
- c. Elevated homocysteine level
- d. Decrease homocysteine level

46) **A typical cause of anemia with normal RDW:**

- a. Thalassemia
- b. Iron deficiency anemia

47) **The definitive treatment of B-thalassemia major:**

- a. BMT (Bone marrow transfusion)
- b. Blood transfusion
- c. Iron therapy

48) **Which leukemia typically is associated with DIC:**

- a. M1
- b. M2
- c. M3
- d. M4
- e. M5

49) Not a typical feature of elevated ICP:

- a. Tachycardia and hypotension
- b. Morning headache
- c. Headache that increase with straining and bending forward

50) Patient present with Hb of 8... Blood film shows polychromasia. Best next step in management . patient is on hydroxychloroquine therapy for SLE :

- a. IV corticosteroids
- b. Plasmapheresis

Ans: A (She has Evan's syndrome)

51) All are correct about the mortality in ARF, except:

- a. Mortality depend on the cause
- b. Prognosis is generally good with reversible causes like drugs and blood loss
- c. Mortality in complicated ARF reaches 15-30%

52) History: A female with history of long travel, then develops unilateral lower limb swelling with redness and hotness. She was diagnosed with DVT. She was started on Unfractionated heparin. 10 days later, she was found to have a platelet count of 60,000. Next step in management:

- a. Stop unfractionated heparin and no longer anticoagulation
- b. Stop unfractionated heparin and start low-molecular heparin.
- c. Stop unfractionated heparin and start her on leperudine

53) Alcoholic patient was found to have macrocytic anemia, the most likely cause:

- a. Vitmain B12 defecency

54) 30 year old male patient, presented with chest pain one week after an URTI, most likely diagnosis:

- a. Pericarditis
- b. Tension pneumothorax

55) 3 weeks after MI, a patient presented with chest pain. ECG showed elevated ST segment in anterior chest leads, diagnosis is:

- a. Re-infarction
- b. Pericarditis
- c. Ventricular aneurysm with superimposed VT

Answer: C (Cause of persistent ST segment elevation is ventricular aneurysm)

56) A 22 year old male patient, with central chest pain, radiating to back, he is found to have murmur on exam. Also, he is 2m tall. Most likely diagnosis:

- a. MI
- b. Pericarditis
- c. Aortic dissection

Answer: C (tall ☞ Marfan syndrome. Plus, he is too young for an MI. Also, chest pain that radiates to back is characteristic of aortic dissection)

57) Wrong statement about T wave:

- a. Can be inverted in all leads in pericarditis

- b. Always abnormal if inverted in V2
- c. Always abnormal if inverted in V5
- d. Can be normally inverted in V1 in 20% of population.
- e. Can be found in NSTEMI

58) 45 year-old male patient presents with retrosternal chest pain, radiating to left arm. Troponin is negative. CK is 320. Next step in management:

- a. Reassure and send home
- b. Start heparin
- c. Start thrombolytics
- d. Observation
- e. Ask for the CK-MB fraction.

59) Patient with history typical of MI. Found to have ST segment depression in leads aVF, V2, and V3. Pulmonary capillary wedge pressure is normal. Right ventricle pressure is 65/20. Right atrial pressure is 25/10. Neck veins are distended. Diagnosis is:

- a. Mitral valve prolapse
- b. Right ventricular infarction

60) Type II respiratory failure is likely to be present in a patient with the following ABGs:

- a. Hypoxia, Hypercapnia, low pH

61) correct about the exacerbation of COPD:

- a. Mechanical ventilation maybe helpful in management if pH is <7.15
- b. ?

62) Correct about Turner syndrome:

- a. Likely to be diagnosed at birth
- b. Typically diagnosed around puberty
- c. End up to have a tall stature

63) Wrong or right about diabetic retinopathy???:

- a. Hard exudate are the first to appear
- b. Hard exudates result from retinal infarction
- c. Hard exudate carry worst prognosis than soft exudate
- d. None of the above

64) A patient with typical history and signs and symptoms of dermatomyositis. What would you do to confirm your diagnosis?

- a. Muscle biopsy
- b. EMG
- c. ENA
- d. ?
- e. **A & B**

65) Wrong about hyperparathyroidism:

- a. Most likely cause is parathyroid hyperplasia
- b. ?
- c. ?

66) Wrong about hypoparathyroidism:

- a. Typically associated with metabolic alkalosis
- b. Typically associated with metabolic acidosis
- c. ?

67) Correct about cluster headache:

- a. Most common form of migraine
- b. **Some are associated with horner's syndrome**
- c. More common in males than females
- d. Beta-blockers are of benefits as prophylaxis
- e. Sumatriptan is not effective

Horner syndrome can be caused by any interruption in a set of nerve fibers that start in the part of the brain called the hypothalamus and travel to the face and eyes.

Sympathetic nerve fiber injuries can result from:

- Injury to one of the main arteries to the brain (carotid artery)
- Injury to nerves at the base of the neck called the brachial plexus
- Migraine or cluster headaches
- Stroke, tumor, or other damage to a part of the brain called the brainstem
- Tumor in the top of the lung

Source:

<http://www.nlm.nih.gov/medlineplus/ency/article/000708.htm>

68) Correct statement about the natural history of multiple sclerosis:

- a. **Invariably progressive with relapses and remission**

Answer: A

69) Correct about hepatitis B:

- a. HbsAg is positive during the prodrome
- b. HbsAg is positive during the acute and chronic phase
- c. HbsAg is more likely to be positive in carrier in western countries than eastern countries
- d. HbsAg is invariably present if the patient is jaundiced during the acute infection

- 70) Correct about H. pylori:**
- Gram positive
 - Antral gastritis is the second most common complication
 - Infection is life long unless treated
 - Causes 80% of DU
 - Increase bicarbonate production
- 71) Wrong about autoimmune hepatitis:**
- Not associated with hepatosplenomegaly or spider naevi
- 72) About cirrhosis:**
- TIPS increases the incidence of hepatic encephalopathy
 - Protein should be restricted to 40mg/kg/d unless encephalopathy develops
- 73) Wrong statement:**
- IVA of renal arteries is less likely to cause renal shutdown than IVU
 - IVU is renal arteries is more likely to cause systemic atheroembolism?
- 74) Wrong about the use of US to diagnose kidney problems:**
- Cheap, available quickly.
 - Disadvantage is that it is highly operator dependent
 - Use of Doppler velocimetry can significantly enhance the information that we can get from it like resistivity index.
 - In CKD, the kidneys appear small with loss of corticomedullary differentiation
 - ???
- 75) One is correct about hyperthyroidism**
- high T3, normal T4 and low TSH is well known type
 - viral infection is usually the cause of graves disease
 - toxic MNG is most common in young males
- 76) Correct about acromegaly:**
- IGF-1 is the gold standard for diagnosis
 - Cardiovascular is main cause of mortality
- 77) Wrong about viral encephalitis:**
- There is no prodrome before the onset of symptoms
 - EEG typically shows involvement of temporal lobe in herpes simplex encephalitis
 - Meningism is present in 70% of patients
 - Glucose in CSF has normal value
- 78) Which lesion would result in right homonymous hemianopia:**
- Left optic tract
 - Optic chiasm
 - Left optic nerve
 - Right optic nerve
 - Right optic tract
- 79) One of the following can diagnose DM:**

- a. Fasting blood sugar ≥ 100
- b. Random blood sugar ≥ 140
- c. **Random blood sugar ≥ 200 with typical signs and symptoms**

80) Wrong about nephrotic syndrome:

- a. More than 2.5 gm is called nephr(i)tic range proteinuria
- b. Range from 0.5-1.5 gm is more likely to be glomerular than tubular
- c. Rnage >2.5 gm is most likely to be glomerular
- d. ?
- e. ?

Answer: A? The question could have a spelling mistake of "nephirit range" instead of nephrotic range. Don't statements b & C contradict each other?

81) Not a cause of acute pancreatitis:

- a. **Measles**
- b. Hypothermia
- c. Azathioprine
- d. Corticosteroids

Answer: A (mumps not measles causes acute pancreatitis)

82) During normal inspiration:

- a. RA pressure increases
- b. SBP increases
- c. Splitting of S2 is increased

83) In pericarditis, one is false:

- a. T inversion occurs after the J point returns to isoelectric line
- b. Elevated troponins imply worse px

84) All the following increase survival in MI except:

- a. Heparin
- b. Antiplatelets
- c. Beta blockers
- d. Iv nitroglycerine

85) Pulmonary edema management except:

- a. Oxygen
- b. Morphine
- c. Iv aminophylline
- d. Diuretics working on the proximal tubule

86) In primary TB:

- a. Patients remains infectious after 2 months of therapy
- b. Bilateral hilar lymphadenopathy
- c. Caseating lesions in lymph nodes always present

Answer: C (this is the definition of Gohn's complex???)

87) In Addison's disease one is true:

- a. Nausea and vomiting are early symptoms

Final Exam 2012 4th year

1- In ASD the second heart sound is best described by the following:

- a- Split and fixed during respiration
- b- Split and moves with respiration**
- c- Paradoxical splitting
- d- decrease in the intensity of the second heart sound
- e- Increase in the intensity of the heart sound

2- Systolic murmur one of the following is true:

- a- Murmur occurs between S1 and S2**
- b- Murmur occurs after S2
- c- Murmur occurs before S1
- d- Murmur occurs between S1 and S2 and after S2
- e- In aortic stenosis the murmur is not transmitted to the carotid artery

3- Diastolic Murmurs are all true except:

- a- Occurs after the S2
- b- It is divided into an early, mid, and late diastolic murmur
- c- In aortic stenosis the murmur is mid diastolic
- d- In aortic regurgitation the murmur is called early diastolic blow
- e- In atrial fibrillation and mitral stenosis the accentuation of presystolic murmur is not maintained**

4- Radiofemoral delay is present in one of the following conditions;

- a- in Angina pectoris**
- b- Coarctation of the aorta
- c- Renal artery stenosis
- d- Heart failure
- e- COPD

5- In hyperthyroidism Atrial fibrillation is best treated with :

- A. Quinidine
- B. Digitalis
- C. Digitalis and quinidine**
- D. Pronestyl
- E. Antithyroid drugs

6- Patients with aortic stenosis frequently develop:

- A. Exertional dyspnea and angina
- B. Wide pulse pressure**
- C. Systemic embolization
- D. Atrial fibrillation
- E. Right ventricular hypertrophy

7-Edema, ascites , enlarged liver and venous pressure of 180mm. of saline suggest:

- A. **Laennec's cirrhosis**
- B. Congestive failure
- C. Interior vena caval obstruction
- D. Acute glomerulonephritis
- E. Cirrhosis of the liver

8- the causative organism in rheumatic fever is

- A. staph aureus
- B. B Haemolytic Streptococcus group A C streptococcus viridians
- D; E coli**
- E; virus

9-In pericarditis the chracterstic EKG changes ;

- A:T wave inversion
- B; ST segent depression C Atrial fibrillation
- D;ST segment elevation covex upwards**
- E; ST segment elevation with cocave downwards

10- IN idiopathic hypertrophic sub aortic stenosis (IHSS)

- One is true
- A; it is a type of dilated cardiomyophy
- B; AN important cause of sudden death in athelets C;Left ventricle is dilated
- D; pulse examination is normal in character**
- E:need nitrate for treatment

11) One of the following is not a cause of pericarditis :

- a) TB**
- b) SLE
- c) Lymphoma
- d) COPD
- e) Uremia

12) In the management of DCM all are true except :

- a) Salt and water restriction
- b) ACE-inhibitors**
- c) Diuretics
- d) Beta blockers
- e) Complete bed rest

13) In hypertrophic CMP one statement is false :

- a) Diagnosis is based on hypertrophied non-dilated left ventricle in the absence of another disease.**
- b) Small LV cavity , asymmetrical septal hypertrophy (ASH) and systolic anterior motion of the mitral valve leaflet (SAM) .
- c) 50% of cases of familial hypertrophic cardiomyopathy is autosomal dominant

- d) Pathophysiologically associated with impaired systolic function.
- e) Patients with HCM usually die because of SCD

14) Pathophysiological abnormalities in heart failure include all of the following except :

- a) Reduced myocyte shortening and wall motion
- b) Sodium retention and circulatory congestion
- c) Systemic vasodilation that increase impedance of the LV ejection
- d) Structural remodelling and dilation of the LV
- e) Renin-Angiotensin-Aldosterone activation

15) Signs of CHF include all of the following except :

- a) Jugular venous distention
- b) S3
- c) Inspiratory rales
- d) Displaced and sustained apical impulses
- e) Bradycardia

16) Systems responsible for BP regulation include all of the following except :

- a) Heart
- b) Blood vessels
- c) Kidney
- d) Baroreceptors in aortic arch and carotid sinuses
- e) Direct CNS control

17) Detrimental effects of HTN include all of the following except :

- a) LVH and diastolic dysfunction
- b) Thromboembolic stroke
- c) Sclerotic and markedly spastic retinal arteries
- d) Aortic dissection
- e) Acute renal failure

18) In renovascular hypertension the following statements are true except :

- a) Mechanism of hypertension is increased renin levels
- b) Etiology is fibromuscular dysplasia or atherosclerosis
- c) Onset < 30 years without family history or recent onset >55 years
- d) Treatment is usually by ACE-inhibitors if bilateral
- e) Recurrent pulmonary oedema is a clue for diagnosis

19) Major manifestations of acute rheumatic fever include all of the following except :

- a) Arthralgia
- b) Subcutaneous nodules
- c) Carditis
- d) Chorea
- e) Erythema marginatum

20) In pulmonary hypertension the following statements are true except :

- a) Primary pulmonary hypertension likely to begin with spasm of the muscle layer of pulmonary arteries .
- b) Secondary pulmonary hypertension most probably results from disease that impedes flow of blood through lungs or that causes periods of low oxygen in blood.
- c) In some people the bone marrow responds to hypoxemia by red blood cell production (polycythemia)
- d) Signs and symptoms of right sided heart failure usually dominates the picture in cor pulmonale
- e) Medical treatment of pulmonary hypertension is usually effective

21)What is swan neck deformity in RA :

- A) Hyper flexion of proximal interphalangeal (PIP) and hyper extension of distal interphalangeal (DIP).
- B) Hyper extension of PIP and hyper flexion of DIP.
- C) Hyper extension of PIP and hyper extension of DIP. D)Subluxation of Metacarpophalangeal.
- E)Non of the above.

22)Which disorder is diagnosed by the presence of calcium pyrophosphate in synovial fluid:

- A) Chondro calcinosis.
- B) Gouty arthritis. C)Psoriatic arthritis. D)Psoriatic arthritis. E)O.A

23)A patient present with B-Asthma mono neuritis multiplex-esoino phila.ANCA positive ; what is the most likely diagnosis :

- A) SLE.
- B) Wegner granulomatosis. C)Microscopic polyangiitis. D)Good pasture.
- E)Currig-strass.

24)Which of the statements isn't true according to myositis :

- A) Inclusion body myositis take a good prognosis.
- B) Helio trope rash is highly specific for dermatomyositis.
- C) steroid is corner stone for treatment.
- D) Statin's can induced myositis.
- E) Subcutaneous calcification a frequent manifestation in juvenile dermatomyositis.

25)A disease modifying anti rheumatic drugs (DMARD) include all f the following except for :

- A) Salazo pyrine. B)Hydroxychloro quine. C)Colchicine.
- D)Methotrexate E)leflenamide

26)All of the following are criteria for Behcet disease except for :

- A) Mouth ulcer's.
- B) Arterial Anuyresm . C) Hypopyron..
- D) Pethergy test. E) Acne-like lesion

27) All of the following are criteria for SLE

- A) Anti RNP.
- B) Mouth ulcer's. C) ANA.
- D) Photosensitivity. E) Leukopenia.

28) One of the following deformities can't be caused by RA:

- A) Swan neck deformity.
- B) Genu valgua.
- C) Elbow flexion.
- D) Bouchard nodules.
- E) Z deformity of thumb.

29) All of the following are indications for the treatment of Gouty arthritis except for:

- A) Chronic Gouty arthritis.
- B) Renal stones.
- C) Renal failure.
- D) Serum uric acid more than 8mg in men.
- E) All of the above.

30) One of the following isn't a characteristic for spondylo arthropathy:

- A) Strong association with HLA-B27. B) Occasional Aortitis.
- C) Assocoation with chronic inflammatory bowel disease. D) Tendency for posterior uveitis.
- E) Enthesitis.

31) The _____ isn't a cause of secondary sjogren:

- A) Reactive arthritis. B) SLE.
- C) Scleroderma.
- D) RA.
- E) Hypothyroctism.

32) Differential diagnosis of sacroiliitis includes all of the following except for:

- A) Psoriatic.
- B) Behcet disease.
- C) Aukylosing spondylitis. D) Reactive arthritis.
- E) Chron disease.

33) Boutonniere deformity is seen in:

- A) RA.
- B) Psoriatic arthritis. C) Reactive arthritis.
- D) Ostco arthritis. E) Tenosynovitis of haud.

34) All of the following are ANCA associated vasculitis except for:

A) Microscopic polyangiitis. B) Churg-Strauss vasculitis. C) Kawasaki syndrome.

D) Wegner granulomatosis.

E) All of the above.

Final Exam 2011 4th year

1. Wrong about DM:

A. Goal of HbA1C should be less than 6.8%

2. Wrong about peptic ulcer:

A. Associated with type A personality

B. Duodenal ulcer is associated with increased risk of malignancy???

C. Most common cause of upper GI bleeding

INTRODUCTION — Since the discovery of *Helicobacter pylori* in the 1980s, much has been learned about this gram- negative spiral bacteria and its associated disease states. In 1994, the NIH Consensus Conference recognized *H. pylori* as a cause of gastric and duodenal ulcers. Later that year, the International Agency for Research on Cancer (IARC) declared *H. pylori* to be a group I human carcinogen for gastric adenocarcinoma [1]. There is also evidence that *H. pylori* infection is a risk factor for gastric mucosa-associated lymphomas (MALT lymphomas). (See "[Clinical presentation and diagnosis of primary gastrointestinal lymphomas](#)".)

Ans:

- About 55% of UGIB is due to peptic ulcer disease.

▪ Abstract

▪ The relation between peptic ulcer and stomach cancer has long been disputed, but there is accumulating evidence that gastric ulcer disease is positively associated and duodenal ulcerations negatively associated with the risk of developing stomach cancer.

World J Surg. 2000 Mar;24(3):315-20. Risk of stomach cancer in patients with peptic ulcer disease. [Hansson LE](#). Department of Surgery, Mora Hospital, S-792 85 Mora, Sweden.

3. Obesity is associated with an increased risk of, except:

A. Cancer

B. Diabetes

C. Hypertension

D. Biliary disease

E. COPD

4. Worldwide, the most common cause of renal failure is?

A. Diabetes

5. Case history: Patient presents to ER with K of 7.9 mmol/L and... the best initial management:

A. Calcium gluconate

B. Calcium resonium C.

6. One of the following does not metastasize to the CNS:

A. ALL

Answer: AML is the leukemia that metastasizes to the CNS.

7. **Wrong about diagnosis of ALL:**

A. Lumbar puncture

8. **Worst prognosis in a patient diagnosed with ALL is with the following at the presentation:**

A. Neurological involvement

B. Philadelphia chromosome

C. Male

D. Age

Answer: Increasing age\ Philadelphia chromosome\ WBC >30,000

9. **Wrong about iron deficiency anemia:**

A. Low TIBC

B. Low retics response

Answer: (A) High TIBC

Corrected reticulocyte count = %reticulocyte X (Patient's Hct/Expected normal Hct of 40) Our patient's

Corrected reticulocyte count is $2.5 \times 23 / 40$. It is 1.2%.

Less than 2% = hypoproliferative type. This means that her anemia is due to underproduction of red cells by the bone marrow.

10. **About blood transfusion:**

A. Back and lumbar pain most common sign and earliest sign of incompatible reaction.

Fever is the most common transfusion reaction

11. **A plumber who didn't improve after taking ranitidine for multiple ulcers he had. He then developed steatorrhea:**

A. Zollinger Ellison syndrome

12. **Not a criteria in diagnosing irritable bowel syndrome:**

A. Nocturnal diarrhoea

B. Bloating

C. Gastrocolic reflex

Diarrhea — Diarrhea is usually characterized as frequent loose stools of small to moderate volume. Stools generally occur during waking hours, most often in the morning or after meals. Most bowel movements are preceded by lower abdominal cramps and urgency even to the point of fecal incontinence and may be followed by a feeling of incomplete evacuation.

Approximately one-half of all patients with IBS complain of mucus discharge with stools [16]. Large volume diarrhea, bloody stools, nocturnal diarrhea, and greasy stools are NOT associated with IBS and suggest an organic disease. A subgroup of patients describe an acute viral or bacterial gastroenteritis which then leads to a subsequent disorder characteristic of diarrhea-predominant IBS, called post-infectious IBS. (See "[Pathophysiology of irritable bowel syndrome](#)".)

13. **Most common pituitary problem:**

A. Prolactinoma

14. 17 year old african american girl presented to ER with a one week history of painful lesions on the legs. X-ray showed bilateral hilar masses, diagnosis is:

A. Sarcoidosis

15. Most common cause of death in hypertensive patients:

A. MI

B. CVA

C. Renal failure

16. A woman who developed dyspnoea over 3 weeks... she presented to ER... X- ray showed large left pleural effusion, your next step is:

A. Aspiration of fluid to dryness and examination of fluid

B. Only examination of fluid

17. Which is not associated with finger clubbing:

A. Wegner's granulomatosis

B. Idiopathic pulmonary fibrosis

C. Bronchiectasis

Clubbing — Clubbing of the digits ([figure 3](#)) is common in some pulmonary disorders (idiopathic pulmonary fibrosis, asbestosis) and rare in others (sarcoidosis, hypersensitivity pneumonitis, pulmonary Langerhans cell histiocytosis). Other disorders associated with clubbing include cystic fibrosis, pulmonary arteriovenous malformations, cyanotic heart disease, malignancies of the lung and pleura, and inflammatory bowel disease [24]. When clubbing occurs in the course of ILD, it is typically a late manifestation and suggests advanced fibrosis of the lung.

Answer: A

NEW TERMINOLOGY — In January 2011, the Boards of Directors of the American College of Rheumatology, the American Society of Nephrology, and the European League Against Rheumatism recommended that the name Wegener's granulomatosis be changed to granulomatosis with polyangiitis (Wegener's), abbreviated as GPA [1-3]. This change reflects a plan to gradually shift from honorific eponyms to a disease-descriptive or etiology-based nomenclature. The parenthetical reference to Wegener's will be phased out after several years as the new name becomes more widely known.

Q18 - X-ray showed a mass in the lung, you suspect this patient to have non-small cell lung cancer. What finding would be against this diagnosis:

D. High ADH

Small cell carcinoma is associated with Eaton-Lambert syndrome (saves ocular muscles), SIADH, and other paraneoplastic syndromes.

Lambert-Eaton syndrome (LES)

lamcb_rt Tct[n

a generalized disorder of neuromuscular transmission caused by a defect in the release of acetylcholine quanta from the presynaptic nerve terminals; often associated with small cell carcinoma of the lung, particularly in elderly men with a long history of cigarette smoking. In contrast to myasthenia gravis, weakness tends to affect solely axial muscles, girdle muscles, and less often the limb muscles; autonomic disturbances, e.g., dry mouth and impotence, are common; the deep tendon reflexes are unelicitable; on motor conduction studies, responses on initial stimulation are quite low in amplitude, but they show marked post-tetanic facilitation after a few seconds of exercise. Lambert-Eaton syndrome is

due to loss of voltage-sensitive calcium channels located on the presynaptic motor nerve terminal.

See: **myasthenic syndrome**. Syn: **carcinomatous myopathy, Eaton-Lambert syndrome, Lambert syndrome, myasthenic syndrome**.

18. Wrong about polycystic ovarian syndrome:

- A. High LH/FSH ratio
- B. Acanthosis nigricans
- C. Acne
- D. Hypertension

Answer: according to Wikipedia, Women with PCOS are at risk for the following: ... acanthosis nigricans

Ehrmann et al¹ reported recently that 33.4% of US women with PCOS exhibit symptoms of the metabolic syndrome, such as increased hyperglycemia, insulin resistance, and dyslipidemia, although this percentage varies depending on the cohort studied. Frequently these young women exhibit hypertension as well.

Despite the list of characteristics that typically accompany PCOS, the exact mechanism(s) responsible for hypertension in women with PCOS is controversial. Many of the symptoms associated with PCOS have been shown to also be associated with increases in blood pressure, such as increases in body mass index and the presence of metabolic syndrome, with its accompanying insulin resistance and type 2 diabetes.

<http://hyper.ahajournals.org/content/49/6/1220.full>

19. Wrong about pulmonary hypertension:

- A. Medical treatment is effective.
- B. Bone marrow can respond by producing more RBCs

Outcome — Treatment of pulmonary hypertension improves hemodynamic measures, World Health Organization (WHO) functional class, and the six-minute walking test distance [69,70]. It also appears to improve survival:

Numerous uncontrolled trials and one controlled trial of epoprostenol therapy have demonstrated improved survival compared to historical controls [61,71-73]. As an example, one trial demonstrated that survival among patients receiving epoprostenol was better than historical controls at one year (85 versus 58 percent), three years (63 versus 33 percent), and five years (55 versus 28 percent) [61].

A meta-analysis of 21 randomized trials (3140 patients) found that therapy with a prostanoid, an

endothelin receptor antagonist, or a phosphodiesterase-5 inhibitor improves mortality compared to controls (1.5 versus 3.8 percent, RR 0.57, 95% CI 0.35 - 0.92) [69]. The average duration of the trials was 14 weeks.

20. Definitive treatment of obstructive sleep apnea:

- A. Weight reduction
- B. Tracheostomy
- C. Continuous positive airway pressure

• Tracheostomy provides definitive correction because it bypasses the obstruction. It is recommended for patients with very severe OSA, especially if the patient does not tolerate CPAP or has cor pulmonale.
<http://emedicine.medscape.com/article/295807-treatment#showall>

21. Wrong about hypertension:

- A. Complications start >140/90 Answer: ????

22. A diabetic patient was diagnosed with new hypertension, best management:

- A. Thiazide
- B. Enalapril**
- C. Furosemide

23. Causes of hypercalcemia, except:

- A. Cushing**
- B. Thiazides

24. All cause hyperkalemia, except:

- A. ACEI
- B. Furosemide**
- C. RTA type 4

25. The following drugs improve prognosis of patients with heart failure, except:

- A. Metoprolol
- B. ACEI
- C. Statin**
- D. Furosemide
- E. Aldosterone antagonist

Although data on diuretic efficacy are limited, a meta-analysis of a few small trials found that diuretics were associated with reduction in mortality as well as reduced admission for worsening heart failure [25]. (See "[Use of diuretics in patients with heart failure](#)", section on 'Efficacy'.)

Statins — Clinical trials have evaluated the efficacy of statins on mortality in patients with both ischemic and nonischemic systolic HF. (See "[Statin therapy in patients with heart failure](#)".)

Summarized briefly, no benefit from statin therapy has generally been demonstrated in patients with moderate to severe heart failure due to systolic dysfunction with or without coronary artery disease. Limited data suggest that statins may benefit patients with diastolic dysfunction.

SUMMARY AND RECOMMENDATIONS — Despite strong evidence of benefit for statins in most subsets of patients with established cardiovascular disease, two large randomized trials found no benefit from initiating statin therapy in patients with symptomatic systolic heart failure (ischemic or nonischemic) and a mean left ventricular ejection fraction ≤ 33 percent. (See '[Statins in systolic HF](#)' above.)

26. True about systolic murmur:

- A. Between S1 & S2

27. Patient was diagnosed with polymyositis. Wrong statement is:

- A. Good prognosis in inclusion body myositis
B. Myositis associated with calcification in children

Ans: IBM is generally resistant to all therapies and its rate of progression appears to be unaffected by currently available treatments.

http://www.ninds.nih.gov/disorders/inclusion_body_myositis/inclusion_body_myositis.htm#What_is_the_prognosis

28. Wrong about scleroderma:

- A. Pulmonary fibrosis
B. Encephalopathy

Answer: B.

Pulmonary involvement — Pulmonary involvement is seen in more than 70 percent of patients with SSc. The two principal clinical manifestations are interstitial lung disease (also called fibrosing alveolitis or pulmonary fibrosis) and pulmonary vascular disease, leading to pulmonary arterial hypertension ([table 5](#)). These issues are discussed in detail separately but will be briefly reviewed here. (See "[Clinical manifestations of systemic sclerosis \(scleroderma\) lung disease](#)".)

Neuromuscular involvement — Neuromuscular involvement in SSc is discussed in more detail elsewhere. (See "[Neuromuscular manifestations of systemic sclerosis \(scleroderma\)](#)".) The following is a brief summary of the types of neurologic and muscle disorders that have been noted in case reports and series:

- Cranial, entrapment, peripheral, cutaneous, autonomic neuropathies
- Myopathy and inflammatory myositis
- Central nervous system involvement, including headache, seizures, stroke, vascular disease, radiculopathy, and myelopathy

29. In kidney biopsy, linear deposits of IgG were found along basement membrane, diagnosis is:

- A. Good pasture's syndrome

30. A patient had infectious mononucleosis, 3 weeks later, he developed pain in the tip of the left scapula and...

- A. Pancreatitis
- B. Splenic rupture**

31. A patient with RUQ pain, fever, chills, rigors, clay colored stool and dark urine. Diagnosis is:

- A. Acute hepatitis**
- B. Ascending cholangitis
- C. Acute cholecystitis

<p>CLINICAL MANIFESTATIONS — The classic triad of Charcot — fever, right upper quadrant pain, and jaundice — occurs in only 50 to 75 percent of patients with acute cholangitis [8]. Confusion and hypotension can occur in patients with suppurative cholangitis, producing Reynold's pentad, which is associated with significant morbidity and mortality [9]. Hypotension may be the only presenting symptom in elderly patients or those on corticosteroids, while septic shock in severe cases can lead to multiorgan failure.</p>	<p>The incubation period averages 30 days (range 15 to 49 days), after which the illness begins with the abrupt onset of prodromal symptoms including, fatigue, malaise, nausea, vomiting, anorexia, fever, and right upper quadrant pain. Within a few days to one week, patients note dark urine, acholic stool (light-colored stools lacking bilirubin pigment), jaundice, and pruritus. The prodromal symptoms usually diminish when jaundice appears. The most common physical findings are jaundice and hepatomegaly. (See 'Clinical evaluation' above.)</p>
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32. Best first management in a 22-year-old presenting to the ER with DKA:

- A. Insulin + Bicarbonate + Saline
- B. Saline + Insulin
- C. Insulin
- D. Saline

Answer: D.

Fluid replacement — Initial fluid therapy in DKA and HHS is directed toward expansion of the intravascular volume and restoration of renal perfusion [16]. Adequate rehydration with subsequent correction of the hyperosmolar state may result in a more robust response to low dose insulin therapy [17,18].

The average fluid loss is 3 to 6 liters in DKA and up to 8 to 10 liters in HHS, due largely to the glucose osmotic diuresis (table 2) [1,2,8,10]. In addition to inducing water loss, glucosuria results in the loss of approximately 70 meq of sodium and potassium for each liter of fluid lost. The aim of therapy is to replete the extracellular fluid volume without inducing cerebral edema due to too rapid reduction in the plasma osmolality. (See 'Cerebral edema' below and "[Treatment and complications of diabetic ketoacidosis in children](#)", section on 'Cerebral edema'.)

Fluid repletion is usually initiated with isotonic saline (0.9 percent sodium chloride). This solution will replace the fluid deficit, correct the extracellular volume depletion more rapidly than one-half isotonic saline, lower the plasma osmolality (since it is still hypoosmotic to the patient), and reduce the serum glucose concentration both by dilution and by increasing urinary losses as renal perfusion is increased [16,19]

Intravenous regular insulin — After an initial infusion of isotonic saline to increase insulin responsiveness by lowering the plasma osmolality [17,18], the only indication for delaying insulin therapy is a serum potassium below 3.3 meq/L, since insulin will worsen the hypokalemia by driving potassium into the cells. (See '[Potassium depletion](#)' below.)

33. RF is positive in all of the following, except:

- A. Subacute bacterial endocarditis
- B. Adult onset stultz
- C. Vasculitis

Answer: B.

Rheumatic disorders — Patients may have detectable serum RF in a variety of rheumatic disorders, many of which share similar features, such as symmetric polyarthritis and constitutional symptoms. These include [36]:

- Rheumatoid arthritis — 26 to 90 percent (see below)
- Sjögren's syndrome — 75 to 95 percent
- Mixed connective tissue disease — 50 to 60 percent
- Mixed cryoglobulinemia (types II and III) — 40 to 100 percent
- Systemic lupus erythematosus — 15 to 35 percent
- Polymyositis/dermatomyositis — 5 to 10 percent

Nonrheumatic disorders — Nonrheumatic disorders characterized by chronic antigenic stimulation (especially with circulating immune complexes or polyclonal B lymphocyte activation) commonly induce RF production (table 1). Included in this group are [36]:

- Indolent or chronic infection, as with SBE or hepatitis B or C virus infection. As an example, studies have demonstrated that hepatitis C infection, especially when accompanied by cryoglobulinemia, is associated with a positive RF in 54 to 76 percent of cases [44-47]. RF production typically ceases with resolution of the infection in these disorders. These molecules may be produced by activated hepatic lymphocytes [48]. (See "[Clinical manifestations and diagnosis of essential mixed cryoglobulinemia](#)".)
- Inflammatory or fibrosing pulmonary disorders, such as sarcoidosis.
- Malignancy.
- Primary biliary cirrhosis

CLASSIFICATION CRITERIA — There is no specific test or combination of tests that can be used to establish the diagnosis of ASD. As a result, at least seven sets of diagnostic criteria have been proposed [15-21].

Yamaguchi criteria — There are four major Yamaguchi criteria:

- Fever of at least 39°C lasting at least one week
- Arthralgias or arthritis lasting two weeks or longer
- A nonpruritic macular or maculopapular skin rash that is salmon-colored in appearance and usually found over the trunk or extremities during febrile episodes
- Leukocytosis (10,000/microL or greater), with at least 80 percent granulocytes

The minor Yamaguchi criteria include:

- Sore throat
- Lymphadenopathy
- Hepatomegaly or splenomegaly
- Abnormal liver function studies, particularly elevations in aspartate and alanine aminotransferase and lactate dehydrogenase concentrations
- Negative tests for antinuclear antibody and rheumatoid factor

34. Wrong about a patient with liver cirrhosis:

- A. Lactulose
- B. Warfarin
- C. Restrict proteins
- D. Restrict diet
- E. Restrict salt

Answer: B.

Salt restriction is often necessary, as cirrhosis leads to accumulation of salt (sodium retention). Diuretics may be necessary to suppress ascites. Diuretic options for inpatient treatment include aldosterone antagonists (usually spironolactone) and loop diuretics. Aldosterone antagonists are preferred for patients who can take oral medications and are not in need of an urgent volume reduction, with loop diuretics as additional therapy.^[21]
<http://en.wikipedia.org/wiki/Cirrhosis#Management>

35. All predispose to hepatic encephalopathy, except:

- A. Hyperkalemia
- B. Furosemide

The history may reveal a precipitating cause. These include:

- Hypovolemia
- Gastrointestinal bleeding
- Hypokalemia and/or metabolic alkalosis
- Hypoxia
- Sedatives or tranquilizers
- Hypoglycemia
- Infection (including SBP)
- Rarely, hepatoma and/or vascular occlusion (hepatic vein or portal vein thrombosis)

36. A 35 female predispose with 3 weeks history of bilateral squeezing headache toward the end of the day, after work. 3-4 times weekly:

- A. Tension headache
- B. Caffeine & nicotine withdrawal
- C. Migraine

CLINICAL FEATURES — The typical presentation of a TTH attack is that of a mild to moderate intensity, bilateral, nonthrobbing headache without other associated features. Descriptions of TTH pain are characteristically nondescript: "dull," "pressure," "head fullness", "head feels large," or,

more descriptively, "like a tight cap", "band-like," or a "heavy weight on my head or shoulders."

37. **Blood film shows target cells, Howell Jolly boies, and sideroblasts:**

A. Hyposplenism

B. **Myelofibrosi**

38. **WBCs 25,000, platelets 6,000**

39. **26 year old female presented to ER with petechiae, everything else is normal:**

A. ITP

B. Septic meningitis Ans: A?

40. **Most common thyroid cancer:**

A. Papillary

41. **Increase life expectancy in COPD patients:**

A. O2 therapy & smoking cessation

42. **Megaloblastic anemia, except:**

A. Dietary defecency is common.

43. **Most common defecency in thromboembolism:**

A. Protein C

B. Protein S

C. Antrithrombin

INTRODUCTION — Inherited thrombophilia is a genetic tendency to venous thromboembolism. Factor V Leiden is the most common cause of the syndrome accounting for 40 to 50 percent of cases. The prothrombin gene mutation, deficiencies in protein S, protein C, and antithrombin account for most of the remaining cases, while rare causes include the dysfibrinogenemias [1,2]. The total incidence of an inherited thrombophilia in subjects with a deep vein thrombosis ranges from 24 to 37 percent overall compared with about 10 percent in controls. (See "[Overview of the causes of venous thrombosis](#)", section on 'Inherited thrombophilia'.)

44. **Wrong about Coeliac disease:**

A. Not associated with increased malignancy

45. **While a patient was participating in medical students exam, he developed hypotension of 50/30, flushing... Treatment is:**

A. Corticosteroids

B. Adrenaline

CUTE MANAGEMENT:

he first and most important therapy in anaphylaxis is epinephrine. There are **NO absolute contraindications** to pinephrine in the setting of anaphylaxis.

irway: Immediate intubation if evidence of impending airway obstruction from angioedema; delay may lead to complete obstruction; intubation can be difficult and should be performed by the most experienced clinician available; cricothyrotomy may be necessary

romptly and simultaneously, give:

M Epinephrine (1 mg/mL preparation): Give epinephrine 0.3 to 0.5 mg intramuscularly, preferably in the mid- anterolateral thigh; can repeat every 5 to 15 minutes as needed. If symptoms are not responding to epinephrine injections, prepare IV epinephrine for infusion (see below).

46. All indicate severity in community acquired pneumonia, except:

- A. Mental score 6/10
- B. WBC 22,000
- C. Age 75 years

CURB-65 score — The British Thoracic Society found a 21-fold increase in mortality in patients who had two or more of the following findings [24]:

- Blood urea nitrogen greater than 20 mg/dL (7 mmol/L)
- Diastolic blood pressure less than 60 mmHg
- Respiratory rate above 30 per minute
- Confusion of new onset (mini **mental score** <= 8)

47. Patient was diagnosed with rapidly progressive glomerulosclerosis (RPGS), best initial managent:

- A. Prednisolone

TREATMENT — Untreated RPGN typically progresses to end-stage renal disease over a period of weeks to a few months. However, patients with fewer crescents may have a more protracted, not so rapidly progressive course [3].

Many of the older studies examining treatment in RPGN with pulse corticosteroids, cyclophosphamide, and plasmapheresis are difficult to interpret because they were performed at a time before it was possible to distinguish among the different types of RPGN. Nevertheless, these studies demonstrated that conventional doses of oral prednisone, given alone or in combination with azathioprine, usually had little beneficial effect [1].

As a result, the therapy of most patients with RPGN involves pulse methylprednisolone followed by daily oral prednisone, oral or intravenous cyclophosphamide, and, in some settings, plasmapheresis. Early diagnosis with renal biopsy and serologic testing and early initiation of appropriate therapy is essential to minimize the degree of irreversible renal injury.

Empiric therapy may be begun with the above modalities in patients with severe disease, particularly if either renal biopsy or interpretation of the biopsy will be delayed. Empiric initial therapy consists of intravenous pulse methylprednisolone (500 to 1000 mg/day for three days) and consideration of plasmapheresis, especially if the patient has hemoptysis. This regimen will not alter the histologic abnormalities observed with a renal biopsy that is performed soon after initiating empiric therapy.

48. A patient with palpitations and heat intolerance... technocium sacn revealed uniform increased uptake in the thyroid, diagnosis is:

- A. Graves' disease

49. Best treatment of fibrillation in hyperthyroidism is:

A. Anti-thyroid drugs.

Atrial fibrillation occurs in 10 to 20 percent of patients with hyperthyroidism, and is more common in elderly patients. In one study, 8 percent of all patients and 15 percent of patients between ages 70 to 79 developed atrial fibrillation within 30 days of the diagnosis of hyperthyroidism [8]. Even subclinical hyperthyroidism is associated with an increased rate of atrial ectopy and a threefold increased risk of atrial fibrillation ([figure 1](#)) [9].

In 60 percent of hyperthyroid patients with atrial fibrillation, the rhythm converts spontaneously to sinus rhythm when the hyperthyroidism is treated; in one study, all who spontaneously converted did so within four months after becoming euthyroid [10]. Among those who do not convert spontaneously to sinus rhythm and who undergo successful electrical cardioversion, the two-year risk of recurrent atrial fibrillation was 59 percent compared with 83 percent of patients whose atrial fibrillation was not associated with hyperthyroidism [11].

50. Wrong about diagnosis of H. pylori:

- A. Stool antigen
- B. Breath test
- C. Culture
- D. Blood ???
- E. C13/C14

51. Most common cause of community acquired pneumonia:

- A. Strept. Pneumonia

EPIDEMIOLOGY — The overall rate of CAP in adults is approximately 5.16 to 6.11 cases per 1000 persons per year; the rate of CAP increases with increasing age [2]. There is seasonal variation, with more cases occurring during the winter months. The rates of pneumonia are higher for men than for women and for black persons compared with Caucasians. The etiology of CAP varies by geographic region; however, Streptococcus pneumoniae (S. pneumoniae) is the most common cause of pneumonia worldwide.

52. Most common cause of pneumonia in alcoholics:

- A. Klebsiella

• Klebsiella pneumonia — K. pneumoniae is responsible for approximately 6 percent of cases of CAP in Asia [17], but is less common in other regions (table 2). K. pneumoniae must be considered as a cause of severe CAP in patients who have significant underlying disease, such as COPD, diabetes, and alcohol abuse. In a study of 112 immunocompetent patients with severe CAP, multivariate analysis found K. pneumoniae was an independent risk factor for mortality [25]. (See "[Overview of Klebsiella pneumoniae infection](#)", section on 'Community-acquired pneumonia'.)

53. Most common cause of spontaneous peritonitis:

- A. E. Coli

<p>B. Bacteria from ascitic fluid 19 patients with spontaneous bacterial peritonitis isolated from 5 organisms percent of isolates</p> <p>Escherichia coli 3</p> <p>Klebsiella pneumoniae 1</p> <p>Streptococcus pneumoniae</p> <p>Other streptococcal species 9</p> <p>Enterobacteriaceae</p> <p>Staphylococcus</p> <p>Pseudomonas</p>	<p>Korea, Aeromonas hydrophila infection is an important cause of SBP, patients commonly also have diarrhea. [Choi, JP, et al. Clin Infect Dis</p> <p>BA. Spontaneous bacterial peritonitis. In: Gastrointestinal and Hepatic Saunders, Philadelphia 1995. p.455.</p>
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C. *In some of the world, regions particularly in such as warm weather 2008; months. 47:67.] Affected p

D. Data from McHuttc Infections, Surawicz, CM, Ow hison, JG, Runyon, en, RL (Eds), WB

54. Wrong about DKA:

A. Normal anion gap

55. Causing organism in rheumatic fever :

A. Group A beta-hemolytic streptococci.

56. All are causes of bloody diarrhoea in a traveler:

A. Shistosoma mansoni

57. 6 hours after hamburger, abdominal pain:

A. Staph. Aurerus

B. ?

58. Not a finding in angina:

A. Normal

59. Not a finding in sarcoidosis:

A. Cranial nerve palsy

B. Uveitis

C. Wrong answer

60. About renovascular hypertension:

A. Managemetn is drugs if bilateral

TREATMENT — Once the diagnosis of hemodynamically significant stenosis is established, with both vessels showing more than a 75 percent stenosis, there are three therapeutic alternatives:

- Medical therapy with antihypertensive drugs
- Percutaneous angioplasty, usually with stent placement
- Surgery

We generally agree with the 2005 American College of Cardiology/American Heart Association (ACC/AHA) guidelines on peripheral artery disease, which were produced in collaboration with major vascular medicine, vascular surgery, and interventional radiology societies [4].

Medical therapy for control of hypertension is indicated in all patients with bilateral renal artery stenosis (or unilateral stenosis in a single viable kidney) [4,6]. Revascularization, usually by percutaneous angioplasty with stenting, may be considered in patients with persistent hypertension who have one or more of the clinical features that suggest that the stenosis plays an important role in the elevation in blood pressure (table 1). Surgery is primarily warranted for correction of complex lesions.

The following discussion will review the antihypertensive response to therapy in patients with bilateral renal artery stenosis. The use of angioplasty or surgery to preserve renal function in such patients is discussed separately. (See "[Chronic kidney disease associated with atherosclerotic renovascular disease](#)".)

61. All are differential diagnosis of sacroilitis, except:

- A. Crohn's
- B. Ankylosing spondylitis
- C. Psoriasis

62. Which condition is associated with HLA-B27:

- A. Ankylosing spondylitis

63. Wrong about heparin:

- A. Half life 90 minutes
- B. Skin necrosis
- C. Thromobcytopenia
- D. Only administered SC and IV

Heparin reversal with protamine — If urgent reversal of heparin effect is required, [protamine sulfate](#) can be administered by slow intravenous infusion (not greater than 20 mg/minute and no more than 50 mg over any 10 minute period). The appropriate dose of protamine sulfate is dependent upon the dose of heparin given and the elapsed time since the last heparin dose. Full neutralization of heparin effect is achieved with a dose of 1 mg protamine sulfate/100 units heparin. Because of the relatively short half life of intravenously administered heparin (approximately 30 to 60 min), the protamine sulfate dose used must be calculated by estimating the amount of heparin remaining in the plasma at the time that reversal is required.

Skin necrosis — Skin necrosis is a well-described complication of treatment with unfractionated or LMW heparin. Affected patients develop heparin-dependent antibodies but most do not experience thrombocytopenia. (See "[Heparin-induced thrombocytopenia](#)", section on 'Skin necrosis'.)

Thrombocytopenia — Heparin-induced thrombocytopenia (HIT) is a well-recognized and potentially fatal complication of heparin therapy, usually occurring within 5 to 10 days after the start of heparin therapy. The pathogenesis, clinical manifestations, diagnosis, and treatment of HIT are discussed in detail separately. (See "[Heparin-induced thrombocytopenia](#)".)

64. Which is not a side effect of statins:

- A. Pulmonary fibrosis
- B. Headache Ans: A

65. The following drugs and their side effects are correct, except:

- A. Thiazide diuretics: thrombocytosis
- B. Enalapril: Dry cough

66. Patient with bronchial asthma, eosinophilia, and mononeuritis multiplex:

- A. Churg strauss

67. Women with multiple tender areas, all investigations are normal:

- A. Fibromyalgia

68. Wrong about ECG findings in hyperkalemia:

- A. Pronounced P wave

69. About ECG findings in pericarditis, except:

- A. ST segment convex upwards
- B. ST segment concave downwards
- C. Inverted T wave

ECG: initially diffuse elevated ST segments ± depressed PR segment, the elevation in the ST segment is concave upwards → 2-5 days later ST isoelectric with T wave flattening and inversion

- Stage 1, seen in the first hours to days, is characterized by diffuse ST elevation (typically concave up) with reciprocal ST depression in leads aVR and V1 ([figure 1](#)). There is also an atrial current of injury, reflected by elevation of the PR segment in lead aVR and depression of the PR segment in other limb leads and in the left

chest leads, primarily V5 and V6. Thus, the PR and ST segments typically change in opposite directions. PR segment deviation, which is highly specific though less sensitive, is frequently overlooked. Saddle-shaped ST segment

70. True about hypertrophic sub-aortic stenosis:

- A. A type of dilated cardiomyopathy
- B. Nitrates are used in treatment
- C. A cause of death in athletics

71. 40 pack years smoker. He has cervical spondylosis. FEV1/FVC 97%, diagnosis is:

- A. Restirve pattern

72. Wrong about parathyroid hyperplasia:

- A. Can be part of MEN1
- B. Can be part of MEN2a
- C. Wrong answer

73. Wrong about polycythemia rubra vera:

- A. Abnormal findings in ABG
- B. Increased platelets, and WBCs

LABORATORY FINDINGS — Laboratory findings in PV include an elevated hemoglobin/hematocrit and red blood cell mass in virtually all patients, a platelet count >400,000/microL in 60 percent, and a white blood cell count >12,000/microL in 40 percent. Bone marrow cellularity was increased in 90 percent of patients, and storage iron was absent from the marrow in 94 percent.

74. Swan neck deformity is characterized by:

- A. Hyper-extension of PIP, and hyperflexion of DIP

75. All are criteria to diagnose SLE, except:

- A. Anti-RNP
- B. Photosensitivity
- C. Mouth ulcers
- D. Leucopenia

Ans: A (Anti-ANA or Anti-dsDNA or Anti-SM)

76. Most common type of lupus nephritis is:

- A. Mesangial glomerulonephritis
- B. Focal proliferative glomerulonephritis
- C. Diffuse GN
- D. Membranous GN

- C. Low HDL
- D. Hypertension
- E. DM

Answer: (C) (type IV)

77. All is part of metabolic syndrme, except:

- A. High LDL
- B. High triglycerid

78. Absence of megakaryocytes in bone marrow is seen in:

- A. HIV
- B. Aplastic anemia

THE PLURIPOTENT STEM CELL — Following the atomic bombings in World War II, there was great interest in the effects of radiation. Lethally irradiated mice frequently died as a consequence of neutropenic infections and thrombocytopenic hemorrhage. Their marrow was found to be "aplastic." That is, the myeloid and erythroid precursors were absent, as were lymphocytes and megakaryocytes, leaving only fat cells, stromal elements, and blood vessels. Two striking observations in this model led to the discovery of the pluripotent hematopoietic stem cell, which could reconstitute all of hematopoiesis and lymphopoiesis:

79. Criteria which is used to diagnose DM is:

- A. Glycosylated haemoglobin
- B. Fasting plasma glucose \geq 126 mg/dL.

80. All are indications for transfusion therapy in sickle cell anemia, except:

- A. Stroke
- B. Pain
- C. Pain with occlusive ???
- D. ???

Transfusion therapy for individuals with SCD can be categorized as therapeutic or prophylactic. Accepted indications for transfusion therapy in individuals with SCD include [62,63]:

- Therapeutic — Acute use of transfusions for acute stroke, acute chest syndrome, acute multi-organ failure, acute symptomatic anemia (eg, onset of heart failure, dyspnea, hypotension, marked fatigue [9]), reticulocytopenia (most commonly associated with Parvovirus B19 infection, but can occur with any infection), or following hepatic or splenic sequestration.
- Prophylactic — Use of periodic red cell transfusions for primary or secondary stroke prevention.

81. Patient with pancytopenia, splenic vein thrombosis, and ??? . Diagnosis is:

- A. Promyelocytic???

82. Osteoporosis, most common site of fracture is:

- A. Hip
- B. Vertebrae
- C. Femur

The answer is not FEMUR ==> Neck of femur ==> So, the the most common location is "Hip"... Right? Because "fracture of the neck of femure" is a type of hip fracture.

"Hip fractures are classified as intracapsular, which includes femoral head and neck fractures, or extracapsular, which includes trochanteric, intertrochanteric, and subtrochanteric fractures. The location of the fracture and the amount of angulation and comminution play integral roles in the overall morbidity of the patient, as does the preexisting physical condition of the individual. Fractures of the proximal femur are extremely rare in young athletes and are usually caused by high-energy

motor vehicle accidents or significant trauma during athletic activity. Other causes may be an underlying disease process such as Gaucher disease, fibrous dysplasia, or bone cysts." <http://emedicine.medscape.com/article/87043-overview>

From the paper entitled "Which fractures are most attributable to osteoporosis?" : "the fractures rated most likely because of osteoporosis were the femoral neck, pathologic fractures of the vertebrae, and lumbar and thoracic vertebral fractures." <http://www.sciencedirect.com/science/article/pii/S0895435610002635>

11. All the following cause normal anion gap metabolic acidosis, except:

- a. Spironolactone
- b. Diarrhea
- c. Vomiting
- d. Acetazolamide
- e. Primary hyperparathyroidism

Acid-base balance — High concentrations of PTH inhibit proximal tubular bicarbonate reabsorption, which tends to cause a mild metabolic acidosis. However, this effect is usually counterbalanced by the alkali liberated as a result of increases in bone resorption and in tubular reabsorption of bicarbonate caused by hypercalcemia [85,86]. Thus, metabolic acidosis is unusual in PHPT unless serum PTH concentrations are very high or the patient has coexistent renal insufficiency.

Acetazolamid (Carbonic anhydrase inhibitor) cause normal anion gap metabolic acidosis)

Spironolactone blocks actions of Aldosterone. Therefore, H is retained. "Other recognized side effects of spironolactone include diarrhea and hyperchloremic metabolic acidosis, especially in patients with a prior history of renal insufficiency.³ A few case reports have been published discussing type 4 renal tubular acidosis (RTA) developed by patients while taking spironolactone.^{4,5}"

Answer: C (not sure... Because Wikipedia: A less frequent occurrence results from a vomiting of intestinal contents, including bile acids and HCO_3^- , which can cause metabolic acidosis.)

C is most probable answer bcz vomiting causes mainly alkalosis

12) All of the following are associated with hypokalemia and alkalosis, except:

- a. Bartter syndrome (???) [Yes Hypokaemia + alkalosis a disorder due to a defect in active chloride reabsorption in the loop of Henle; characterized by primary juxtaglomerular cell hyperplasia with secondary hyperaldosteronism, hypokalemic alkalosis, hypercalciuria, elevated renin or angiotensin levels, normal or low blood pressure, and growth retardation; edema is absent. Autosomal recessive inheritance, caused by mutation in either the Na-K-2Cl cotransporter gene (SLC12A1) on chromosome 15q or the K(+) channel gene (KCNJ1) on 11q.
- b. Furosemide Yes
- c. Diabetes (If they are talking about DKA Hypokalemia and acidosis, so this should be the answer?
- d. Nasogastric tube suction Yes (loss through upper GI of K and Hydrogen)
- e. Thiazides Yes

13) All of the following are indications to start hemodialysis, except:

- a. Pericarditis

- b. Encephalopathy
- c. Creatinine – 8 mg/dL
- d. Hypercalcemia
- e. Hyperkalemia

Answer: C (hypercalcemia is an indication for dialysis according to up-to-date)

14) **All of the following are complications of nephrotic syndrome, except:**

- a. Hypercholesterolemia
- b. Renal vein thrombosis
- c. Recurrent infection
- d. Polycythemia
- e. ARF

15) **Concerning the antibiotic resistance, all of the following are true, except:**

- a. The more antibiotics are continued the more the resistance develop

16) **In a patient with HIV, the worst prognosis is for a patient with:**

Ans: C (this is the lowest CD4 and highest viral load)

17) **HIV is composed of:**A single strand of RNA

18) **Which of the following is least likely to transmit HIV?**

- a. Semen
- b. Saliva
- c. Blood
- d. CSF
- e. Transplanted organs

Answer: B (saliva_) <http://www.cdc.gov/hiv/resources/qa/transmission.htm>

19. **Which of the following influenza viruses subtypes is expected to cause the (???) pandemic influenza?**

20. **Neuroaminiase projections in the influenza virus act as:**

- a) Receptors for entry into cells
- b) Ezymatic function to release the building virus for the cell
- c) Both A + B
- d) Cherokinase receptors
- e) Receptors for IL-1

The enzyme helps viruses to be released from a host cell. Influenza virus membranes contain twoglycoproteins: hemagglutinin and neuraminidase. While the hemagglutinin on the surface of the virion is needed for infection, its presence inhibits release of the particle after budding. Viral neuraminidase cleaves terminal neuraminic acid (also called sialic acid) residues from glycan structures on the surface of the infected cell. This promotes the release of progeny viruses and the spread of the virus from the host cell to uninfected surrounding cells. Neuraminidase also cleaves sialic acid residues from viral proteins, preventing aggregation of viruses.

21. **Which of the following is true regarding brucella:**

- a) monotherapy is the standard of care
- b) Usually is treated for 3 weeks. ☑ For 6 weeks

- c) Intracellular activity is important in the antibiotic (choice) for brucellosis
- d) It is a Gram +ve cocci G-ve bacilli
- e) Pneumonia is a frequent complication Pneumonitis is a less common complication

22. Which of the following is the closest measurement of core body temperature:

- a) Oral temperature
- b) Axillary temperature
- c) Rectal temperature
- d) Ear temperature
- e) **Mixed venous temperature**

23. Which of the following is false about acute HIV disease?

- a. It occurs within 2-6 weeks of infection
- b. It is best diagnosed by ELISA Wrong (*However, the standard third generation enzyme linked immunosorbent assays (ELISAs) used in clinical practice and in blood banks in the United States do not detect antibodies to HIV until three to seven weeks after infection.*)
- c. It manifests as a flu-like illness Yes
- d. It is associated with high infectivity state → Patients with primary HIV infection are highly contagious to others,
- e. It occurs in about 70% of patients

24. Which of the following is true about S. aureus?

- a. It lacks a coagulase enzyme
- b. It rarely causes a nosocomial infection
- c. It is a gram negative bacilli
- d. It is associated with infections in patients with burns Correct Burns provide a suitable site for bacterial multiplication and are more persistent richer sources of infection than surgical wounds. Staphylococcus aureus is one of the most frequently isolated pathogens in both community and hospital practices. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3511900/>
- e. So far, there is no documented resistance to vancomycin

25. Which of the following is true about fever of unknown origin?

In developing countries, infections contribute to majority of cases.

26. A 70-year-old man with 3 months headache, stiffness, low grade fever, jaw claudication, and amuresiss fugax, his ESR is 100, all of the following statements are true regarding this condition, except:

- a. Increased risk of permanent blindness
- b. Tongue claudication
- c. Weight loss
- d. Drug therapy can only be started after tissue biopsy**
- e. Dramatic response to steroids

27. All of the following are true about vasculitis, except:

- a. PAN is associated with hypertension
- b. Wegner granulomatosis is associated with +ve C-ANCA
- c. Hypersensitivity vasculitis mainly presents with large vessel involvement of the aortic arch vessels in females younger than 40 years of age.
- d. Giant cell arteritis affects mainly people above the age of 50
- e. Churg-struss disease occurs in people with history of atopy**

28. Which of the following associations is true?

- a. Hepatitis a with PAN
- b. RF and Riter's syndrome
- c. Giant cell arteritis and blindness**
- d. RA and Addison's disease
- e. TB and reactive arthritis

29. Which of the following is true about septic arthritis?

- a. Hematogenous spread is the most common route of infection**
- b. Joint involvement is typically episodic recurrent polyarticular
- c. Almost always occur in normal joints
- d. Presence of urate crystals exclude its diagnosis
- e. Gram negative bacteria is the leading cause

30. Which statement about rheumatoid arthritis is not correct?

- a. The commonest cause of anemia seen in pts with the disease is due to hemolysis?**
- b. Synovitis characteristically involves Metatarsophalangeal joints
- c. RF is of an IGM type
- d. Joint effusions occur in the first several months
- e. Felty's disease is more common in seropositive patients **Answer: A (Anemia of chronic disease)**

31. Which antibody is rather specific for diffuse scleroderma?

- a. Anticentromere AB
- b. Anti-myeloperoxidase AB (p-ANCA)
- c. Anti-Jo1 AB
- d. Antimitochondrial AB
- e. Anti-Scl70**

Answer: E [Diagnosis is by clinical suspicion, presence of autoantibodies (specifically anti-centromere and anti-scl70/anti-topoisomerase antibodies) and occasionally by biopsy. Of the antibodies, 90% have a detectable anti-nuclear antibody. Anti-centromere antibody is more common in the limited form (80-90%) than in the diffuse form (10%), and anti-scl70 is more

common in the diffuse form (30-40%) and in African-American patients (who are more susceptible to the systemic form).[19]

In 1980 the American College of Rheumatology agreed upon diagnostic criteria for scleroderma.[20]

32. All of the following statement about gout are true, except:

- a. In adult men the solubility of monosodium urate is 7 mg/dL
- b. Women of child-bearing age have lower serum uric acid
- c. Initial treatment of acute attack should include NSAIDs, colchicine, and allopurinol
- d. Diuretics should elevate serum uric acid
- e. Attacks can be precipitated by acute MI.

Answer: C (allopurinol and colchicine never in acute treatment)

33. One of the following is correct about aldosterone?

- a. Increased Na and K reabsorption in the renal collecting duct
- b. Causes increase synthesis of Na/K pumps in the principal cells of the renal collecting duct
- c. Is released from the adrenal cortex in response to decreased plasma K
- d. Promotes H secretion from the principle cells of the normal collecting duct
- e. ?

34. Acute interstitial nephritis might present with any of the following, except:

- a. Fever
- b. Rash
- c. Renal impairment
- d. Hypertension
- e. Low grade proteinuria

35. All of the following may cause renal papillary necrosis, except:

- a. DM
- b. Analgesic abuse
- c. Sickle cell anemia
- d. pyelonephritis
- e. hypertension

Answer E: Any condition that involves ischemia can lead to renal papillary necrosis. The four most significant causes are sickle cell disease or trait, analgesic use, diabetes mellitus, and severe pyelonephritis.[2]

A mnemonic for the causes of renal papillary necrosis is POSTCARDS: pyelonephritis, obstruction of the urogenital tract, sickle cell disease, tuberculosis, chronic liver disease, analgesia/alcohol abuse, renal transplant rejection, diabetes mellitus, and systemic vasculitis. Often, a patient with renal papillary necrosis will have numerous conditions acting synergistically to bring about the disease. [3][4]

36. A 40-year-old female presented to clinic because his blood pressure was 160/100. All the following are appropriate first line investigations, except:

- a. K+ level
- b. Urine analysis
- c. Renal US
- d. MRI suprarenals
- e. Creatinien level

37. A 20-year-old male presented to you with generalized weakness. Labs showed:

- a. Diarrhea
- b. Spironolactone
- c. Recovery from DKA
- d. **Thiazide diuretic**
- e. Amiloride

Ans: D (Thiazide diuretic cause metabolic alkalosis)

38. All of the following are true about pre-renal acute renal failure, except:

- a. FeNa < 1%
- b. BUN/CR ratio is elevated
- c. **Mostly irreversible**
- d. Most common cause of ARF
- e. Urine output improves with IV fluid coverage

39. All of the following is true about diabetic nephropathy in IDDM except:

- a. Microalbuminuria is seen within 5 years from onset
- b. Usually preceded by retinopathy
- c. Thickening of basement membrane is a ??? factor determining progressing of disease
- d. **It requires kidney transplant**
- e. More common in diabetic who have siblings with diabetic nephropathy

40. All the following are true about effect of drugs in causing ARF, except:

- a. **Furosemide causes toxicity by forming crystals?**
- b. NSAIDs cause vasoconstriction
- c. Aminoglycoside cause toxicity to proximal tubules
- d. D-penicillamine causes membranous nephropathy
- e. Ampicillin causes acute tubulointerstitial nephritis

41. One of the following is least likely feature of hemochromatosis:

- a. **Fulminant liver failure**
- b. Pseudogout
- c. Diabetes
- d. Bronze skin
- e. Hepatocellular carcinoma

42. All the following are subclinical presentations of celiac disease, except:

- a. Mood changes
- b. Iron def
- c. **B12 def**
- d. Unexplained elevation of liver enzymes
- e. Recurrent abdominal pain

Ans: C (Mild to moderate anemia is present in 50% of cases. Folate deficiency is common, often causing macrocytosis. B12 deficiency is rare. Iron deficiency due to malabsorption of iron and increased loss of desquamated cells is common).

43. All of the following are associated with rapid progression of chronic hepatitis C to cirrhosis, except:

- a. Acquiring the infection at older age
- b. Female sex**
- c. Alcohol use
- d. HIV co-infection
- e. HBV co-infection

44. The most common complication after ERCP: answer: b

- a. Acute pancreatitis

45. All of the following are initial management strategies in patients with upper GI bleeding, except:

- a. Somatostatin
- b. Bleeding scan**
- c. Esophagogastroduodenoscopy
- d. Acid suppressing medication
- e. Gastric lavage

46. Wilson's disease should be considered in all of the following medical scenarios, except:

- a. Abnormal liver enzymes and non-immune hemolytic anemia
- b. Exaggerated high bilirubin level and depressed alkaline phosphatase
- c. Decreased serum ceruloplasmin
- d. Elderly patient with neuropsychiatric problem**
- e. Fulminant liver failure with low uric acid

47. All of the following medications are being used for non-alcohol steatohepatitis (NASH), except:

- a. Betaite
- b. Ursodeoxycholic acid
- c. ribaverin**
- d. Vitamin e
- e. Beta carotene

48. All of the following medications are being used in chronic hepatitis B, except:

- a. Lamivudine
- b. Ribavirin**
- c. Pegylated interferon
- d. Adefovir
- e. Entecavir

49. All of the following micro-organisms can cause infectious diarrhea with positive fecal leukocytes, except:

- a. Shigella
- b. Yersinia
- c. Giardia**
- d. Campylobacter
- e. Salmonella

50. All of the following are protective from colo-rectal cancers, except:

- a. Aspirin
- b. Folic acid
- c. Fier diet
- d. calcium
- e. moderate use of alcohol

51. The most common cause of GI bleeding is:

- a. Peptic ulcer disease

52. Regarding achalasia, all of the following are true, except:

- a. There is increase of intramural inhibitory signals

53. Regarding Crohn's disease, all of the following are true, except:

- a. The rectum is often spared
- b. Fistulae and abscesses can occur in patients with colo-rectal Crohns
- c. The disease is limited to the mucosa
- d. The mucosa can appear as cobble stone

54. All of the following are true regarding ulcerative colitis, except:

- a. Azathioprine can be used in treatment
- b. Maybe associated with Pyoderma gangrenosum
- c. Patients may be P-ANCA positive
- d. The rectum is never involved

55. Regarding IBD, all of the following are true, except:

- a. UC patients usually smoke more than Crohn's patients (*Unlike Crohn's disease, ulcerative colitis has a lesser prevalence in smokers than non-smokers.*)
- b. Incidence is about 7/100,000
- c. Jewish affected more often than Asians
- d. Iliocecal area is frequently involved in Crohn's disease

56. The most common cause of portal hypertension is:

- a. Liver cirrhosis

57. All of the following are true regarding inflammatory acute diarrhea, except:

- a. Can be caused by shigella ☑ Correct
- b. There is polymorphonuclear cells in the stool sample
- c. There may be blood in the stool sample
- d. Usually affects the small bowel in the infected type inflammatory acute diarrhea

58. 5 year-old girl came to ER because of fatigue and shortness of breath. She was taking amoxicillin for

acute otitis media. Laboratory testing showed Hb 5.5 gm/dL with normal WBC and platelet count. The smear showed numerous nucleated RBCs and spherocytes. Both direct and indirect test Coomb's test were positive. The patient has:

- a. Warm autoimmune hemolytic anemia

59. All of the following can cause peptic ulcer, except:

- a. Paracetamol

60. All of the following help differentiate between inflammatory and non-inflammatory arthritis, except:

- a. Favorable response to NSAIDs
- b. Mornign stiffness for 2 hours
- c. Pain improves with continued ambulation
- d. Presence of extra-articular features
- e. **Hottness and rednes of the affected joint**

61. All of the following are features of osteoarthritis, ecept:

- a. **Morning stiffness for more than an hour**
- b. Normal ESR
- c. Pain in affected joint is increased with ambulation
- d. Swelling of the affected joint but without hottness or redness
- e. Lack of systemic extra-articular symptoms

62. All of the following are consistent with the diagnosis of rheumatoid arthritis, ecept:

- a. Symmetrical involvemtn of the small joints of the hands?
- b. Elevated ESR
- c. Wan neck deformities in the fingers
- d. **Nodes of the distal interphalangeal Heberden's joint**
- e. Erosive changes othe MCP joints on x-ray Answer: D (osteoarthritis)

63. A positive rheumatoid factor can be seen in all of the following conditions, ecept:

- a. RA
- b. **TB**
- c. Hepatitc C
- d. Malignancies
- e. Combinedimmunedeficiencysyndrome → Corect

64. All of the following are extra-articular features of rheumatoid arthritis, except:

- a. **Posterior uveitis**
- b. Cutaneous vasculitis
- c. Pulmonary fibrosis

- d. Sicca syndrome (secondary sjogren's)
- e. Pericarditis

Answer: A (Eyes: Scleritis, episcleritis, scleromalacia perforans, and Sicca syndrome)

65. All of the following are true for myofibril, except:

- a. Each myofibril is made up of a series of sarcomeres
- b. **The basic unit of contraction is intercalated disc**
- c. A sarcomere is bounded by two transverse Z lines
- d. The actin filaments overlap with thicker protein filament called myosin

66. In conductive system of the heart muscle, all of the following are true, except:

- a. Conduction started in SA node. AV node, bundle of His, left and right bundle branch- Purkinje fibers.
- b. Left bundle branch is shorter than right bundle
- c. Right bundle supplies right ventricle and left bundle supplies left ventricle and septum
- d. **Action potential in the ventricle is rapid and generated by rapid transmembrane K diffusion.**

67. Cause of syncope include all of the following, except:

- a. Arrhythmias, atrial and ventricular.
- b. Obstruction to cardiac output like aortic stenosis
- c. Vasovagal, neurogenic
- d. CVA
- e. **SBE**

68. The least common cause of AF is? Or: The commonest cause of AF?

- a. WPW syndrome
- b. Mitral valve disease
- c. Hypertension
- d. Pericarditis
- e. Thyrotoxicosis

Most common cause: Mitral valve disease

Least common cause: Either WPW syndrome or pericarditis (The common arrhythmia that occurs in WPW syndrome is a paroxysmal (intermittent) supraventricular tachycardia (PSVT). Other arrhythmias that can also occur include atrial fibrillation, atrial flutter and atrioventricular re-entrant tachycardia (AVRT). Rarely, another arrhythmia called ventricular fibrillation can develop)

69. Compensatory physiologic changes in HF include which one of the following:

Thyrotoxicosis\ infection and infective endocarditis, poor compliance in therapy, renin-angiotensin system, pregnancy ??? Question not clear ☹ Probably answer is Renin-angiotensin-system.

70. All of the following are true in atrial fibrillation, except:

- a. Presence of A wave in front of QRS in EKG
- b. Presence of pulse deficit between apical rate and radial rate <<< Wrong
- c. It's a type of arrhythmia called irregularly irregularly

d. It is treated medically by digoxin and surgically by Maze operations?

71. Myocardial ischemia is an imbalance between O₂ supply and myocardial demand, all of the following are true except:

- a. Obstruction of coronary arteries by atherosclerosis
- b. Coronary artery spasm
- c. Anemia
- d. Thyrotoxicosis
- e. **Pericarditis**

Answer: E Conditions that may cause myocardial ischemia include Coronary artery disease (atherosclerosis). Atherosclerosis occurs when plaques made of cholesterol and other cellular waste products build up on your artery walls and restrict blood flow. Atherosclerosis of the heart arteries is called coronary artery disease and is the most common cause of myocardial ischemia.

Blood clot. The plaques that develop in atherosclerosis can rupture, causing a blood clot, which may lead to sudden, severe myocardial ischemia, resulting in a heart attack.

Coronary artery spasm. A coronary artery spasm is a brief, temporary tightening (contraction) of the muscles in the artery wall. This can narrow and briefly decrease or even prevent blood flow to part of the heart muscle. Coronary artery spasms are more common in people with risk factors for heart disease, such as high cholesterol and high blood pressure, but the spasms can happen in people who have no risk factors, too. Coronary artery spasms can also occur in people who have conditions that affect their immune systems, such as lupus.

Severe illnesses. Myocardial ischemia can occur when the metabolic demands of your heart increase or when blood pressure is very low due to infection, bleeding or other severe illness. Source: <http://www.mayoclinic.com/health/myocardial-ischemia/DS01179/DSECTION=causes>

72. In acute MI all of the following are true, except:

- a. Inf MI, ST elevation in I, II, AVF
- b. Anteroseptal MI – ST segment elevation in V1-V2-V3
- c. **In acute MI, thrombolytic therapy achieve 100% reperfusion rate.**
- d. Treatment of MI include morphine, coronary vasodilation, aspirin.
- e. Cardiac markers in acute MI, serial cardiac enzymes, like CPK, troponin. Answer: C (reperfusion rate 100%? Fee eshee bel6eb 100%)...

73. Clinical features in infective endocarditis include all of the following, except:

- a. Appearance of new murmur or change in the quantity of existing murmur
- b. Fever
- c. CHF
- d. Skin and eye lesions
- e. **No splenomegaly**

Answer: E (A wide variety of diseases are associated with splenomegaly, or enlargement of the ... Such as in subacute bacterial endocarditis or infectious mononucleosis ...

<http://emedicine.medscape.com/article/206208-overview>)

74. Classification of cardiomyopathy include all of the following, except:

- a. Dilated cardiomyopath
- b. Hypertrophic-IHSS
- c. Restrictive cardiomyopathy
- d. Arrythmogenic right ventricle
- e. **Prolpase mitral valve**

75. In pericarditis, all are true, except:

- A. Chest pain increase by deep breathing\
- b. usually follow URI'\
- C. on EKG, ST segment elevation is conve upwards**
- D. pericardial rub can confirm diagnosis\
- E. treated with NSIAD or aspirin

Answer: C (saddle shaped ST segment – convex downwards not upwards)

76. All of the following are causes of secondary hypertension, except:

- A. Coarcation of the aorta\
- B. Renal artery stenosis\
- C. Pheochromocytoma\
- D. Female hormones nad NSAIDS\
- E. Increase in arteriolar peripheral resisatnce**

Drug-induced hypertension associated with NSAIDs is due to the renal effects of these drugs. Specifically, NSAIDs cause dose-related increases in sodium and water retention. This effect is also seen with COX-2 selective agents, such as celecoxib.[11]

- a. ?

Inspiratory arm of the flow-volume loop wil be typically abnormal in which of the following conditions?

- a. Bronchial asthma
- b. Vocal cord dysfunction**
- c. Emphysema
- d. Interstitial lung diseae
- e. Bronchoiolitis obliterans

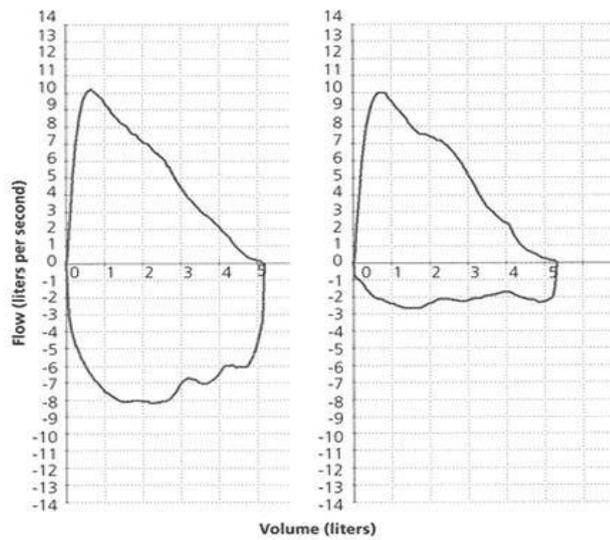


Figure 1. Flow-volume loop. (Left) Normal expiratory and inspiratory loop. (Right) Normal expiratory loop with flattening of the inspiratory loop, consistent with vocal cord dysfunction.

Vocal cord dysfunction involves inappropriate vocal cord motion that produces partial airway obstruction. Patients may present with respiratory distress that is often mistakenly diagnosed as asthma. Exercise, psychological conditions, airborne irritants, rhinosinusitis, gastroesophageal reflux disease, or use of certain medications may trigger vocal cord dysfunction. The differential diagnosis includes asthma, angioedema, vocal cord tumors, and vocal cord paralysis. Pulmonary function testing with a flow-volume loop and flexible laryngoscopy are valuable diagnostic tests for confirming vocal cord dysfunction. Treatment of acute episodes includes reassurance, breathing instruction, and use of a helium and oxygen mixture (heliox). Long-term management strategies include treatment for symptom triggers and speech therapy.

<http://www.aafp.org/afp/2010/0115/p156.html>

All of the following associations between conditions and mechanisms of hypoxia are true, except:

- COPD and V/Q mismatch (The principal contributor to hypoxemia in COPD patients is ventilation/perfusion (V/Q) mismatch resulting from progressive airflow limitation)
- ARDS and pulmonary shunt (edema in patients with ALI/ARDS is impaired gas exchange with intrapulmonary shunt,)
- Multiple rib fractures and hypoventilation**
- Hepatopulmonary syndrome and V/Q mismatch (The hepatopulmonary syndrome is characterized by a defect in arterial oxygenation induced by pulmonary vascular dilatation in the setting of liver disease¹) (Dyspnea and hypoxemia are worse in the upright position (which is called platypnea and orthodeoxia, respectively))
- Motor neuron disease and hypoventilation

77. IN patients with sarcoidosis, all of the following are associated with good prognosis, except:

- a. Fever
- b. Erythema nodosum
- c. Age less than 40 years
- d. **Black race**
- e. Presence of polyarthritis

78. Regarding the pathogenesis of bronchial asthma, one of the following is specific for the disease:

- a. Air flow limitation
- b. **Airway hyper-responsiveness**
- c. Inflammation of the mucosa
- d. Peak flow variability
- e. Bronchioalveolar eosinophils

79. The most common organism responsible for severe community pneumonia needing ICU care is:

- a. **Strep. pneumoniae**
- b. Legionella
- c. H. influenza
- d. Gram negative bacilli
- e. Mycoplasma pneumoniae

80. In chronic obstructive pulmonary disease, there is increased risk of respiratory tract infection with all of the following pathogens, except:

- a. Strep/ pneumoniae
- b. H. influenza
- c. Atypical mycobacteria
- d. Moraxella catarrhalis
- e. **Legionella pneumoniae**

81. Actions of PTH include all of the following, except:

- a. Increase bone resorption
- b. **Increase net acid excretion**
- c. Increased calcium absorption from GI tract
- d. Increased calcium reabsorption in the kidney
- e. Increased phosphate excretion

82. effect of serum osmolarity of a patient with the following labs: Na⁺ 125 mmol/l, glucose 108 mg/dL and BUN of 140 mg/dL is:

Serum osmolarity = $2 \times [\text{Na}^+] + \text{Glucose}/18 + \text{Urea}/2.8 = 2 \times 125 + 108/18 + 140/2.8 = 250 + 6 + 50 = 306$

83. Actions of PTH include all of the following, except:

- a. Increase bone resorption

- b. Increase net acid excretion
- c. **Increased calcium absorption from GI tract**
- d. Increased calcium reabsorption in the kidney
- e. Increased phosphate excretion

Answer: C (this is a function of vitamin D). So, PTH acts indirectly to increase calcium absorption from GI tract by increasing the synthesis of vitamin D.

84. The effect of serum osmolarity of a patient with the following labs: Na⁺ 125 mmol/l, glucose 108 mg/dL and BUN of 140 mg/dL is:

Serum osmolarity = $2 \times [\text{Na}^+] + \text{Glucose}/18 + \text{Urea}/2.8 = 2 \times 125 + 108/18 + 140/2.8 = 250 + 6 + 50 = 306$

85. Syndrome of inappropriate ADH secretion is characterized by all of the following, except:

- a. Urine osmolarity more than 100
- b. Hypoosmolarity of the serum
- c. Urine Na⁺ more than 40
- d. **Normovolemia and hyperuricemia**

86. All of the following factors increase distal tubular secretion of K⁺, except:

- a. Increased serum K⁺.
- b. Increased tubular flow rate
- c. Increased serum H⁺ concentration
- d. Increased tubular Cl⁻ concentration
- e. Increased aldosterone → ~~Correct~~ Answer: D?

87. All of the following electrolyte and acid-base disturbances may be seen in a patient with diabetic ketoacidosis upon presentation, except:

- a. Hyponatremia
- b. **Normal anion gap metabolic acidosis**
- c. Hyperkalemia
- d. Hyperphosphatemia
- e. Increased urea

Answer: B (DKA causes high anion gap metabolic acidosis)

88. All of the following are causes of high turnover bone disease in chronic renal failure, except:

- a. **Aluminum toxicity**
- b. Decreased vitamin D hydroxylation
- c. Metabolic acidosis
- d. Hyperphosphatemia
- e. Increased parathyroid hormones

89. All of the following are true about chronic myeloid leukemia (CML), except:

- a. It is a disease of middle aged which could present with constitutional symptoms
- b. **The laboratory finding usually show leukocytosis, with left shift and high leucocyte alkaline phosphatase.**
- c. It is characterized by specific translocation between chromosomes 9, 22 (Philadelphia chromosome)
- d. Possible treatment for CML include; imatinib ??? and allogenic BMT
- e. CML could transfer to AML or ALL Answer: B (low Leucocyte alkaline phosphatase).

90. All of the following are true about myeloproliferative disorders, except:

- a. **In polycythemia vera, the serum erythropoietin level is high.**
- b. In essential thrombocytosis, the bone marrow biopsy usually show hypercellular marrow with increased megakaryocytes
- c. Massive splenomegaly in CML and myelofibrosis

96. The adrenal glands, one is correct:

- a. The zona reticularis is the most important area in the cortex during embryogenesis
- b. There is no relation between the adrenal cortex and the adrenal medulla regarding catecholamine synthesis ❌ Wrong! Cortisol increases catecholamine synthesis.
- c. Pheochromocytoma is associated with high blood pressure and hyperkalemia
- d. Atrophy of the glands is a late sign of autoimmune adrenalitis
- e. Zona fasciculata is the place for adrenal androgen synthesis

97. In Cushing syndrome, one is correct:

- a. Significant hypokalemia is associated with Cushing disease
- b. Easy bruisability is associated only with oral steroid therapy – induced Cushing syndrome
- c. **Loss of diurnal variation of serum cortisol is found in Cushing syndrome**
- d. Proximal myopathy is a rare feature of Cushing syndrome
- e. Glucose intolerance in Cushing syndrome is related to suppression of insulin release

98. In Addison disease, one is correct:

- a. Hyperpigmentation of the gums and skin is secondary to the increased release of prolactin hormone...
- b. Postural dizziness is a common feature in the history of a patient with Addison disease
- c. Normokalemia is the rule unless there is recurrent vomiting
- d. The ACTH level is normal in the later stage of disease
- e. Hemorrhage into the adrenals is the most common cause Ans: B???

Extra info: Schmidt's syndrome: Primary adrenal insufficiency + Hypothyroidism (and often type 1 DM).

99. A 17 year old pregnant lady was referred for evaluation of anemia. As a child, she was hospitalized with pneumonia and visited ER twice with abdominal pain. Two years ago, she was found anemic and iron

was recommended, but intermittently taken. The examination was unremarkable except for a palpable spleen tip. The Hb was 10 with ferritin 105 and saturation 18%. The peripheral smear revealed slight hypochromasia and target cells, but no sickle forms. Hb electrophoresis results were HbA 26%, HbF 5%, and HbS 69%. Which of the following is the most likely diagnosis:

- a. ?
- b. ?
- c. ?
- d. ?
- e. ?

Answer: B? B-Thalassemia minor + Sickle cell trait

100. A 65-year-old man with progressive pancytopenia is referred for evaluation. On examination, there is splenomegaly. Bone marrow aspirate demonstrated no dysplasia but decreased cellularity. Which diagnosis is most likely:

- a. Aplastic anemia
- b. Megaloblastic anemia
- c. Myelodysplasia
- d. **Hairy cell leukemia**

1. Pulsus paradoxus pulse is felt in ONE of the following.

- a- aortic regurgitation
- b- aortic stenosis
- c- mitral stenosis
- d- VSD
- e- Cardiac tamponade

2 . A 30-year-old man admitted with right sided hemiplegia. Clinical examination reveals loss of a wave in JVP with irregular irregular pulse. He has ONE of the following cardiac rhythm abnormalities.

- a- complete heart block
- b- atrial fibrillation
- c- atrial flutter
- d- sinus tachycardia
- e- sinus bradycardia

3. Major criteria for Rheumatic fever include all the following Except.

- a- carditis
- b- Sydenham's chorea
- c- Polyarthralgia
- d- Erythema marginatum
- e- Subcutaneous nodules

4. ONE of the following drugs is LEAST used in treatment of acute sever asthma.

- a- nebulized B2 agonist
- b- i.v hydrocortisone
- c- epinephrin (adrenaline)
- d- oxygen
- e- i.v . aminophylline

5. Hypoxia (decreased PaO₂) and decreased Pa CO₂ is found in all the following Except.

- a- left ventricular failure
- b- massive pulmonary embolism
- c- acute sever asthma
- d- acute exacerbation of COPD
- e- pneumonia

6. All the following are true following splenectomy Except.

- a- thrombocytopenia

- b- pneumococcal vaccine should be given
- c- annual influenza vaccine should be given
- d- long term oral penicillin V 500 mg 12 hourly should be given e- Howell-Jolly bodies are characteristically seen on blood film.

7. ONE of the following drugs is most appropriate in treatment of pneumocystis carinii pneumonia.

- a- clarithromycin
- b- ethambutol
- c- azithromycin
- d- Trimethoprim-Sulphamethoxazole e- INH and rifampicine

8. ONE of the following is the mode of action for B-Blockers in controlling hypertension.

- a- decrease cardiac out put. b- Slow the heart rate
- c- Increase cardiac force of contraction d- Increase cardiac output
- e- Decrease plasma volume

9. A healthy patient who is HLA-B27 is most likely to develop ONE of the following.

- a- psoriatic arthritis
- b- enteropathic spondylitis
- c- gonococcal arthritis
- d- Reiter's disease

e- ankylosing spondylitis

10. According to Vaughan Williams Classification of antiarrhythmic drugs, which class would verapamil belong to?

- a- class 1 A
- b- class 1 B
- c- class 1 C
- d- class III

e- class IV

11. Which one of the following is LEAST useful in assessing patient with a poor prognosis in community-acquired pneumonia?

- a- mental confusion
- b- urea of 11.4 mmol/l
- c- positive C-reactive protein
- d- respiratory rate of 35/ min.
- e- age 75 years old.

12. All the following are functions of kidney Except. (a). Excretion of waste products.

- (b). production of erythropoietin.
- (c). Metabolism of vitamin D
- (d). destruction of rennin.
- (e). production of prostaglandins.

13. All the following are causes of sterile pyuria Except:

- a) Kidney stones
- b) Tubulointerstitial disease
- c) Papillary necrosis
- d) Tuberculosis

e) Acute pyelonephritis

14. ONE of the following is the most frequent cause of death in acute renal failure.

- a) Uremia
- b) Pulmonary edema
- c) Hyperkalemia
- d) Infection
- e) Hyponatremia

15. A 29-year-old medical student developed a positive PPD (purified protein derivative) test. She was started on isoniazid (INH) and rifampin prophylaxis. Three months into her therapy, she began to experience pins and needles (parasthesia) in her lower limbs. Administration of which of the following vitamins might have prevented these symptoms?

- A. Niacin
- B. Pyridoxine
- C. Riboflavin
- D. Thiamine
- E. Vitamin C

16. Increased bleeding time and PTT is found in ONE of the following. a- hemophilia A

- b- hemophilia B (Xmas disease) c- Von Willebrand disease
- d- treatment with warfarin
- e- idiopathic thrombocytopenic purpura

17. All the following may be found in Iron deficiency anemia Except.

- a- Red cell distribution width (RDW) is less than 13. b- microcytic RBC
- c- low serum ferritin
- d- low serum iron e- increased TIBC

18. Bilateral hilar lymph nodes enlargement occurs commonly in all the following Except.

- a- pulmonary Tuberculosis b- chronic myeloid leukemia c- non-Hodgkins lymphoma d- Hodgkin lymphoma
- e- sarcoidosis

19. All the following may be found in Intravascular hemolysis Except.

- a- increased unconjugated bilirubin

b- increased haptoglobin

c- increased methemalbumin d- reticulocytosis

e- Hemoglobinuria

20. All the following are causes of WORM autoimmune hemolytic anemia Except. a- SLE

b- chronic lymphocytic leukemia c- methyl dopa

d- infectious mononucleosis

e- non-Hodgkins lymphoma

21. A 72-year-old woman comes to you to control her high blood pressure (180/100) mmHg.

What is the ONE target blood pressure in the long term for this patient?

a- <160/90

b- <150/90

c- <145/90

d- <130/85

e- <120/70

22. All the following are true about side effects of anti-diabetic agents Except.

a- metformin carries a risk of lactic acidosis.

b- sulphonylurea is used safely pregnancy

c- glitazones may cause prominent fluid retention d- insulin may cause lipohypertrophy

e- acarbose causes diarrhea

23. Causes of hypoglycemia in diabetes include all the following Except. a- no daily exercise.

b- unrecognized other endocrine diseases like Addison's disease. c- missed, delayed or inadequate meal

d- gastroparesis

e- factitious and deliberately induced.

24. Causes of indirect (unconjugated) hyperbilirubinemia include all the following Except.

a- autoimmune hemolytic anemia b- thalassemia major

c- G6PD deficiency anemia d- Dubin-Johnson syndrome e- Gilbert's syndrome

25. Precipitating factors for hepatic encephalopathy in patient with liver cirrhosis include all the following Except.

- a- occult infection
- b- aggressive diuresis
- c- gastrointestinal bleeding
- d- treatment with oral neomycin** e- excess dietary proteins

26. All the following hepatitis viruses are RNA Except.

- a- hepatitis A b- **hepatitis B** c- hepatitis C d- hepatitis D e- hepatitis E

27. ONE of the following statements is true about treatment of pulmonary tuberculosis.

- a- **pyrazinamide may precipitate hyperuricemic gout.**
- b- INH can cause optic neuritis
- c- renal impairment with rifampicine
- d- streptomycin is causing reversible damage to vestibular nerve e- hepatitis is usually caused by ehambutol

28. All the following are found in left sided heart failure Except. a- bilateral basal creptations

b- third heart sound c- pulsus alternans d- **raised JVP**

e- pulmonary oedema

29. All the following may occur in cardiac tamponade Except.

a- raised jugular venous pressure with sharp rise and y descent.

b- Kussmaul's sign (rise JVP/ increased neck vein distension during inspiration) c- pulsus paradoxus

d- visible apex beat.

e- reduced cardiac output.

30. ONE of the following B-Blockers is cardioselective and lipid soluble. a- atenolol

b- propranolol

c- **metoprolol** d- bisoprolol e- carvedalol

31. All the following are criteria to define sever attack of ulcerative colitis Except.

a- stool frequency > 10 per day with out blood

- b- fever > 37.5 C
- c- tachycardia >90/min
- d- anemia hemoglobin < 10 gram/dl e- albumin < 30 g/L

32. All the following are true about gout except:

- a- Is caused by deposition of monosodium urate monohydrate crystals in the joints. b- It is an asymmetric arthritis.
- c- Can be caused by thiazide diuretics.
- d- It is commoner in females than males 4:1.
- e- Attack of gout can be triggered by dehydration.

33. A 32-year-old alcoholic with shock due to bleeding oesophageal varices. After resuscitation. Which ONE of the following is the treatment of choice.

- a- intravenous octreotide. b- intravenous glypressin
- c- oesophageal variceal endoscopy ligation
- d- Transjugulartranshepatic portocaval shunt (TIPS) e- oesophageal variceal sclerotherapy

34. A 65-year-old man with liver cirrhosis presented with ascitis, abdominal pain, tenderness and peripheral edema. A diagnostic tap revealed a neutrophil count of 400 /mm³ (normal < 250).

Which ONE of the following would be of the most immediate benefit ? a- Fluid restriction and no added salt diet.

- b- Intravenous antibiotics.
- c- Oral spironolactone.
- d- Therapeutic paracentesis
- e- Trans-jugular intrahepatic porto-systemic shunt.

35. All the following are recognized complications of Hepatitis C infection Except.

- a- diffuse proliferative glomerulonephritis.
- b- hepatocellular carcinoma c- liver cirrhosis

d- chronic hepatitis C infection e- cryoglobulinemia

36. ONE of the following tests is most suitable in screening patients for celiac disease. a- Anti-casein antibodies

b- Anti-endomyseal antibodies

c- Anti-gliadin antibodies d- ESR

e- Alpha fetoprotein.

37. All the following are true about Bronchiectasis Except.

a- chronic cough with whitish sputum.

b- May be caused by cystic fibrosis c- Clubbing of fingers

d- Hemoptysis

e- Bronchial dilation and wall thickening is shown by high resolution chest CT scan.

38. All the following are true about sarcoidosis Except.

a- raised serum level of angiotensin converting enzymes b- Negative tuberculin skin test

c- Normochromic normocytic anemia d- Hypercalcemia

e- Pulmonary caseating granuloma

39. ONE of the following is found only in Grave's disease.

a- atrial fibrillation

b- Pretibial myxoedema c- heat intolerance

d- Tremor

e- Proximal myopathy

40. Rheumatoid factor is positive in all the following diseases except:

a.- Rheumatoid arthritis

b- dermatomyositis

c- ankylosing spondylitis

- d- discoid lupus erythematosus
- e- mixed connective tissue diseases.

41. 20-year old woman presents with a week history of fever, rigor and productive rusty cough. The chest X-ray shows left lower lobe consolidation. Which ONE of the following is most appropriate treatment?

- a- clarithromycin
- b- gentamycin
- c- Cotrimoxazole
- d- Benzylpenicillin**
- e- Flucloxacillin

42. ONE of the following is most likely diagnosis for patient with thyroid function test showing elevated serum T4 and low radioactive iodine uptake.

- a- Grave's disease.
- b- Hashimoto's thyroiditis. **c- subacute thyroiditis.**
- d- non-toxic goiter. e- pregnancy.

43. A 25-year old man presents with urethritis, painful swollen left knee and conjunctivitis.

ONE of the following is most likely diagnosis. a-SLE

- b- Gonococcal arthritis c- Gout
- d- Reiter's syndrome**
- e- Ankylosing spondylitis

44. One of the following is true about management of diabetes mellitus.

- a. the latest guideline recommended HbA1C to be less than 7%.**
- b. post prandial blood sugar up to 200 mg/dl is accepted.
- c. fasting blood sugar should be less than 100 mg/dl in all patients.
- d. LDL-cholesterol up to 120 mg/dl is acceptable in diabetics.
- e. blood pressure of 145/95 mm Hg is acceptable in diabetics.

45. One of the following is true about complications of diabetes mellitus.

- a. HbA1C is the most studied marker for diabetes mellitus complications.**
- b. fasting blood sugar does not attribute to HbA1C level.
- c. Erectile dysfunction is solely (only) due to diabetic vasculopathy.

- d. hard exudates are more serious than soft exudates in diabetic retinopathy.
- e. serum creatinin is the early biochemical marker to change in diabetes nephropathy.

46. All the following are true about calcium metabolism except.

- a. calcitonin inhibit bone resorption
- b. vit. D3. is hydroxylated in the liver to 25-hydroxycholecalciferol
- c. parathyroid hormone decrease phosphate excretion by the kidneys.
- d. parathyroid hormone is increased renal tubular reabsorption of calcium.
- e. vit. D deficiency is manifested as low parathyroid hormone level.

47. A 54- year- old male with Child's grade C hepatic encephalopathy presents with haemetemesis. Which ONE of the following is most appropriate immediate therapy?

- a. i.v desmopressin
- b. i.v isosorbide dinitrate
- c. i.v. omeprazole
- d. i.v. propranolol e. i.v. somatostatin.

48. All the following are risk factors for development of peptic ulcer disease Except.

- a. daily use of NSAID
- b. gastric infection with H.pylori c. sever emotional stress.
- d. cigarette smoking
- e. gastrin-secreting tumors.

49. Which ONE of the following is LEAST associated with hemochromatosis.

- a. cardiomyopathy b.hypogonadism c. Chorea.
- d. diabetes mellitus
- e. liver cirrhosis.

50. A 29- year-old man presents with symptoms of gastroesophageal reflux. Which ONE of the following is most useful in assessing the role of surgery.

- a. cardiac sphincter manometry.
- b. gastric emptying study.

- c. intragastric PH monitoring off therapy . d. oesophageal motility study.
- e. oesophageal PH monitoring on therapy

51. All the following are true about hepatitis A ,except.

- a. has an incubation period of 2-4 weeks. b. it is transmitted during vaginal delivery.
- c. does not cause chronic hepatitis.
- d. may cause hepatosplenomegaly.
- e. a vaccine is available.

52.A peripheral blood film shows hypersegmented neutrophils. What is the most likely ONE cause for this ?

- a. Iron deficiency anemia
- b. myelofibrosis
- c. thalassemia major
- d. thalassemia minor
- e. megaloblastic anemia

53. All the following may be used in treatment of idiopathic thrombocytopenic purpura Except.

- a. oral prednisolone. b. Fresh frozen plasma
- c. splenectomy
- d.I.V. immunoglobulin
- e. immunosuppressant drug (cyclophosphamide)

54.A-23- year old woman presents with lethargy, the following blood results are obtained. Hb 10.4 g/dl, platelet $268 \times 10^9/L$, WBC $6.3 \times 10^9/L$, MCV 65 fl, Hb A2 9% (NORMAL < 3.5%),

Which ONE of the following is the most likely diagnosis?

- a. B-Thalassemia minor
- b. B-Thalassemia major
- c. sickle cell anemia
- d. hereditary spherocytosis
- e. G6PD deficiency

55. A 70-year-old woman is referred to hospital due to evidences of congestive heart failure. Blood test reveal the following: Hb 7.4 g/dl, MCV 124 fl, platelets $98 \times 10^9/l$, WBC $3 \times 10^9/L$,

All the following investigations are required to reach a diagnosis Except.

- a. Schilling test
- b. Intrinsic factor antibodies
- c. antiparietal cell antibodies
- d. bone marrow aspiration, looking for megaloblasts
- e. C-reactive protein.

56. Splenomegaly may be found in all the following Except.

- a. polycythemia rubra vera
- b. essential thrombocythemia
- c. portal hypertension
- d. thalassemia minor.
- e. myelofibrosis.

57. A patient with Hodgkin's lymphoma, has cervical lymphadenopathy with splenomegaly. He has no fever, weight loss or drenching sweating.

His clinical staging is ONE of the following.

- a. stage I
- b. stage II
- c. stage III
- B. d. stage III
- e. stage IV

58. All the following are true about renal osteodystrophy Except.

- a. reduced conversion of $25(OH)_2 D_3$ to $1-25(OH)_2 D_3$
- b. increased parathyroid hormone
- c. increased intestinal calcium absorption
- d. decreased osteoclastic activity
- e. increased reabsorption of calcium from bone.

59. All the following may be found in polycythemia rubra vera Except.

- a. elevated WBC
- b. elevated platelets
- c. splenomegaly
- d. elevated serum uric acid
- e. high erythropoietin level

60. Coomb's test is positive in ONE of the following.

- a. warm autoimmune hemolytic anemia
- b. hereditary spherocytosis
- c. G6PD deficiency
- d. paroxysmal nocturnal hemoglobinuria
- e. malaria

61. All the following are true about thalassemia major Except

- a. Hb electrophoresis shows mainly increase in Hb A2
- b. failure to thrive with short stature
- c. severe anemia
- d. hepatosplenomegaly
- e. treatment is by blood transfusion with iron chelating agent (desferrioxamine)

62. All the following are true about rheumatoid arthritis except.

- a- it is chronic disease, but curable.
- b- it is commonly associated with positive rheumatoid factor
- c- antimalarial treatment is one of the lines of management.
- d- the patients with the disease are liable to infection
- e- this disease may affect the patients functionally.

63. All the following are true about uric acid metabolism except.

- a- 2/3 of body uric acid pool is dietary in origin

b- 2/3 is from endogenous purine metabolism c- 2/3 of uric acid is excreted by the kidney
d- serum uric acid is increased in polycythemia rubra vera e- serum uric acid is increased in eclampsia of pregnancy.

64- All the following are poor prognostic signs in scleroderma except.

a- old age of onset.

b- limited skin involvement. c- high ESR

d- renal involvement

e- pulmonary hypertension

65. Pathergy test is positive in one of the following diseases.

a- Behcet's syndrome

b- Kawasaki disease

c- erythema multiforme d- osteoarthritis

e- rheumatoid arthritis

66. All the following are most likely causes of pyrexia of unknown origin Except. a- occult bacterial infection

b- lymphoma

c- factitious fever

d- **viral infection** e- SLE

67. A 50-year old woman has pain in her fingers on exposure to cold, arthralgia, and difficulty in swallowing solid food.

The most useful One test to make a definitive diagnosis is a- rheumatoid factor

b- anti-nuclear antibody c- ECG

d- Blood urea and serum creatinin e- anti-mitochondrial antibody

68. A 20-yea-old male is complaining of arthritis and eye irritation. He has a history of burring on urination. On examination, he has Right knee effusion and dermatitis of the glans penis. Which of the following is ONE most correct statement about this patient?

a- Nisseria gonorrhoeae is likely to be cultured from the glans penis b- B- the patient is likely to have positive rheumatoid factor

c- **An infectious process of the GI tract may precipitate this disease** d- The anti-nuclear antibody is very likely (highly) to be positive e- There is strong association with HLA-B8 antigen.

69. A pleural effusion analysis results: ratio of concentration of total protein in pleural fluid to serum of 0.38, lactate dehydrogenase LDH level of 125 IU, and ratio of LDH in pleural fluid to serum of 0.45.

Which of the following ONE disease is the most likely the cause for this pleural effusion. a- uremia

b- pulmonary embolism c- sarcoidosis d- SLE Congestive heart failure

70. All the following criteria indicate severe asthma Except.

- a. silent chest
- b. respiratory rate of 20/ min.
- c. hypercapnia
- d- thoracoabdominal respiration e- confusion

101. A 57-year-old man develops acute shortness of breath shortly after a 20-hour automobile ride. He has normal physical examination except for tachycardia, ECG: shows sinus tachycardia, but is otherwise normal.

Which ONE of the following is correct?

- a- the patient should be admitted to hospital and if there is no contraindication to anticoagulant, Heparin should be started while waiting for tests.
- b- Normal finding on examination of the lower limbs are extremely unusual
- c- A definitive diagnosis can be made by history alone
- d- Early treatment has little effect on overall mortality
- e- The disease can be diagnosed definitely by Chest X-Ray

102. Which ONE of the following Arterial Blood Gases is most likely to be found in a 60-year-old heavy smoker man, He has chronic bronchitis, peripheral edema and cyanosis?

- a- PH 7.50, PO₂ 75, PCO₂ 28
- b- PH 7.15, PO₂ 78, PCO₂ 92
- c- PH 7.06, PO₂ 36, PCO₂ 95
- d- PH 7.06, PO₂ 108, PCO₂ 13
- e- PH 7.39, PO₂ 48, PCO₂ 54

103. A 60-year-old man has an inferior myocardial infarction; his heart rate is 45 /min. The artery most likely to be involved in this process is:

- a- right coronary artery
- b- left main artery
- c- left anterior descending artery
- d- circumflex artery

e- left mammary artery

104. A patient with stable angina on aspirin, nitrate and B-Blocker, developed 3 episodes of severe and long-lasting chest pain each day over the past 3 days.

His ECG and cardiac enzymes are normal.

One of the following is the best treatment

- a- admit the patient and start I.V digoxine b- [admit the patient and start I.V heparin](#)
- c- admit the patient and start I.V prophylactic streptokinase
- d- admit the patient and for observation without changing his medications e- Discharge the patient with increasing the dose of B-blocker and nitrate

105. ONE of the following drugs reduces myocardial remodeling after acute myocardial infarction.

- a- [ACE inhibitors](#) b- digoxin
- c- verapamil
- d- furosemide (Lasix) e- hydralazine.

106. Autoimmune thyroiditis can be confirmed by ONE of the following.

- a- [thyroid peroxidase antibody](#)
- b- anti-nuclear antibody c- thyroid uptake resin
- d- fine needle thyroid aspiration e- estimation of TSH

107. A 70 hypertensive woman patient with mild left hemiparesis and finding of persistent atrial fibrillation. Optimal treatment with anti-hypertensive drugs would be ONE of the following

- a- close observation
- b- permanent pacemaker c- aspirin
- d- **warfarin**
- e- I.V heparin

108. ONE of the following is used in treatment of hypertensive emergency a- I.V atenolol (tenormin)

- b- oral captopril
- c- sublingual nifedipine
- d- [continuous infusion of sodium nitroprusside](#) e- oral alpha methyl dopa

109. Which ONE of the following should be immediately given to a patient with ventricular fibrillation.

- a- I.V amiodrone
- b- I.V epinephrine (adrenaline) c- [defibrillation at 200 joules](#) d- I.V adenosine

e- I.V verapamil

110. Which ONE of the following drugs would be most appropriately used in treatment of patient with inferior myocardial infarction and has a heart rate of 40/minute .

a- atropine

b- digoxine

c- propranolol

d- calcium channel blockers e- heparine

111. All the following are true in Cushing Except

a- ectopic ACTH is association with sever weight gain without electrolytes disturbances

b- Cushing disease is usually due to pituitary micro-adenoma c- Salivary cortisol level has low sensitivity and specificity

d- Cushing disease is a major component in MEN-1

E- Ectopic ACTH Cushing is associated with metabolic acidosis and hyperkalemia

112. A 50-year-old female , she is 155 cm tall and weighs 100 Kg, her fasting bloods sugar is 150 mg/100 ml on 2 occasions, she is a symptomatic and no abnormal physical signs on examination.

The treatment of choice include ONE of the following. a- observation

b- medical nutrition therapy c- insulin

d- sulphonylurea

e- biguanides (metformin) !!!!!!!!!!!!!!!

113. Increased rennin and angiotensin II is found in ONE of the following causes of secondary hypertension.

a- renal artery stenosis b- Conn's syndrome

c- cushing's syndrome d- pheochromocytoma e- acromegaly

114. Hypocalcemia with increased serum phosphate is found in ONE of the following a- hypoparathyroidism

b- osteomalacia

c- acute pancreatitis

d- chronic renal failure e- malabsorption

115. All the following may be findings in primary hypoadrenalism (Addison's disease) Except.

- a- hypernatremia with hypokalemia
- b- palmer creases skin pigmentation
- c- impotence and amenorrhoea
- d- postural hypotension
- e- weight loss

116. All the following are true about nephrotic syndrome Except. a- dietary sodium restriction is initial treatment.

- b- high protein diet (120-150 gram) daily is recommended
- c- prolong bed rest should be avoided as thromboembolism is common.
- d- Sepsis is the major cause of death
- e- hyperlipidemia is responsible for increase risk of ischemic heart disease.

117. Modifiable risk factors for ischemic heart disease include all the following Except. a- smoking

- b- hypertension
- c- hyperlipidaemia
- d- age
- e- diabetes mellitus

118. All the following antibiotics may be used in treatment of H.pylori Except. a- amoxicillin

- b- tetracycline
- c- metronidazole
- d- clarithromycin
- e- streptomycin

119. All the following are found in chronic renal failure Except. a- hyperkalemia

b- hyperurecemia

c- hypophosphatemia d- hypocalcemia

e- Low serum erythropitein

120. Treatment of hyperkalemia include all the following Except. a- i.v calcium gluconate

b- i.v salbutamol

c- i.v soluble insulin and gluouse d- i.v hydrocortisone

e- hemodialysis

121. After undergoing surgical resection for carcinoma of stomach, a 60-year-old male develop numbness in the lower limb. Blood film shows macrocytosis and MCV = 120fl.

The abnormality is most likely due to ONE of the following a- folic acid

b- Vit. B12 (IF)

c- thiamin

d- Vit. K

e- Riboflavin

122. ONE of the following is not a disease –modifying anti-rheumatoid arthritis drug. a- sulfasalazine

b- NSAIDs

c- methotrexate d- leflunamide

e- sodium aurothiomalate (Gold)

123. All the following are early complications of acute myocardial infarction Except.

a- cardiogenic shock b- heart block

c- ventricular fibrillation

d- aneurismal dilatation of infarcted area e- sudden cardiac death

124. ECG shows ST elevation in leads II, III, AVF, indicate infarction in ONE of the following

a- anteroseptal MI b- anterolateral MI c- posterior MI

d- inferior MI

e- subendocardial MI

125. All the following ECG findings are found in hypokalemia Except.

a) Flattened T waves

b) U waves

c) Shortened QT interval

d) ST segment depression

e) Ectopic beats

126. ONE of the following is LEAST common cause of Microscopical hematuria

a-Minimal change disease (lipoid nephrosis) b-Membranous glomerulonephritis

c-Proliferative glomerulonephritis

d-Membranoproliferative glomerulonephritis e-Lupus nephritis

127. Causes of nephrotic syndrome include all the following Except.

a) SLE

b) DM

c) Amyloidosis

d) Membranous glomerulonephritis

e) Autosomal-dominant polycystic kidney disease

128. All the following are true regarding the pathogenesis of lupus erythematosus except.

- a- the exact cause is unknown.
- b- It is a chronic inflammatory disease.
- c- the basic pathological unit is vasculitis
- d- it is due to type I hypersensitivity reaction.
- e- genetic and environmental factors may play a role in the disease.

129. All the following are causing hypokalemia Except.

- a- Conn's syndrome
- b- Addison's disease
- c- B-agonist (salbutamol) therapy
- d- Alkalosis
- e- Thiazide diuretics

130. Repeated multiple mouth ulcers are seen in the following conditions EXCEPT:

- a. Behcet's disease.
- b. Systemic lupus erythematosus.
- c- Herpes simplex virus infection.
- d- Ankylosing spondylitis.
- e- Mental stress.

Part 1

1) A 22 year old female presents to clinic because of severe generalized muscle weakness .Her Blood pressure 120/70 mm Hg , pulse 76/min . Physical exam is normal except for the muscle weakness .

Labs : Na 142 meq/L , **K 2.8 meq / L** , Cl 94 meq / L , Ca 10 mg / dl , Po4 3.5 mg/dl, CO2 36 meq/L
Urine ;

Ph : 7 , protein : trace elements , Cl 75 meq / L , glucose : negative , K : 74 meq/L , Na : 55 meq /L

The clinical findings are most consistent with :

- A .) Hypokalemic periodic paralysis B) Villous adenoma
C) Primary aldosteronism **D) Bartter s syndrome xxx** E) Surreptitious vomiting

2) A 20 year old primigravida in her 32 nd week of gestation is admitted to the hospital because of epigastric pain , nausea & vomiting . physical exam shows Blood pressure 150/105 mm Hg , puffiness of the eyes , + 1 peripheral edema , segmental arteriolar narrowing but no hemorrhages or exudates of the fundus , cardiovascular exam is normal Labs :

Hct :40 % ,WBC 7000 / μL , platelets 70 , 000 /μL , BUN 15 mg/dl , Uric acid 8.3 mg/dl , Cr 1.7 mg/dl , Bilirubin 2.7 mg/dl , ALT 500 U/L , lactate dehydrogenase 500, Haptoglobin 14 mg / dl , Urine analysis + 2 protein , no RBC .

Peripheral smear shows schistocytes & helmet cells , retic 5 % , fibrin split products 20 mg/dl (normal < 10)

.

What is the most likely diagnosis ?

- A) Thrombotic thrombocytopenic purpura
B) Malignant hypertension C) Acute glomerulonephritis D) Acute pancreatitis
E) Fulminant Preeclampsia (HELLP)

3) During a routine physical examination for obtaining health care insurance , a 31 year old woman is found t have asymptomatic hematuria with 25-30 RBC/HPF in her urine

. Her serum Cr level is 0.9 mg/dl , and her BUN is 12 mg/dl . On questioning , the patient said that she had a sore hroat within the past month . Physical Exam is unremarkable & shows no evidence of hypertension or edema . Dipstick analysis shows only trace proteinuria .

The patient returns for follow up evaluation 2 weeks later , the microscopic hematuria has resolved .

What is the most appropriate next step you would take to arrive at a diagnosis ?

- A) Order complement , ANA, and ANCA tests B) Order a urine test for cytology
C) Order measurement of Serum IgA level **D) Repeat urine analysis xxx**
E) Order an intravenous pyelogram

4) A 67 year old man with a 4 year history of NIDDM is admitted to the hospital with DVT in his calf . He is placed at bed rest & given a diet for diabetic patients & started on heparin therapy . He is treated with his chronic antihypertensive regimen of Captopril , 25 mg, twice daily

Labs :

Na 138 meq/L, K 4.6 meq/L , HCO₃ 25 meq/L , Cr 2 mg/dl stable for 2 years , 5 days later Blood pressure remained stable 135/85 mmHg , but labs became :

glucose 225mg/dl, Na 135 meq/L , k 7 meq/L , HCO₃ 21 meq/L , Cr 2.4 mg/dl , TTKG 4 .

What is the most likely cause of hyperkalemia ?

A) Acute adrenal hemorrhage B) Acute Renal failure

C) Hyperglycemia

D) Pulmonary embolus

E) Hypoaldosteronism xxx

5) 30 year old woman , 34 weeks pregnant developed PET , as part of her treatment was given Mg SO₄ , a check on her deep tendon reflexes were decreased and she started to be confused .

Labs :

BUN : 40 mg/dl , Cr 1.7 mg/dl , Ca 8.3 mg/dl , CO₂ 23 meq/L , Cl 97 meq/l , K 4.3 meq/l , Na 137 meq/l , Mg 10.5 meq/L

The patient urine output is 30 cc / hour for the last few hours

What is the first step in management of this patient hypermagnesemia :

A) Placement of a dialysis catheter and initiation of hemodialysis B) Administration of furosemide , Iv 100 mg

C) Administration of 10 % Ca gluconate , Iv , 10-20 ml xxx

D) Discontinuation of Mg containing antacids followed by observation

E) Gastric lavage alternating with Kayexalate (Na polystyrene sulfonate) enemas .

6) A 66 year old man with ESRD secondary to hypertension has been receiving maintenance hemodialysis for 15 years . He is hospitalized for evaluation of neck and bilateral shoulder pain associated with pain and parasthesias in both hands . Nerve conduction studies show bilateral median nerve entrapment .

He undergoes a bilateral carpal tunnel release procedure . A skeletal survey shows numerous periarticular lytic lesions in both humeral heads , the right acetabulum , & right scaphoid . Diffuse osteopenia , and subperiosteal erosion of the medial aspects of the middle phalanges of the hands .

Which of the following procedures is most likely to document the cause of this patients symptoms ?

A) MRI of the cervical region and shoulders B) An intact parathyroid hormone level test

C) Congo red staining of the carpal tunnel band or periarticular lytic lesions xxx D) A transiliac bone biopsy

E) A deferoxamine challenge test

7) A 19 year old man presents to ER with nausea & vomiting . He has been attending a wrestling camp for 2 days and had been in good health previously . He has an oral temperature of 38 °C , the remainder of his vital signs are normal .

Labs :

Cr 2 mg/dl , Urine analysis : protein + 1 , blood + 3 , microscopic RBC 0-3 / HPF , WBC 0 , casts positive

What is the most appropriate next step :

- A) Prescribe acetaminophen , oral hydration , and abstinence from exercise for the next 3 days
- B) Prescribe Aspirin , oral hydration, & abstinence from exercise for the next 3 days
- C) Admit to hospital & order Iv hydration xxxx**
- D) Order a toxic screen for drugs
- E) Order a throat culture and antistreptolysin O titer

8) A 33 year old woman presented with Sarcoidosis , her labs showed :

BUN 13 mg/dl , Na 140 meq/L , K 3.8 meq/L , Cl 105 meq/L , Ca 11.9 mg/dl , PO4 3.5 mg/dl , Cr 1.9 mg/dl , alb 4 g/dl , CO2 23 meq/L .

All the following are likely to be a finding in this patient except :

- A) Increased intestinal Ca absorption
- B) Increased production of 1,25 dihydroxyvitamin D3
- C) Increased levels of PTH xxxx**
- D) Hypercalciuria
- E) Increased risk for nephrolithiasis

9) A 55 year old male has progressive CRI due to type II Diabetic Nephropathy & hypertension . His Cr clearance is 23 ml/min , his serum Cr is 3.1 mg/dl . He has just returned from an introductory educational session regarding dialysis & transplant options . He asks your opinion about the best options

Which of the following offers the best prognosis for this patient :

- A) NIPD
- B) Hemodialysis
- C) Renal transplant xxxx**
- D) Combined renal & pancreas transplant
- E) CCPD

10) A 41 year old man has had recurrent Calcium oxalate stones for the past 3 years . A recent 24 hour collection showed the following :

Cr 1.56 g/24 hrs

Ca 380 mg/24 hrs , normal (< 300 mg/24hrs) . Urate 740 mg/24 hrs , normal (< 750 mg/24 hrs) Oxalate 38 mg/24 hrs , normal (< 40 mg/24 hrs) Citrate 643 mg/24 hrs , normal (300-700 mg/24 hrs) Na 104 meq / 24 hrs

Which of the following would be most effective in reducing his urinary Calcium excretion ?

- A) Dietary Ca restriction
- B) Cranberry juice

- C) Hydrochlorothiazide xxxx
- D) Furosemide
- E) High fluid intake

11) A 28 year old man is found to have microscopic hematuria on an insurance physical examination . His physical exam is normal .

Urine analysis : no protein , many RBC/HPF , no RBC cast nor dysmorphic RBC . IVP showed Medullary sponge kidney but no stones .

Appropriate counselling of this patient include which of the following :

- A) Advice him that this disorder is likely to progress to CRF over 10-20 years .
- B) Advice him that this is a benign finding and that although it may be a risk factor for nephrolithiasis , it never leads to renal failure xxxx
- C) Advice him that his children should have a genetic testing
- D) Advice him that ACE inhibitor can modify course of disease
- E) He needs cystoscopy to find source of bleeding

12) In which of the following clinical situations would an increase in serum Cr concentration be explained only by reduction in GFR ?

- a) Use of Trimethoprim in a patient with a urinary tract infection
- b) Increased levels of ketoacids in a patient with DKA
- c) Severe extracellular volume contraction in a patient with diarrhea xxxx
- d) Use of Cimetidine in a patient with a peptic ulcer
- e) Carnitine ingestion for body building

13) After 4 years on dialysis , a 42 year old HCV positive black patient received a living unrelated transplant from his wife . He is treated with Tacrolimus , Sirolimus & prednisone .Four months post transplant he has high blood sugar ranging 200- 300 mg/dl .He has no family history of diabetes . His BMI is 35 .

His risk factors for post transplant diabetes include all Except :

- A) Tacrolimus therapy
- B) Increased BMI
- C) HCV infection
- D) Sirolimus therapy xxxx
- E) Ethnicity

14) All the following are true in regards to corticosteroid withdrawal after kidney transplant except :

- a) Acute rejection is more likely in blacks
- b) Avoidance of steroids may be more effective than withdrawal
- c) If achieved without acute rejection , it does not affect graft survival x
- d) Results in acute rejection in approximately 30 % of patients
- e) Reduces the need for antihypertensive therapy .

15) The use of which one of the following immunosuppressant therapies is not Associated with

hyperlipidemia ?

B) Cyclosporine C) Rapamycine

D) Mycophenolate mofetil xxx E) Prednisone

Part 2

1- the drug that act on cell wall:

vancomysin

2- the most virulant bacteria:

strep a b hemolytic

3- patient with hypotension post op u suspect the cause to be hypovolemia one will confirm it in urine:

-urine Na 40

-urine\plasma creatinine ratio 20

- **na excretion ratio less than 1**

4- primary survey all must be done except

-radiographs and selecting fractures

-airway patency

-disability

-circulation elmore A B C D

5- all antibiotics affects anaerobes except:

-metronidazole

-chloramphenicol

-clindamycin

-cefalaxin? 2 من الجواب واحد من 2nd generation cephalosporines

6- not important in prevention of surgical infections during surgery

- dec number of persons in OR
- masks and gloves
- air handling systems
- taking shower to the surgeon pre op ----- had eljawab

7- clean contaminated surgery

- appendectomy with walled off ?? abscess?
- shot gun injury --perforated eshe
- cholecistectomy ----- azon hai
- interstitial vol = 11 L

9- how many k calory need for adult??

10-30

30-50

50-70

70-90

i think 30-50

10- not avasodailator?? **angeotensin**

11- most effective method to prevent dvt -

post op mobilization

12- most common herniA IN FEMALE:

indirect

13- ringer lactate

14- peritoneal lavage in trauma patient is not sensitve fer intra peret bleeding 15- men fe bleeding ma

b3mal hypovolemic shock?

peritonium-pleura-pericardium-limbs- pharynx ana 76et pharynx fe nas b7ko pericardium

16- fe jwab kan mild anxiety in hypovol.shock

17- inhalational injury - msh chest x-ray and ABG

onco

18- radiation not cause lymphocytosis

19- radiationn effect fat necrosis and breast edema

20- mean age for mammogram check up for normal female y3ne :40yr 30- most common cause of unilat

nipple bleeding

intraductal papilloma

31- nipple retraction msh sign for advanced local malig!!!!!! mn dr.jamal

cardio

about varicose vein

32- most common cause for visiting dr
asthesis

33- first symptom..
pian

34- aortic stenosis poor prognosis :
congestive H F

35- trachostomy doesnt increase dead space? not sure 36- not in middle mediastinum ??
schwannoma???

37- dvt complications :
venous ulcer

38- pt with intermit claud & impotence Dx :
leriche synd??

39- tension pneumothorax: false:
collapsed neck veins

40- teratology of fallot not present?? anemia-bleeding tendency- cyanosis-clubbing ymkin anemia l2no
3ndhom polycythemia

Part3

1. A 50 year old man with no past medical history is found to be in atrial fibrillation during routine medical examination. He reports no history of palpitation or dyspnea. Normal physical examination. He refused DC cardioversion. If the patient remains in chronic Atrial fibrillation.

Which ONE of the following is most suitable treatment to offer? a- Asprine.*****

b- warfarin, target INR 2-3. c- no anticoagulation.

d- warfarin, target INR 3-4.

e- warfarin, target INR 2-3, for 6 months then Asprin.

2. Pulsus paradoxus pulse is felt in ONE of the following. e- aortic regurgitation

f- aortic stenosis

g- mitral stenosis

h- VSD

i- Cardiac tamponade.*****

3. A 30-year-old man admitted with right sided hemiplegia. Clinical examination reveals loss of a wave in JVP. He has ONE of the following cardiac rhythm abnormality.

- a- complete heart block
- b- atrial fibrillation***** c- atrial flutter
- d- sinus tachycardia e- sinus bradycardia

##4. All the following occurs usually in 3rd week of Enteric (Typhoid) fever Except.

- a- meningitis
- b- lobar pneumonia
- c- maculopapular rash (rose spots)***** d- oostomyelitis
- e- intestinal perforation

##5. All the following are Zoonotic infections Except. a- rabies

- b- brucellosis
- c- anthrax
- d- toxoplasmosis
- e- cholera*****

6. Major criteria for Rheumatic fever include all the following Except. f- carditis

- g- Sydenham's chorea
- h- Polyarthralgia***** i- Erythema marginatum
- j- Subcutaneous nodules

7. Pathergy test is positive in one of the following diseases. a- Behcet;s syndrome.*****

- b- Kawasaki disease.
- c- Erythema multiforme. d- Osteoarthritis.
- e- Rheumatoid arthritis.

8. ONE of the following drugs is LEAST used in treatment of acute sever asthma. f- nebulized B2 agonist

- g- i.v hydrocortisone
- h- epinephrine (adrenaline)***** i- oxygen
- j- i.v . aminophylline

9. Hypoxia (decreased PaO₂) and decreased Pa CO₂ is found in all the following Except.

- f- left ventricular failure
- g- massive pulmonary embolism h- acute sever asthma
- i- acute exacerbation of COPD*****????????????? j- pneumonia

##10. All the following are true in osteomalacia Except. a- may be caused by primary biliary cirrhosis

- b- low serum 25-hydroxy vitamin D₃
- c- normal serum alkaline phosphatase*****

- d- pelvic x-ray may show linear areas of low density surrounded by sclerotic borders (looser's zones)
- e- treated by alfacalcidol.

##11. All the following are causes of eosinophilia Except. a- ascaris infestation
b- malaria***** c- bronchial asthma
d- Hodgkin's lymphoma e- Drug hypersensitivity

##12. All the following are true about Giardia lamblia Except.

- a- Is usually acquired by ingestion of food or water contaminated by trphozoites.*****
- b- Can cause malabsorption
- c- Both cystic and trophozoites can be found in stool
- d- Can be effectively treated by metonidazole (flagyl) e- Cysts are destroyed by boiling.

13. All the following are true following splenectomy Except.

- f- Thrombocytopenia***** g- pneumococcal vaccine should be given
- h- annual influenza vaccine should be given
- i- long term oral penicillin V 500 mg 12 hourly should be given j- Heizbodies are characteristically seen on blood film.

##14. All the following are true about Amoebic liver abscess Except. a- it can be treated by metronidazole (flagyl)

- b- should be aspirated routinely***** c- there may be signs of pleural effusion on right side of chest.
- d- Usually affect the right lobe of liver. e- There is often no history of dysentery.

##15. All the following neoplasm have a known infective etiology Except. a- Burkitt's lymphoma*****

- b- Hepatocellular carcinoma c- Gastric lymphoma
- d- Nasopharyngeal carcinoma e- Skin basal cell carcinoma

##16. All the following are findings in Visceral leishmaniasis (Kalaazar),Except. a- pancytopenia

- b- hypergammaglobulinaemia c- lymphadenopathy
- d- splenomegaly
- e- the drug of choice for treatment is chloroquine.*****

17. ONE of the following drugs is most appropriate in treatment of pneumocystiscarinii. f- clarithromycin

- g- ethambutol
- h- azithromycin
- i- Trimethoprim-Sulphamethoxazole***** j- INH and rifampicine

18. ONE of the following is the mode of action for B-Blockers in controlling hypertension.

- f- decrease cardiac out put.

- g- Slow the heart rate***** h- Increase cardiac force of contraction
- i- Increase cardiac output
- j- Decrease plasma volume

19. HLA-B27 is commonly associated with all of the following Except. a- it may present normally in general population

b- ankylosing spondylitis

c- polymyositis***** d- reactive arthritis

e- Reiter's disease

21. Which one of the following is LEAST useful in assessing patient with a poor prognosis in community-acquired pneumonia?

f- mental confusion

g- urea of 11.4 mmol/l

h- positive C-reactive protein***** i- respiratory rate of 35/ min.

j- age 75 years old.

22. Functions of the kidney include all the following Except. (a). Excretion of waste products.

(b). production of erythropoietin. (c). Metabolism of vitamin.

(d). destruction of rennin.***** (e). production of prostaglandins.

23. ONE of the following ECG changes will NOT be found in patient with cirrhotic liver and chronic diarrhea who has been taking diuretics

f) Flattened T waves

g) U waves

h) Shortened QT interval*****

i) ST segment depression

j) Ectopic beats

24. ONE of the following is LEAST common cause of Microscopical hematuria

a) Minimal change disease (lipoid nephrosis)

b) Membranous glomerulonephritis*****

c) Proliferative glomerulonephritis

d) Membranoproliferative glomerulonephritis

e) Lupus nephritis

25. Ultrasound is not useful in defining ONE of the following:

- a) Obstructive uropathy
- b) Papillary necrosis*****
- c) Renal cysts
- d) Renal masses
- e) Renal size

26. Causes of nephrotic syndrome include all the following Except.

- f) SLE
- g) DM
- h) Amyloidosis
- i) Membranous glomerulonephritis
- j) Autosomal-dominant polycystic kidney disease*****

27. All the following are associated with large or normal size kidneys Except:

- a) Diabetes
- b) Amyloid*****
- c) Scleroderma
- d) Acute tubular necrosis
- e) Chronic pyelonephritis

28. A low complement level is seen in all the following Except: b) Membranous

GN*****

- c) Mesangiocapillary GN
- d) Bacterial endocarditis
- e) Shunt nephritis
- f) Systemic lupus erythematosus

29. All the following are causes of sterile pyuria Except:

- f) Kidney stones
- g) Tubulointerstitial disease
- h) Papillary necrosis
- i) Tuberculosis
- j) Acute pyelonephritis*****

30. Hypernatremia in the presence of uncontrolled DM suggests One of the following: a) Salt overload

- b) Water depletion
- c) Hyperlipemia
- d) Increased tubular sodium resorption
- e) Ketoacidosis

31. ONE of the following is the most frequent cause of death in acute renal failure.

- e) Uremia
- f) Pulmonary edema
- g) Hyperkalemia
- h) Infection*****
- e) Hyponatremia

32.. A 29-year-old medical student developed a positive PPD (purified protein derivative) test. She was started on isoniazid (INH) and rifampin prophylaxis. Three months into her therapy, she began to experience muscle fasciculations and convulsions. Administration of which of the following vitamins might have prevented these symptoms?

- a- Niacin
- b- Pyridoxine ***** c- Riboflavin
- d- Thiamine e- Vitamin C

33. All the following are causes of low Total gas transfer (TLCO) in respiratory function test Except.

- a- pulmonary fibrosis b- pulmonary oedema c- emphysema
- d- pulmonary emboli
- e- asthma*****

34. A 71-year-old woman with no significant past medical history is investigated for generalized tiredness. She has recently lost 7 Kg in weight.

The following blood results are obtained.

Hb: 9.8 g/ dl, platelets: $104 \times 10^9/L$, WBC: $70 \times 10^9/L$

Blood film: small mature lymphocytosis, smudge cell seen, no abnormal (blast) cells.

ONE of the following is most likely diagnosis. a- chronic myeloid leukemia

b- chronic lymphocytic leukemia***** c- acute myeloid leukemia

d- acute lymphoblastic leukemia e- aplastic anemia

##35. All the following cardiac lesions are associated with high risk of infective endocarditis Except.

a- VSD

b- combined mitral valve disease c- aortic stenosis

d- Atrial septal defect***** e- Aortic regurgitation

36. Increased bleeding time and PTT is found in ONE of the following. a- hemophilia A

b- hemophilia B (Xmas disease)

c- Von Willebrand disease***** d- treatment with warfarin

e- idiopathic thrombocytopenic purpura

37. All the following may be found in Iron deficiency anemia Except.

a- Red cell distribution width (RDW) is less than 13.***** b- microcytic RBC

c- low serum ferritin d- low serum iron

e- increased TIBC

38. Bilateral hilar lymph nodes enlargement occurs in all the following Except. a- pulmonary Tuberculosis

b- chronic myeloid leukemia***** c- non-Hodgkins lymphoma

d- Hodgkin lymphoma e- sarcoidosis

39. All the following may be found in Intravascular hemolysis Except. a- increased unconjugated bilirubin

b- increased haptoglobin***** c- increased methemalbumin

d- reticulocytosis

e- Hemoglobinuria

40. All the following are causes of WORM autoimmune hemolytic anemia Except. a- SLE

b- chronic lymphocytic leukemia c- methyl dopa

d- infectious mononucleosis*****+ e- non-Hodgkins lymphoma

41. Splenectomy may be an option in treatment of all the following Except. a- hereditary spherocytosis
b- idiopathic thrombocytopenic purpura c- worm autoimmune hemolytic anemia
d- hypersplenism*****e- G6PD defecency

42. Philadelphia chromosome is seen in 90-95 % of patients in ONE of the following. a- - chronic lymphocytic leukemia
b- chronic myloid leukemia***** c- polycythemia rubra vera
d- essential thrombocythemia e- myelodysplastic syndrome

##43. Life threatening complications of multiple myeloma include all the following Except.
a- renal impairment b-hypercalcemia
c- hyperurcemia***** d- hyperviscosity due to high level of paraprotein
e- spinal cord compression.

##44. Metronidazole (Flagel) is used in treatment of all the following Except. a- acute intestinal amoebiasis.
b- H.pylori infection c- Giardiasis
d- Enteric fever (typhoid)***** e- pseudomenbrnous coloitis.

45. A 72-year-old woman comes to you to control her high blood pressure (180/100) mmHg.
What is the ONE target blood pressure in the long term for this patient? a- <160/90
b- <150/90
c- <140/90
d- <130/85***** e- <120/70

46. A woman, her weight is 82 Kg, height is 1.71 meter.
Which ONE of the following is approximately her Body Mass Index? a- 28.37*****
b- 24.50
c- 32.40
d- 34.00
e- 36.00

47. All the following are true about anti-diabetic agents Except. a- metformin carries a risk of lactic acidosis.
b- sulphonylurea is used safely pregnancy***** c- glitazones may cause prominent fluid retention
d- insulin may cause lipohypertrophy e- acarbose causes diarrhea

48. Causes of hypoglycemia in diabetes include all the following Except. a- no daily exercise.*****
b- unrecognized other endocrine diseases like Addison's disease. c- missed, delayed or inadequate meal

d- gastroparesis

e- factitious and deliberately induced.

49. All the following drugs are used in treatment of congestive heart failure Except. a- bisoprolol

b- metoprolol

c- carvedilol

d- spironolactone

e- propranolol*****

50. Causes of indirect (unconjugated) hyperbilirubinemia include all the following Except.

a- autoimmune hemolytic anemia b- thalassemia major

c- G6PD deficiency anemia

d- Dubin-Johnson syndrome***** e- Gilbert's syndrome

51. Precipitating factors for hepatic encephalopathy in patient with liver cirrhosis include all the following Except.

a- occult infection

b- Aggressive diuresis

c- Gastrointestinal bleeding

d- Treatment with oral neomycin***** e- Excess dietary proteins

52. All the following hepatitis viruses are RNA Except. a- hepatitis A

b- hepatitis B***** c- hepatitis C

d- hepatitis D e- hepatitis E

53. ONE of the following statements is true about treatment of pulmonary tuberculosis. a- pyrazinamide may precipitate hyperuricemic gout.*****

b- INH can cause optic neuritis

c- renal impairment with rifampicine

d- streptomycin is causing reversible damage to vestibular nerve e- hepatitis is usually caused by ethambutol

54. In patient with coma due to morphine overdose, which ONE of the following Medications is used to reverse its act.

a- methionine

b- N-acetyl cystine

c- Naloxone***** d- Atropine

e- Praloxone

55. All the following are found in left sided heart failure Except. a- bilateral basal creptations

b- third heart sound c- pulsus alternans

d- raised JVP***** e- pulmonary oedema

56. All the following are long term complications of sickle cell anemia Except. a- pulmonary hypertension

b- leg ulcer

c- neurological complications d- aplastic crisis

e- splenomegaly.*****

58. A 35-year-old man with type 1 diabetes mellitus, is evaluated for recent onset morning hypoglycemia. For the last 10 days his morning blood glucose has ranged from 220 mg/dl-300 mg/dl. He has experienced nightmares recently.

Which of the following is best explanation for his morning hyperglycemia. a- Diabetic nephropathy

b- Under treatment with insulin

c- Overtreatment with insulin*****????????????????? d- Diabetic neuropathy

e- Hypothyroidism.

59. All the following can cause high prolactin level Except. a- prolactinoma

b- acromegaly

c- polycystic ovary syndrome d- metacopramide

e- hyperthyroidism.*****

60. Which ONE of the following is contraindicated in treatment of patients with hypercalcemia of malignancy.

a- thiazide diuretics***** b- loop diuretics

c- infusion of intravenous normal saline d- bisphosphonates

e- glucocorticoids

61. All the following may occur in cardiac tamponade Except. a- raised jugular venous pressure with sharp rise and y descent.

b- Kussmaul's sign (rise JVP/ increased neck vein distension during inspiration) c- pulsus paradoxus

d- visible apex beat.***** e- reduced cardiac output.

62. All the following are correct about non-pharmacological therapy in all *hypertensive* patient Except.

- a- weight reduction –BMI- should be < 25 Kg/m²*****
- b- low fat and saturated fat diet
- c- low sodium diet < 2 gram per day
- d- dynamic exercise
- e- stop smoking

63. All the following are true regarding the pathogenesis of lupus erythematosis except. a- the exact cause is unknown.

- b- It is a chronic inflammatory disease.
- c- the basic pathological unit is vasculitis
- d- it is due to type I hypersensitivity reaction.*****
- e- genetic and environmental factors may play a role in the disease.

64. All the following are criteria to define severe attack of ulcerative colitis Except. a- stool frequency > 10 per day with out blood*****

- b- fever > 37.5 C
- c- tachycardia >90/min
- d- anemia hemoglobin < 10 gram/dl
- e- albumin < 30 g/L

65. Constipation may occur with all the following Except. a- diabetes mellitus

- b- hypercalcemia
- c- carcinoid syndrome*****
- d- porphyria
- e- hypothyroidism

66. A 65-year old man presents with 6 months history of diarrhea with pale stool and weight loss. Relevant lab results show: calcium 1.8 mmol/L (normal 2.12-2.62 mmol/L), alkaline phosphatase 350 U/L Normal value (45-105),

- What is the ONE most likely diagnosis? a- celiac disease
b- Giardia lamblia infection
c- Pancreatic carcinoma***** d- Small intestinal bacterial overgrowth
e- Whipple disease.

67. A 32-year-old alcoholic with shock due to bleeding oesophageal varices. After resuscitation. Which ONE of the following is the treatment of choice.

- a- intravenous octreotide. b- intravenous glypressin
c- oesophageal variceal endoscopy ligation
d- Transjugulartranshepatic portocaval shunt (TIPS)
e- oesophageal variceal sclerotherapy*****

68. A 65-year-old man with liver cirrhosis presented with ascitis, abdominal pain, tenderness and peripheral edema. A diagnostic tap revealed a neutrophil count of 400 /mm³ (normal < 250).

- Which ONE of the following would be of the most immediate benefit? f- Fluid restriction and no added salt diet.
g- Intravenous antibiotics.
h- Oral spironolactone.
i- Therapeutic paracentesis***** j- Trans-jugular porto-systemic shunt.

69. The presence of fecal leukocytes in a sample of stool or rectal mucus is consistent with all the following causes of diarrhea Except ONE.

- a- campylobacter jejuni. b- Shigella sonnei
c- Giardia Lambilia***** d- Ulcerative colitis
e- Entamoeba histolytica

70. All the following are recognized complications of Hepatitis C infection Except. a- diffuse proliferative glomerulonephritis.*****

- b- hepatocellular carcinoma
- c- liver cirrhosis
- d- chronic hepatitis C infection
- e- cryoglobulinemia

71. All the following statements are associated with Wilson's disease Except. a- Kayser-Fleischer rings.

- b- haemolysis
- c- Elevated serum caeruloplasmine*****
- d- Renal tubular acidosis
- e- Chorea.

72. ONE of the following tests is most suitable in screening patients for celiac disease. a- Anti-casein antibodies

- b- Anti-endomyseal antibodies*****
- c- Anti-gliadin antibodies
- d- Xylose absorption test
- e- C-reactive protein.

73. All the following are true about Bronchiectasis Except.

- a- chronic cough with whitish sputum.*****
- b- May be caused by cystic fibrosis
- c- Clubbing of fingers
- d- Hemoptysis
- e- Bronchial dilation and wall thickening is shown by high resolution chest CT scan.

74. All the following are true about sarcoidosis Except.

- a- raised serum level of angiotensin converting enzymes
- b- Negative tuberculin skin test
- c- Normochromic normocytic anemia
- d- Hypercalcemia
- e- Pulmonary caseating granuloma*****

75. Cardiac risk factors for CNS ischemic stroke are all the followings except: a- Atrial fibrillation.

- b- Supraventricular tachycardia.
- c- Myocardial infarction.*****
- d- Left atrial myxoma.
- e- Cardiomyopathy.

76. ONE of the following is found only in Grave's disease. a- atrial fibrillation

- b- Pretibial myxoedema*****
- c- heat intolerance

d- Tremor

e- Proximal myopathy

77. All the following are causing hypokalemia Except. a- Conn's syndrome

b- Addison's disease***** c- B-agonist (salbutamol) therapy

d- Alkalosis

e- Thiazide diuretics

78. A60-year-old man recently treated for renal tuberculosis, presents with weight loss, diarrhea, anorexia, and hypotension and is noted to have hyper pigmented buccal mucosa and hand creases.

ONE of the following is discriminating investigations which is useful in diagnosis.

a- Stool for ova, cysts and parasites.

b- Full blood count.

c- thyroid function test

d- Plasma ACTC and Cortisol***** e- Blood cultures.

79. A20-year-old woman presents with fever, abdominal pain, purpura and focal neurological signs.

ONE of the following is most likely diagnosis. a- idiopathic thrombocytopenic purpura

b- thrombotic thrombocytopenic purpura*****

c- DIC

d- Henoch-Schonlein purpura e- Von Willebrand's disease.

80. A -30-year old man has, on heart auscultation, loud first heart sound, rumbling mid diastolic murmur with opening snap.

ONE of the following is most likely diagnosis.

a- Pliable (mobile) mitral valve stenosis.***** b- Calcified (immobile) mitral valve stenosis.

c- Mitral valve prolepses. d- Aortic regurgitation

e- Mitral regurgitation.

81. A-40-year old man post thyroidectomy for medullary thyroid carcinoma presents with hypertension and complains of attacks of sever headache and palpitations. He is noted to have glycosuria.

Which ONE of the following is most likely cause of his hypertension.? a- Cushing syndrome.

b- Primary hyperaldosternosim.

c- Essential hypertension

d- Pheochromocytoma***** e- Polyarteritis nodosa.

82. A-20-year old woman presents with a week history of fever, rigor and productive rusty cough. The X-ray shows left lower lobe consolidation.

Which ONE of the following is most appropriate treatment?

- f- Clarithramycin***** g- ciprofloxacin
- h- Cotrimoxazole
- i- Benzypenicillin
- j- Flucloxacillin

83. A-60- year-old female with rheumatoid arthritis presents with splenomegaly. Her CBC shows: WBC 1500/mm³, platelets 60000/mm³, Hb 8 g/dl. No blast in peripheral blood film.

Which ONE of the following is most likely diagnosis? a- Malaria

- b- Lymphoma
- c- Polycythemia rubra vera
- d- Felty's syndrome***** e- Gaucher's disease.

84. A patient with mild congestive heart failure is treated with high-dose furosemide and diureses 25 pounds of fluid. A complete blood count (CBC) taken before the diuresis shows an RBC count of 4 million/mm³; a CBC taken after diuresis shows a RBC count of 7 million/mm³. Which of the ONE of the following is the most likely explanation?

- a- Cyanotic heart disease
- b- Increased erythropoietin
- c- Polycythemia vera
- d- Relative polycythemia*****????????????????/ e- Renal cell carcinoma

85. ONE of the following is most likely diagnosis for patient with thyroid function test showing elevated serum T4 and low radioactive iodine uptake.

- a- Grave's disease.
- b- Hashimoto's thyroiditis.
- c- subacute thyroiditis.***** d- non-toxic goiter.
- e- pregnancy.

86. Blood stored in a blood bank tends, with time, to become relatively depleted of 2,3-diphosphoglycerate. What effect does this have on the hemoglobin-oxygen dissociation curve?

- a- Shifts the curve to the left, so that the hemoglobin has a decreased oxygen affinity

- b- Shifts the curve to the left, so that the hemoglobin has an increased oxygen affinity
- c- Shifts the curve to the right, so that the hemoglobin has a decreased oxygen affinity
- d- Shifts the curve to the right, so that the hemoglobin has an increased oxygen affinity
- e- Does not change the dissociation curve

87. A-25-year woman who takes oral contraceptive pills, recently developed intermittent left sided headache with photophobia, vomiting. They occur about once a month and last 24-36 hours.

ONE of the following is most likely diagnosis. a- tension headache

b- temporal arteritis

c- trigeminal neuralgia

d- migraine***** e- Cluster headache.

88. In anaphylactic shock, ONE of the following drugs should be given FIRST. a- intramuscular

epinephrine*****

b- oral prednisolone

c- oral antihistamine

d- intramuscular antihistamine e- intravenous atropine.

89. All the following are true regarding the ANA(Antinuclear antibody) test Except. a- it is the mainstay test in SLE

b- there are several techniques for making this test.

c- it is highly specific test for SLE.***** d- it may be positive in normal individuals.

e- it is highly sensitive in SLE.

90. All the following are causes of high ESR Except. a- Anemia

b- polycythemia rubra vera*****

c- multiple myeloma d- giant cell arteritis e- tuberculosis.

91. An elderly man on treatment for irregular heart rate develop ankle oedema for which he is given a new drug. 2 weeks later he develops complete heart block, nausea and complains of seeing " yellow".

ONE of the following drug combination is most likely the cause for above complaints. a- theophylline and erythromycin.

b- Propranolol with verapamil

c- Amiodarone with captopril

d- Digoxin with frusemide (lasix)***** e- ACE inhibitor and atenolol.

92. A 52-year-old man presents to his physician after a community health screening test reveals a fasting glucose of 170 mg/dL. Physical examination is remarkable for bronze skin pigmentation, hepatomegaly, splenomegaly, and limitation of motion in the second and third metacarpophalangeal joints of both hands. The man has no known history of hemolytic anemia, and takes daily multivitamins without minerals.

Which ONE of the following pigments is most likely present in the man's liver?

a- Bilirubin b- Carotene

c- Ferritin ***** d- Lipofuscin

e- Melanin

93. A 45-year-old homeless man has a chronic cough, a cavitory lesion of the lung, and is sputum positive for

acid-fast bacilli. Which ONE of the following is the principle form of defense by which the patient's body fights this infection?

a- Antibody-mediated phagocytosis

b- Cell-mediated immunity***** c- IgA-mediated hypersensitivity

d- IgE-mediated hypersensitivity e- Neutrophil ingestion of bacteria

94. A 54-year-old male with acute lymphocytic leukemia develops a blast crisis. He is treated with intensive systemic chemotherapy. Following treatment, the patient will bear increased risk for the development of ONE of the following.

- a- bile pigment gallstones
- b- cholesterol gallstones
- c- cystine kidney stones
- d- struvite kidney stones
- e- uric acid kidney stones *****

95. A 30-year-old pregnant woman complains to her physician of feeling very tired during her pregnancy. A complete blood count with differential reveals a Hg 10 g/dl, with hypersegmented neutrophils and large red cells. Deficiency of which ONE of the following would be most likely to produce these findings?

- a- Ascorbic acid
- b- Calcium
- c- Copper
- d- Folate *****
- e- Iron

96. A 26-year-old man presents to his physician with a chronic cough. The man is a smoker, and states that he also gets frequent headaches and aches in his legs when he exercises. Chest x-ray demonstrates notching of his ribs.

Which ONE of the following undiagnosed congenital defects may be responsible for these findings?

- a- Coarctation of the aorta *****
- b- Eisenmenger's syndrome
- c- Tetralogy of Fallot
- d- Transposition of great vessels
- e- Ventricular septal defect

97. All the following statements regarding the uric acid are true Except.

- a- two third of the body uric acid pool is dietary in origin. *****
- b- two third is from endogenous purine metabolism.
- d- normal serum uric acid level does not exclude acute gouty arthritis.
- e- there are variation in normal values between male and female.

98. A 42-year-old female presents with a recent onset of fatigue, malaise, constipation, and a 12-pound weight gain. On examination, her thyroid is firm and enlarged. What ONE laboratory test is most likely to confirm the expected diagnosis?

- a- Antithyroid antibodies
- b- Serum thyroid-stimulating hormone (TSH) measurement *****
- c- Serum thyroxine (T4) measurement
- d- Serum triiodothyronine (T3) measurement
- e- T3 resin uptake

99. 5 mL of synovial fluid is aspirated from an inflamed knee joint. The fluid contains Needle-shaped, strongly negatively birefringent crystals. These crystals most likely to have ONE of the following compositions?

- a- Basic calcium phosphate
- b- Calcium oxalate
- c- Calcium pyrophosphate dihydrate
- d- Cholesterol
- e- Monosodium urate *****

100. ONE of the following intravenous fluids is colloid. a- 0.9% sodium chloride intravenous infusion
b- Ringer's solution
c- Ringer's lactate solution
d- Dextran 40 solution***** e- 5% glucose intravenous infusion.

Part 4

1. 30 year old male has IDDM for the past 15 years , now presenting with lower limb edema . Cr 2.0 mg/dl , urea 70 mg/dl . 24 hour urine collection 4.0 gm/24 hrs

All the following have a role in the progression of his renal disease except :

- a) Degree of Mesangial expansion on kidney biopsy
- b) Decrease in intraglomerular pressure**
- c) Duration since onset of DM
- d) Amount of proteinuria
- e) Quitting smoking

2. All the following are true about Focal Segmental Sclerosis (FSGS) except :

- a) Familial type has better prognosis**
- b) Progresses fast in Renal failure
- c) Collapsing type is associated with HIV
- d) Recurrence after transplant is high
- e) Main presentation is Nephrotic syndrome

3. 25 year old female presented to OPD with Bp 160/100 , she stated that her Bp was the same over the past 2 weeks .

All the following are first line investigations for this patient except :

- a) Urine analysis
- b) Serum K, Urea ,Cr
- c) Lipid profile
- d) Fasting blood sugar
- e) MRA for renal arteries**

4. 35 year old female previously healthy presented to ER c/o generalised weakness , Bp 110/80 . Irregular irregular pulse

Labs : K 2.5 meq / L , Cl 100 meq /L , Na 135 meq /L ABG : PH 7.48 , HCO₃ 30 meq/L , PCO₂ 40 mm Hg

All the following can be in the differential diagnosis of this case except :

- a) Bulimia
- b) Barter syndrome
- c) Hypercalcemia
- d) Primary Hyperaldosteronism**
- e) Diuretic abuse

5. 20 year old male came to OPD with c/o of passing red urine , which was preceded by URTI the previous morning .

Upon exam Bp 170/95 otherwise Negative :

All the following can present in the above disease except :

- a) More common in males
- b) May run in families
- c) Mesangial expansion by kidney biopsy
- d) Symptoms may recur with future URTI

e) Low complement

6. 25 year old female was admitted to hospital with referred to OPD due to incidental finding of the following labs & ABG :

PH 7.32 , HCO₃ 15

Cr 1.0 mg/dl , urea 35 meq/l , Na 135 meq /L , Cl 110 meq/l All the following may cause the above except :

- a) Acetazolamide treatment
- b) Fanconi syndrome
- c) **Treatment with Thiazide**
- d) Primary hyper parathyroid
- e) Diarrhea

7. 70 year old male presented to OPD with Bp 180/80 , he had similar readings over the last month otherwise asymptomatic . The best management for this patient is :

- a) Observation
- b) Start on Enalapril 5 mg Q day
- c) **Start on Nifedipine 20 mg + Thiazide 25 mg**
- d) Start on Furosemide 40 mg Q day
- e) Start on α Methyl Dopa 250 mg 1 x 3

8. 50 year old patient previously healthy presented with hemoptysis & hematuria
Labs : Cr 3.0 mg/dl , Urea 70 mg/dl , PO₄ 5 mg/dl , Ca 9.2 mg/dl . Hb 13 .Kidney biopsy showed 55 % crescents with linear deposits on basement membrane by IF . The best management is :

- a) Prednisone 20 mg Q day
- b) Azathioprine 50 mg Q day + Cyclosporin 1mg/kg/day
- c) **Plasmapheresis + Methylprednisone IV + Cyclophosphamide PO**
- d) Prednisone 30 mg Q day alternating with Chlorambucil
- e) Tacrolimus 1 mg 1x2

9. 40 year old male know to have Nephrotic syndrome for 15 years , now presenting with Cr 8.0 mg/dl , Urea 100 mg/dl , All the following are indications to start this patient on dialysis except :

- a) Peripheral Neuropathy
- b) **Anemia**
- c) Pericarditis
- d) Low albumin
- e) Bleeding tendency

10. All the following are true about Diabetic Nephropathy except :

- a) More likely to occur if patient ha siblings with Nephropathy
- b) More severe in black
- c) Occurs within 5 years in I DDM
- d) **It needs 15 years to progress into ESRD after start of overt proteinurea**
- e) Mostly preceded by Diabetic Retinopathy

11. 60 year old male known to have Diabetes for 10 years and is on Enalapril 10 mg 1x2 , presented to ER because all his peripheral extremities became paralised , Labs K 8.0 meq /L , Cr 1.0 mg/dl. Which of the following should be used first in the management of this patient :

- a) NAHCO3 Iv
- b) Ventolin nebuliser
- c) Glucose + insulin Iv
- d) K exalate (Na polysterene Sulfonate)
- e) **Ca gluconate Iv**

12. 25 year old male presented c/o of polyurea and weakness , Bp 110/70 , Labs : K 3.0 meq/l , PH 7.46 , HCO3 32 . All the following could be part of the dfferential of the above case except :

- a) Barter Syndrome
- b) Furosemide abuse
- c) Hypercalcemia
- d) **Excessive Licorice ingestion**
- e) Gittleman syndrome

13. All the following are true for a Diabetic with ESRD except

- a) Oral hypoglycaemic agents should be stopped
- b) First year post transplant survival is the same as in the general population
- c) More prone to hypotension during HD than other patients
- d) **They have higher Insulin requirements**
- e) PD is associated with increase in Triglycerides level

14. A 40 year old female known to have Membranous GN came to OPD with 24 hour protein 4 gm/24 hours , Cr 1.0 mg/dl , Urea 40 mg/dl . Her Bp 160/100 , she was started on Enalapril 20 mg 1x1 . The desirable Bp reading in such a lady should be :

- a) 140/90
- b) 130/85
- c) **120/75**
- d) 130/80
- e) 135/85

15. 20 year old male has a LRD kidney transplant 2 years ago , he is not known to be Diabetic nor Hypertensive . His medications are Tacrolimus 3 mg 1x2 , prednisone 5mg 1x2 , MMF 1 gm 1x2, Labs : FBS 400 mg/dl , Cr 1.0 mg/dl , Urea 35 mg/dl , Tacrolimus level 12 . The next step in managing his Diabetes other than start him on treatment and re checking his sugar level is :

- a) Stop Prednisone
- b) Decrease MMF to 500 mg 1x2
- c) Stop Tacrolimus
- d) Stop MMF , and increase Tacrolimus
- e) **Decrease Tacrolimus to 2 mg 1x2**

16. Each of the glomerular lesions listed below can cause Nephrotic syndrome . Which of them may be found in all the following conditions : non – Hodgkins lymphoma , hepatitis B, hepatitis C , and infective endocarditis ?

- a) Focal and segmental glomerulosclerosis
- b) Minimal change disease
- c) Membranous nephropathy
- d) **Type I membranoproliferative glomerulonephritis (with subendothelial deposits)**
- e) Type II membranoproliferative glomerulonephritis (dense deposit disease)

17. 83 year old male who has DM , CHF,CRI is admitted to hospital with volume overload & Cr 4.0 mg/dl (baseline 2.3 mg/dl) . He was treated by Iv diuretics , post voiding residual was 250 ml after foleys catheter was inserted . He was discharged 2 days later with Cr 3.0 mg/dl . One week lter he came to OPD , Cr is 3.5 mg/dl , ultrasound shows mild bilateral hydronephrosis . Which of the following would best predict the effect of the patient bladder outlet problem on kidney function :

- a) Serum PSA
- b) Serum Cr after several days with foleys catheter
- c) Kidney size on U/S
- d) Retrograde urography
- e) Renal Scan

18. 49 year old female is evaluated in ER after being found lying in the street in a semiconscious state , she is known to have hypertension and a history of seizures. Lab : BUN 79 mg/dl , Cr 8.7 mg/dl , Na 138 meq/l , K 4.2 meq/l , Cl 60 meq/l , HO3 54 meq/l . ABG PH 7.43 , PCO2 85 mmHg. Which of the following Acid Base disorder is most compatible with these lab findings

- a) Metabolic Acidosis and Metabolic Alkalosis
- b) Metabolic Acidosis and Respiratory Acidosis
- c) **Metabolic Acidosis and Metabolic Alkalosis and Respiratory Acidosis**
- d) Metabolic Alkalosis and Respiratory Acidosis
- e) Metabolic Acidosis

Part 5

1. Which one of the following arterial blood gas sets on room air is compatible with completely compensated metabolic acidosis?

	A	B	C	D	E
PH	7.44	7.38	7.60	7.36	7.56
PaCO ₂ mmHg	26	25	25	95	40
Bicarb. mEq	18	15	24	49	34
B. Excess	-4.0	-10	+4	+15	+11

The pH must be normal. Therefore, exclude "E" and "C". The correction will be respiratory in the form of "washed-out" CO₂ need to be low. Therefore, exclude D. Bicarbonate will be low. The remaining options are A & B.

2. Lung's failure type respiratory failure is characterized by which one o the followings :

- Normal chest X ray .
- Hypocapnia or normocapnia .**
- Diffusion is the main mechanism of hypoxia .
- Easy to correct hypoxia .
- PEEP is contraindicated .

Answer: B (Lung's type respiratory failure = type 1 respiratory failure).

Respiratory failure is a syndrome in which the respiratory system fails in one or both of its gas exchange functions: oxygenation and carbon dioxide elimination. In practice, it may be classified as either hypoxemic or hypercapnic.

Hypoxemic respiratory failure (type I) is characterized by an arterial oxygen tension (Pa O₂) lower than 60 mm Hg with a normal or low arterial carbon dioxide tension (Pa CO₂). This is the most common form of respiratory failure, and it can be associated with virtually all acute diseases of the lung, which generally involve fluid filling or collapse of alveolar units. Some examples of type I respiratory failure are cardiogenic or noncardiogenic pulmonary edema, [pneumonia](#), and pulmonary hemorrhage.

Hypercapnic respiratory failure (type II) is characterized by a PaCO₂ higher than 50 mm Hg. Hypoxemia is common in patients with hypercapnic respiratory failure who are breathing room air. The pH depends on the level of bicarbonate, which, in turn, is dependent on the duration of hypercapnia. Common etiologies include

drug overdose, neuromuscular disease, chest wall abnormalities, and severe airway disorders (eg, asthma and [chronic obstructive pulmonary disease](#) [COPD]).

Source: Medscape, <http://emedicine.medscape.com/article/167981-overview>

3. All of the followings can be caused by sarcoidosis EXCEPT :

- a. Stridor .
- b. Wheezes .
- c. Heart block .
- d. Facial nerve weakness
- e. Hypercalcemia and Hypocalciuria .

4. In patients with idiopathic pulmonary fibrosis (usual interstitial pneumonia) all of the followings are expected patho physiological changes EXCEPT :

- a. Low DLCO .
- b. **Decreased FEV1/FVC .**
- c. Severe O2 desaturation on exercise.
- d. Reduced vital capacity and total lung capacity .
- e. Increased pulmonary artery pressure

Answer: B (increased FEV1/FVC ratio).

5. All of the followings may improve obstructive sleep apnea EXCEPT:

- a. Dental extraction .
- b. Weight Reduction .
- c. Decrease alcohol consumption .
- d. Nasal CPAP
- e. Tracheostomy

6. All of the following statement regarding lung cancer are true EXCEPT :

- a. **Small cell lung carcinoma metastasis late in the course of the disease**
- b. Adenocarcinoma usually is a peripheral lung tumor .
- c. Adenocarcinoma in some cases is difficult to be differentiated from mesothelioma .
- d. Thromboembolic disease can be the first manifestation of the disease.
- e. Surgery can be curative for early diagnosed cases .

Answer: "A. Compared to non-small cell lung cancer, small cell lung cancer is just bad disease. The tumor grows fast and metastasizes early. Small cell is more often associated with paraneoplastic syndromes (e.g., Eaton-Lambert) and ectopic hormonal syndromes (e.g., SIADH).

7. All of the followings are useful for the assessment of the severity of an attack of bronchial asthma, EXCEPT:

- a. Spirometry .
- b. Methacholine test**
- c. ABG (arterial blood gases)
- d. Peak expiratory flow rate
- e. Physical examination.

Answer: B. Methacholine tes: methacholine challenge test: a test that involves the inhalation of increasing concentrations of methacholine, a potent bronchoconstrictor, in patients with possible bronchial hyperreactivity; usually performed when a diagnosis of asthma or bronchospastic lung disease is not clinically obvious. Source: Stedman's.

8. Which one of the following pulmonary function values indicates airflow limitation

- a. FEV1 of 60% of predicted .
- b. FVC of 60% of predicted .
- c. FEV1/FVC of 60% of predicted .**
- d. DLCO of 60% of predicted.
- e. Residual volume of 60% of predicted.

Answer: C. FEV1/FVC of 60%. Total lung capacity (TLC) is used to assess interstitial lung disease. Expiratory flow rate (FEV1/FVC is used to assess obstructive lung disease. Airway obstruction is diagnosed when the FEV1/FVC is <0.7 (70%). (Source: MedStudy Pulmonology 2013, p. 6)

9. Wide alveolar-arterial Po₂ (PA-a O₂) gradient can be increased in all of the following conditions EXCEPT:

- a. Morphine overdose .
- b. Severe pneumonia .
- c. Acute Bronchial Asthma .
- d. Acute Pulmonary edema .
- e. ARDS (acute respiratory distress syndrome)

Answer: In morphine overdose ☒ Hypoventilation ☒ No washout of alveolar CO₂ and replacement with new O₂

☒ Both arterial and alveolar O₂ are decreased. Therefore, the PAa O₂ gradient is decreased.

10. Atopic bronchial asthma is characterized by all of the followings EXCEPT:

- a. Positive family history .
- b. Positive immediate reaction to skin prik test to allergens.
- c. Elevated IgE level .
- d. Affects patients after age of 40.**
- e. Elevated serum eosinophils count.

Answer: D. Onset of asthma early in life.

11. The main mechanism of dyspnea is

- a. Hypercapnia.**
- b. Alkalosis.
- c. Increased work of breathing.
- d. Increased deoxygenated hemoglobin.
- e. Hypoxia .

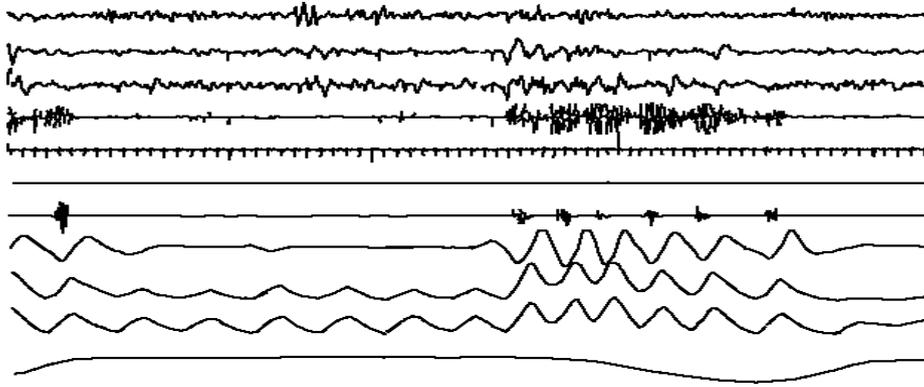
Answer: A? Hypercapnia ☒ metabolic acidosis?. For hypoxia and deoxygenated hemoglobin, it is true that they cause dyspnea. But in metabolic acidosis, for example, there is no hypoxia. Nonetheless, there is “dyspnea”.

12. All of the followings are true combination between a risk factor and pathogens causing pneumonia EXCEPT :

- a. Alcoholism and klebsella pneumonia
- b. Old age and mycoplasma pneumonia**
- c. Cigarette smoking and H .influenza
- d. Mechanical ventilation and pseudomonal pneumonia.
- e. Abnormal level of consciousness and anaerobic bacteria

Answer: B (Mycoplasma ☐ Young, otherwise healthy patients).

13. This is atypical part of 8 hours polysomnography for a 45 year old male patient



What is the diagnosis of this patient?

- a. Narcolepsy.
- b. Central apnea
- c. Obstructive sleep apnea.
- d. Mixed apnea .
- e. Hypopnea

Answer: I don't know and I don't want to know! Most probably, this is not required from us! Medscape article about polysomnography: <http://emedicine.medscape.com/article/1188764-overview#showall>

Part 6

1. All of the following statements regarding acute lower limb ischemia are true except:

- A) Acute lower limb ischemia of thrombotic origin generally has a long history of intermittent claudication
- B) In cases of thrombosis, the embolic source of acute lower limb ischemia is generally present
- C) Treatment of acute lower limb ischemia of embolic origin is embolectomy and anticoagulation
- D) Arteries in acute lower limb ischemia of embolic origin are soft to tender
- E) In acute lower limb ischemia of embolic origin , contralateral pulses are generally present

2. All of the following regarding mediastinal masses are true except:

- A) The most common anterior mediastinal mass is a thymic derivative
- B) The most common posterior mediastinal mass is a neurogenic tumor

- C) The most common middle mediastinal mass is a bronchogenic cyst
- D) The majority of mediastinal masses are present in the pediatric population.
- E) Most mediastinal masses are benign

3) All of the following regarding thymoma are true except:

- A) It is the most common neoplasm of the anterosuperior mediastinum
- B) It is the second most common mediastinal mass
- C) patient with thymoma are usually symptomatic at presentation
- D) Myasthenia is the most common symptom associated with thymoma
- E) Thymoma is frequent in the first two decades of life.

4) All of the following regarding mediastinal masses(MM) are true except:

- A) Patient with MM are generally symptom- free
- B) The most common clinical feature of MM is fever.
- C) Asymptomatic MM are generally regarded as benign
- D) Children with MM are more symptomatic than adults
- E) MM of the anterior mediastinal are most likely to cause symptoms

5) The most common clinical manifestation of patients with hemodynamically significant aortoiliac occlusive disease is:

- A) Claudication.
- B) Sexual dysfunction
- C) Absent femoral pulses
- D) Limb threatening ischemia
- E) Intestinal ischemia

6) Screening for Abdominal aortic aneurysm is usually done by:

- A) Computed tomography
- B) Angiography
- C) Ultrasonography.
- D) Magnetic resonance imaging
- E) Serial abdominal X-ray

7) Which of the following is regarded as the most important sign for evaluating the degree of lower limb ischemia?

- A) Pulseless
- B) Pallor
- C) Paralysis.
- D) Severe pain
- E) Poikilthermia (coldness)

8) Popliteal artery aneurysm is:

- A) The rarest peripheral arterial aneurysm
- B) Rarely bilateral
- C) Occurring predominantly in males.
- D) Generally diagnosed before the stage of complications
- E) Treated once it is diagnosed/

9) Which of the following is not regarded as risk factor for development of peripheral arterial atherosclerosis?

- A) Female sex.
- B) Advanced age
- C) Hypertension
- D) Tobacco use
- E) Diabetes mellitus

10) Which of the following is the most frequently reported immediate complication of subclavian vein catheterization?

- A) Pneumothorax. B) Hemothorax
- C) Air embolism
- D) Vessel laceration
- E) Atrial Fibrillation

11) Which of the following regarding congenital anterior chest wall deformity is true?

- A) Pectus carinatum is the most common type
- B) Its etiology is well established
- C) A familial tendency is rare
- D) Cardiopulmonary derangement constitutes its main operative indication
- E) Its repair is recommended around the preschool age.

12) All of the following are accepted treatment options for empyema except:

- A) Thoracocentesis
- B) Closed tube thoracostomy
- C) Thoracotomy + decortication
- D) Thoracotomy + lung resection.
- E) Open drainage + rib resection

13) Which of the following is the most common clinical manifestation of major pulmonary embolism?

- A) Tachypnea.
- B) Tachycardia
- C) Pleural pain
- D) Cough
- E) Rales

14) A 65-year diabetic and hypertensive patient is complaining of symptomatic aorto-iliac occlusive disease. Which of the following therapeutic modality is not applicable on him?

- A) Aortofemoral bypass
- B) Aortoiliac endarterectomy
- C) Extra anatomic by pass
- D) Angioplasty/stenting
- E) Lumbar sympathectomy.

15) All of the following regarding varicose veins(VV) are true except:

- A) Varicose veins are the most common vascular disorders affecting the human being
- B) Leg paraesthesia is the most common late post operative complication.
- C) The majority of patients with varicose veins are treated conservatively
- D) Large thigh VV should be treated surgically
- E) Varicose veins with I sapheno-femoral incompetence should be treated with sclerotherapy.

16) All of the following are accepted surgical indication for patients with lung abscess except;

- A) Failed medical treatment
- B) Serious hemorrhage
- C) Suspicion of cancer
- D) Unsuccessful drainage
- E) An abscess of 3 cm diameter.

18) The total lung capacity is:

- A) 2 liters
- B) 3 liters
- C) 4 liters
- D) 5 liters
- E) 6 liters.

19) All of the following regarding pneumothorax are true except:

- A) Expiratory chest radiograph is not necessary for the routine diagnosis of pneumothorax
- B) A patient with normal PA radiograph, alateral chest or lateral decubitus radiograph should be performed if clinical suspicion of pneumothorax is high
- C) CT scanning is not recommended when differentiating a pneumothorax from complex bullous lung disease.
- D) The clinical history is not a reliable indicator of pneumothorax
- E) On a plain chest radiograph, a surgical emphysema may obscure simple pneumothorax

19) All of the following regarding intercostals tube drainage for pneumothorax are true except:

- A) It is done in cases of unsuccessful simple aspiration or catheter aspiration drainage
- B) It is especially recommended in secondary spontaneous pneumothorax
- C) A non-bubbling chest tube should not usually be clamped
- D) Bubbling chest tube should never be clamped
- f) A patient with a non-bubbling and clamped chest tube for pneumothorax can leave the ward environment.

20) All of the following regarding chest drain suction are true except:

- A) Suction to an intercostal tube should not be applied directly after tube insertion
- B) Suction to an intercostal tube is recommended in cases of lung failure to re-expand
- C) When applying suction, high volume, low pressure (-10 to -20 cm H₂O) suction systems are recommended
- D) Suction to an intercostal tube should can be applied in cases of persistent air leak
- E) Patients requiring suction can be managed on outpatient basis.

21) All of the following regarding spontaneous pneumothorax are absolute indications for operative interventions except:

- A) Second ipsilateral pneumothorax
- B) First contra lateral pneumothorax
- C) Bilateral pneumothoraces
- D) First ipsilateral of pneumothorax in individuals living in remote area.
- E) Persistent air leak (>7days)

22) Which of the following is the least cause of iatrogenic pneumothorax?

- A) Transthoracic needle aspiration
- B) Subclavian vessel puncture
- C) Thoracocentesis
- D) Pleural biopsy
- E) Intercostal nerve block.

23) All of the following are causes of exudative pleural effusion except:

- A) Malignancy
- B) Trauma
- C) Collagen vascular disease
- D) Infection
- E) Congestive heart failure.

37) The essential factor in the pathogenesis of aortic aneurysm is damage:

- A) To the intimal layer
- B) To the medial layer.
- C) To the adventitial layer
- D) To all layers
- E) Due to atherosclerosis

Part 7

1) 35 year old man presented to ER after an episode of Grand mal seizure and by exam he was afebrile , Bp 130/95 and confused .

Labs showed : Cr 1.0 mg/dl , BUN 12mg/dl , Na 140 meq/L , K 4.8 meq /L , Cl 100 meq/L , HCO₃ 12 meq/L . ABG : PH 7.25 , PCO₂ 28 mmHg , HCO₃ 12 meq/L .

Which of the following is the most appropriate initial treatment for the Metabolic Acidosis : **Observation and repeat ABG in 2 hours**

NaHCO₃ 2 ampoules (100 meq) by Iv push

1 L of 5 % dextrose in H₂O & HCO₃ 3 ampoules (150 meq) infused over 3 hours
Hemodialysis Fomepizole

2) All the following affect short term survival in kidney transplant except :

Delayed Allograft function HLA antibodies

Acute rejection

Type of Donor kidney Donor illness

3) 25 year old man was found to have microscopic hematuria by chance . Urine analysis showed many RBC /HPF, no RBC casts , no Dysmorphic RBC

IVP showed Medullary Spongy Kidney , but no stones

The most appropriate counseling for this patient includes which of the following :

Advise him that this disorder is likely to progress to CRF over 10-20 years

Advise him that this is a benign finding , there may be a risk for nephrolithiasis but it never progresses to Renal failure

Advise him to have his children undergo genetic testing and get treatment early Advise him that ACE inhibitor can modify course of disease

Advise him that he should be on daily Trimethoprim –Sulfa forever

4) All the following are mechanism – drug induced Hyperkalemia except :

Trimethoprim inhibits Na channels Cyclosporin and Cl shunting

Heparin decreases Aldosterone level

Digoxin inhibits K-ATP ase

NSAID blocks PG stimulated Renin secretion

5) 35 year old female is evaluated because of an elevated Bp 160/105 for the past 2-3 months . Her mother has hypertension and kidney disease , and a maternal aunt is now on hemodialysis

Labs : Cr 0.8 mg/dl , Na 140 meq/ L , K 5.0 meq /L , Cl 102 meq / L , HCO₃ 25 MEQ / l , Urine Analysis is negative .Which of the following is most likely to provide information regarding cause of her hypertension .

Captopril Renal Scan

24 hour urine for Vanillyl Mandelic Acid

Renal U/S

Plasma Renin activity & aldosterone level Plasma PTH

6) All the following are Renal changes expected in normal pregnancy except :

Dilation of pelvicaliceal system

Serum HCO₃ is 4-5 mmol/L higher than normal

GFR increase by 35-50 %

Serum osmolality decreases by 10 mosmol/L Renal length increases by 1 cm on U/S

7) 50 year old man has history of recurrent kidney stones which were Ca containing stones . All of the following are risk factors for formation of these stones except :

Hypercalciuria Hyperoxaluria Low urine volume **Hypercitrauria** Hyperuricosuria

8) All the following can be clinical & lab manifestations of hypokalemia except :

Nephrogenic DI Tubular vacuolization Rhabdomyolysis

Decreased Amoniogenesis Tetany

9) According to National kidney foundation guidelines . All the following are acceptable target PTH levels in CRF as per stage except :

Stage I , PTH 10-65 pg /ml **Stage II 25-50 pg/ml** Stage III 35 -70 pg/ml Stage IV 70-110 pg/ml Stage V
150-300 pg/ml

10) All the following diuretic site of action combinations are true except : **Indapamide is a Na channel blocker in CD**

Ethacrynic acid blocks NaK₂CL in TALH Acetazolamide inhibits CA in PT

Spironolactone inhibit Aldosterone in Principal cell Mannitol act on both PT & TALH

1. Upper GI bleeding secondary to Dieulafoy is characterized by all of the following except:
 - A. Presents as massive and recurrent bleeding
 - B. Extramural artery present in the Submucosa.
 - C. Most commonly in the gastric fundus
 - D. Easily diagnosed and treated by endoscopy**
 - E. High mortality

2. One of the following causes of portal hypertension is caused by Presinusoidal intrahepatic pathology:
 - A. Veno-occlusive disease
 - B. Schistosomiasis**
 - C. Viral hepatitis
 - D. Alcohol Hepatitis
 - E. Congestive heart failure

3. All of the following are subclinical presentations of Celiac disease except:
 - A. Mood changes
 - B. Iron deficiency
 - C. B12 deficiency**
 - D. Unexplained elevation of liver enzymes
 - E. Recurrent abdominal pain

4. All of the following factors are associated with rapid progression of chronic hepatitis C to cirrhosis except:
 - A. Acquiring the infection at older age
 - B. Female sex**
 - C. Alcohol use
 - D. HIV Co-infection
 - E. HBV Co-infection

5. The most common complication after Endoscopic retrograde cholangiopancreatography (ERCP) is:
 - A. Perforation
 - B. Pancreatitis**
 - C. Cholangitis
 - D. Bleeding
 - E. Sepsis

6. All of the following regarding Vibrio Cholera except:
 - A. Most vibrio cholera infections are Asymptomatic.

- B. Antibiotic therapy is effective in decreasing mortality.**
C. Transmission by Contaminated Water and Food and very rarely by person-to-person transmission.
D. Requires large inoculum to get the infection
E. "Rice water" diarrhea is characteristic feature.
7. All of the following are risk factors for Squamous cell carcinoma of the esophagus except:
A. Zinc Deficiency
B. Low serum Selenium
C. Infection with Human Papilloma virus
D.
E. Chronic Gastroesophageal reflux disease
F. Alcoholism
8. All of the following are accepted initial management strategies in patients with upper GI bleeding except:
A. Somatostatin
B. Bleeding scan
C. Esophagogastrodeudeoscopy EGD
D. Acid suppressive medication
E. Gastric Lavage
9. Wilson's disease should be considered in all of the following medical scenarios except:
A. Abnormal liver enzymes and non-immune hemolytic anemia
B. Exaggerated high bilirubin level and depressed serum alkaline phosphatase
C. Decrease serum ceruloplasmin
D. Elderly patients with neuropsychiatric problem
E. Fulminant liver failure with low uric acid
10. All of the following medications are being used for Non Alcoholsteatohepatitis NASH except:
A. Betaine
B. Ursodeoxycholic acid
C. Ribavirin
D. Vitamin E
E. Beta- Carotene

11. In treatment of patients with Spontaneous Bacterial peritonitis, all of the following are true except:

- A. Initiate therapy when ascitic fluid Neutrophils > 250/mm²
- B. Majority sterile at presentation (culture negative)
- C. Gentamycin is the drug of choice**
- D. Treat for at least 5 days
- E. 30% of patients are Asymptomatic at presentation and during follow up

12. In regard to hepatitis C and pregnancy, all of the following is true except:

- A. The rate of transmission from mother to baby during delivery is around 6%.
- B. Transmission is higher in vaginal delivery comparing to cesarian.**
- C. Higher rate of transmission is seen if the mother is co-infected with HIV
- D. Severe hepatitis is rare in infected infants Breast-feeding is safe

13. All of the following medications are being used in chronic hepatitis B except:

- A. Lamivudine
- B. Ribavirin**
- C. Pegylated interferon
- D. Adefovir Dipivoxil
- E. Entecavir

14. All of the following micro organisms can cause infectious diarrhea with positive fecal leucocytes except:

- A. Shigella
- B. Yersinia
- C. Giardia**
- D. Campylobacter
- E. Salmonella

15. All of the following are protective from colo-rectal cancer except:

- A. Aspirin
- B. Folic Acid
- C. Fiber Diet
- D. Calcium
- E. Moderate use of Alcohol**

Q1. Esophageal lower esophageal sphincter contraction is caused by?

- a) protein
- b) fat
- c) peppermint
- d) alcohol

Q2. How much bile is produced by the liver each day? a) 100-300 ml

- b) 300-500 ml
- c) 500-1000ml
- d) 500-1200 ml

Q3. Which of the following is not a criteria for diagnosing Sphincter of Oddi Dysfunction

- a) CBD diameter more than 12 mm on USG
- b) Decrease in CBD pressure after infusion of Cholecystokinin
- c) Ampullary pressure more than 40 mm Hg
- d) Delayed emptying of contrast from CBD after ERCP

Q4. Most important investigation for Dysphagia in 60 year old is

- a) Upper GI Endoscopy
- b) CT Thorax
- c) Barium Swallow d) MRI

Q5. Maximum potassium concentration is seen in

- a) Saliva
- b) Gastric Secretion
- c) Jejunum
- d) Colon

Q6. In Bismuth Strasberg Classification cystic duct stump blow out is

- A) Type A
- B) Type B
- C) Type C
- D) Type D

Q7) All segments of liver drain into Right Hepatic Duct except?

- A) I
- B) III

C) V

D) VIII

Q8) Right Posterior segment duct drains into

a) VI VII

b) V VIII

c) III

d) IV

Q9) Double bubble sign is seen in

a) Pyloric stenosis

b) Esophageal atresia

c) Duodenal Atresia

d) Ileal atresia

Q10) In liver transplantation false is

A. HLA-I is present on endothelium

B. HLA-II present on biliary epithelium

C) chronic rejection syndrome is same as vanishing bile duct syndrome D).None

Q11. Most common site of carcinoma colo-rectum is

a) Hepatic Flexure

b) Sigmoid colon

c) Anal canal

d) Rectum

Q12. All are premalignant for carcinoma esophagus except

a) Diverticulum

b) Caustic burn

c) Mediastinal fibrosis

d) Human papilloma virus

Q13. Lipoma which undergo malignant degeneration is

a) Retroperitoneal

b) Subserosal

c) subfascial

d) Submucosal

Q14. Most important prognostic factor for carcinoma esophagus is

- a) cellular differentiation
- b) Depth of esophagus involvement
- c) length of esophagus involvement
- d) age of the patient

Q15 Contraindication to anterior resection of rectum is

- a) Age more than 60
- b) poorly differentiated carcinoma
- c) Sigmoid lymph nodes
- d) single hepatic metastasis

Q 16 Budd chiari Syndrome Most common cause is?

- a) Hepatic vein thrombosis due to haematological disorder
- b) Membranous IVC Obstruction
- c) Congestive Heart failure
- d) Venous occlusive Disease

Q17. In Transhiatal Vs Trans thoracic esophagectomy most common complication associated with THE is

- a) Pulmonary
- b) Anastomotic leak
- c) Bleeding
- d) Injury to recurrent laryngeal nerve

Q18) Dye used for early diagnosis of carcinoma while doing endoscopy

- a) toluidine blue
- b) Methylene Blue
- c) Gentian Violet
- d) Haematin and Eosin

Q19) Most Severe metabolic demand is seen in

- a) 50 % burns
- b) Peritonitis
- c) Multi organ failure
- d) Trauma

Q20. What is the most common complication after esophagectomy

- a) Arrhythmia
- b) Pulmonary Collapse and Consolidation
- c) Recurrent laryngeal nerve injury
- d) Massive bleeding

Q21 After liver resection earliest proliferation is of which kinds of liver cells occurs?

- a) Parenchymal
- b) Ductal
- c) Canalicular
- d) Non parenchymal

Q22. In Hepatocellular carcinoma true is

- a) Arterial bruit is seen in 80% cases
- b) 2/3rd of patients present with signs of liver disease
- c) 5% of patients present with haemoperitoneum
- d) none

Q23. Most valuable investigation for preoperative evaluation of extensive corrosive stricture is

- a) Endoscopic ultrasound
- b) Barium study
- c) CT Thorax
- d) Pharyngoscopy

Q24 Tumor Marker for Hepatocellular carcinoma is?

- a) alpha feto protein
- b) carbohydrate antigen
- c) alpha fucosidase
- d) HCG

Q25) In high risk population HCC (Hepatocellular carcinoma) is best detected by

- a) USG
- b) CT
- c) MRI
- d) x-ray

Q26 Which of the following is not true about TME (Total Mesorectal Excision)

- a) It improves survival
- b) It decreases local recurrence
- c) It is associated with with increased blood loss
- d) Associated with higher anastomotic leakage as compared to Low Anterior Resection
- e) Associated with pelvic sepsis

Q27. About Crohn's disease of colon false is

- a) Midline incision is used for surgery
- b) Perianal disease in 20% cases present with SI diseases
- c) Ileocaecal type is the most common
- d) Bypass is preferred over resection

Q28 False about Crohn's disease

- a) Perianal presentation can be there
- b) Predominant Rectal involvement
- c) Deep fissures and fistula is common
- d) Transmural involvement occurs

Q29 In Ulcerative Colitis false is

- a) Malignancy related to duration of disease not extent
- b) Malignancy more common on Right side
- c) Cancer is more infiltrative and with poor prognosis
- d) 30% malignancies associated with Dysplasia

Q30) In carcinoid tumor of small bowel false is

- a) Transmural location
- b) 65% arise in ileum and appendix
- c) Rectum is rare site

- d) Localised disease has 75% 5 year survival
- e) Symptoms are due to 5HT

Q31 What is not true regarding Siguira's procedure for Portal Hypertension

- a) Transesophageal variceal ligation
- b) Splenectomy
- c) Vagotomy
- d) Pyloroplasty

Q32. True about Hydatid cyst of liver is

- a) E. multilocularis is more common than E. Granulosus
- b) Extrahepatic 15% in lungs 2% in brain
- c) Adult worm infests herbivores
- d) Indirect Heamagglutination (IHA) is the most specific serological test

Q33. Peritoneo-Venous shunt is contraindicated in

- a) Uncorrectable coagulopathy
- b) Spontaneous bacterial peritonitis
- c) Hepatic encephalopathy
- d) All

Q34. False about cholecystectomy

- a) Open cholecystectomy CBD injury rate is 0.1-0.2%
- b) In Lap Cholecystectomy complication of CBD injury is double that of open
- c) Abnormal GB, CBD, Cystic artery in 1/3 cases
- d) Open cholecystectomy is the treatment of choice for cholelithiasis

Q35. Write True or false for the following statements for Extra Hepatic Biliary atresia a)More in premature babies

- b) Jaundice occurs after 1wk
- c) surgery should be done after 1year
- d) Most common operation is Kasai operation
- e) Most common indication for liver transplant in children
- f) only intrahepatic tree is involved
- g)

Q36. Which is not a type of anal margin tumors

- a) Basal cell carcinoma
- b) Epidermoid carcinoma
- c) Paget's disease
- d) Bowen's disease

Q37. False about the pelvic floor is

- a) Anorectal ring is formed by Puborectalis and ext sphincter
- b) Anorectal ring is 3cm above anal verge.
- c) Pelvic Floor is supplied by S2,3,4
- d) All are true

Q38 True about radiation proctitis is

- a) Sucralfate enema is very effective.
- b) Laser Ablation is effective in every case.
- c) Local Metronidazole is effective
- d) Resection and Anastomoses give best results.

Q39. Recurrence after resection for Ca rectum is related to all except

- a) Tumor Grade
- b) No. of lymph nodes
- c) Lateral Margin Involvement
- d) Inexperienced surgeon
- e) None of the above

Q40. Contraindication for resection of locally recurrent rectal cancer are all except

- a) Extrapelvic disease
- b) Sciatic pain
- c) Bilateral ureteric obstruction
- d) S1 or S2 nerve involvement
- e) Circumferential or extensive pelvic side wall involvement
- f) None

Q41. False about carcinoma pancreas is

- a) Smoking is a risk factor
- b) CA19-9 is a good tumor marker
- c) Laparoscopy is required for staging
- d) Pylorus Preserving Pancreoduodenectomy should not be done.

Q42. In cirrhosis mechanism of portal hypertension is all except

- a) fibrosis
- b) Regenerating nodules compress portal vein
- c) single blood supply of regenerating liver nodule
- d) Dual blood supply of regenerating liver nodule

Q43. In liver laceration if there is uncontrolled bleeding after pringles's maneuver what is the likely cause

- a) arterial bleeding

- b) capillary bleed
- c) hepatic vein bleed
- d) portal vein bleed

Q44. A 3cm non bleeding liver laceration, what is the optimal intraoperative management

- a) suture the laceration
- b) Mesh closure of the laceration
- c) Peritoneal Toileting and close abdomen
- d) Use a binding glue

Q45. Vein of segment I of liver drains into

- a) IVC
- b) Right Portal vein
- c) Left Portal vein
- d) Main portal vein

Q46. Mesothelioma of peritoneum is associated with exposure of which of the following

- a) Beryllium
- b) Asbestos
- c) Zinc
- d) Nickel

Q 47. The most common symptom of peritoneal mesothelioma is

- a) Abdominal pain
- b) Anorexia
- c) Nausea
- d) weight loss

Q48. Drug of choice in chemotherapy of mesothelioma is

- a) Mitomycin
- b) 5FU
- c) Cisplatin

Q 49. Colonic polyps are seen to regress with

- a) Azathioprine
- b) streptozocin
- c) Sulindac

Q 50) True about Caudate lobe Segment

- a) Caudate lobe is segment IV
- b) Caudate lobe has three parts

- c) Caudate lobe duct mainly drains into Right lobe duct
- d) Does not Hypertrophy in Budd Chiari syndrome

Q51). Ulcerative Colitis with malignancy

- a) has a better prognosis than Ca Colon
- b) Is related to disease activity
- c) is related to duration of ulcerative colitis
- d) Malignancy is more in ano rectal ulcerative colitis

Q52) In ulcerative colitis with toxic megacolon lowest recurrence is seen in

- a) complete proctocolectomy and brook's ileostomy
- b) Ileo rectal anastomose
- c) koch's pouch
- d) Ileo anal pull through procedure

Q53) All are premalignant except

- a) Turcot syndrome
- b) cowden syndrome
- c) Juvenile polyposis coli
- d) None

Q54) Colonic polyps are seen to regress with

- a) Azathioprine
 - b) streptozocin
 - c) Sulindac
- Q55) All are precancerous for carcinoma colon except
- a. crohn's disease
 - b. Bile acids
 - c. Fats
 - d. carotene

Q56. which of the following statements regarding arterial blood supply of the colon is incorrect

- a) Marginal artery of Drummond is a collateral vessel that connects SMA with IMA
- b) Arc of Riolon or meandering mesenteric artery connects proximal SMA with proximal IMA
- c) Right colic artery is the most constant branch of Ileo colic artery
- d) Splenic flexure is the area of watershed

Q57. which of the following about blood supply to the liver is incorrect a) Portal vein provides 75% of total blood flow

- b) Hepatic artery provides 75% of total blood flow
- c) Portal flow provides 50-70% of total oxygen deman

d) Increase in Hepatic artery flow is autoregulated and increase in hepatic artery flow decreases portal blood flow

Q58. which of the following regarding bile formation is false
a) Osmolality of bile is mainly by organic solutes
b) Major organic solutes are Bile acids, Bile pigments, cholesterol and phospholipids
c) Approximately 1500 ml bile is secreted per day
d) Bile flow has a linear relation with bile acid secretion

Q59) Which of the following statements regarding the quantitative tests is false
a) Aminopyrine breath test based on clearance by hepatic p450 depends on functional hepatic mass
b) Aminopyrine breath test is mainly used for prognosis in chronic liver disease but its not useful for subclinical hepatic dysfunction.
c) Lidocaine and MEGX have some value in transplant population
d) Indocyanine green has a role in predicting prognosis in cirrhosis patients undergoing resection
e) None of the above

Q60. Most common site for cholangiocarcinoma is

- a) Intrahepatic
- b) Hepatic duct bifurcation
- c) Lower End of CBD (Common Bile Duct)
- d) Lower 1/3rd of CBD

Part 9

1. A 4-month-old infant is noted to have a grade 4 holosystolic murmur that is harsh over the left parasternal border. Results of both the chest radiograph and ECG are normal, and the child is otherwise asymptomatic. The most likely cause of this murmur is

- A. large VSD with 3:1 shunt
- B. an ASD secundum defect
- C. a small VSD
- D. pulmonic stenosis
- E. pink tetralogy of Fallot

2. The initial treatment of choice for a symptomatic patient with isolated pulmonic stenosis is

- A. closed surgical blade valvotomy
- B. open surgical valvotomy
- C. balloon catheter valvuloplasty
- D. Blalock-Taussig shunt
- E. valve replacement

For the following question one or more of the answers is correct , select :

- A. if only 1,2,3 are correct.
- B. if if only 1,3 are correct
- C. only 2,4 are correct
- D. if only 4 is correct
- E. all are correct

3. Factors that are thought contribute to maintaining the patency of the ductus arteriosus are

1. increased pulmonary vesicular resistance secondary to hypoxia.
2. high arterial oxygen tension.
3. prostaglandin.
4. acetylcholine

4. All of the following are acyanotic child may have increased pulmonary marking on x- ray ,except:

- A. ASD
- B. VSD
- C. PDA
- D. Endocardial cushioning defect
- E. Pulmonary stenosis.

5. all are mechanisms of increase risk of infections in minimal lesion nephrotic syndrome , except:

- a.Loss of immunoglobulin b.Loss of Properdin factor B
- c.Decreased perfusion of the spleen d.Loss of opsonization factors e.leukopenia

6. Pneumocystis carinii pneumonia is caused by:

- a. protozoa
- b. rickettsia
- c. virus
- d. bacteria
- e. none of the above

7. Long term outcome in healthy children who survive staphylococcal pneumonia is usually:

- a. recurrent spontaneous pneumothorax
- b. chronic respiratory failure
- c. chronic lung abscess and empyema
- d. persistent pneumatoceles
- e. complete resolution

8. Over a period of a day a 4 month old infant developed tachypnea, chest recession, widespread wheezes, CXR showed hyperinflation. Which of the following is correct?

- a. viral studies would show rhinovirus in 25% of cases
- b. the baby has a chance of > 20% of becoming asthmatic later in life
- c. steroids will decrease the mortality rate
- d. you can assure the family that the critical period of his illness will not last >48hrs
- e. adrenaline nebulizer is the state of art in the treatment

9. ITP, one is correct:

- a. often follow a viral infection
- b. typically has chronic course
- c. is characteristically associated with moderate splenomegaly
- d. requires splenoectomy in more than 20 % of cases
- e. associated with decrease megakaryocytes on bone marrow exam

10. 11 month-old girl presents to your office with fever (39.c) for the last 2 days. 3 hrs ago she started to to have vomiting and decrease oral intake, she looked tired and ill. Her exam reveals no focus and moderate to severe dehydration. you suspect UTI

19. Her urine culture is positive at 24 hrs, the most likely organism , is:

- a. klebsiella
- b. E. coli
- c. staph. Aureus
- d. proteus
- e. enterococcus

11. After treating her infection, what investigation(s) needed?

- a. no test are needed
- b. renal U /S
- c. VCUG
- d. DTPA
- e. renal U /S & VCUG

12. an 4-year old boy presented with his mother with abnormal posturing of the hands, the mother stated that his hands turned into a claw shape, first time noticed by his teacher in the day care center for mental retarded kids. This is his photo you were surprised by his funny looking and laughing.



In your cardiac exam, you heard a systolic murmur, you conclude that he has at most:

- a. VSD
- b. subvalvular aortic stenosis
- c. supra-ventricular aortic stenosis
- d. ASD
- e. critical pulmonary stenosis with right sided aortic arch

Cardiology

Part 1 (top secret)

1. One of the following is the principle symptoms of heart disease :

- a- chest pain with deep inspiration
- b- nervousness
- c- chest pain on movement** ?xxx
- d- edema of the lower limbs
- e- pain in the right arms

2. The following diseases cause cardiac pain except :

- a- Angina
- b- MI
- c- Pericarditic pain
- d- Aortic pain
- e- Pectus excavatum** xxx

3. The best description of Angina is:

- a- pain in both hands
- b- pain in the back of the chest
- c- interscapular pain
- d- retrosternal heaviness** Xxx
- e- Sharp pain comes on movement or breathing

4. In Paroxysmal nocturnal dyspnoea one is true :

- a- dyspnoea on exertion
- b- comes early at night** xxx
- c- the patient is despenic at rest
- d- cough and frothy sputum is not present
- e- chest pain is a major symptom

5. In Palpitation all the following are true except :

- a- Is the sensation of the heart beating
- b- awareness of occasional irregularities
- c- missed beats
- d- cyanosis may be present xxx

6. Which one of the following is not a cause of sinus tachardia:

- a- Anemia
- b- Raised intracranial pressure #####
- c- Thyrotoxicosis
- d- Pheochromocytoma
- e- Nebulized salbutamol

7. Systolic murmur one of the following is true:

- a- Murmur occurs between S1 and S2 xxx
- b- Murmur occurs after S2
- c- Murmur occurs before S1
- d- Murmur occurs between S1 and S2 and after S2
- e- In aortic stenosis the murmur is not transmitted to the carotid artery

8. Diastolic Murmur are all true except:

- a- Occurs after the S2
- b- It is divided into an early mid and late diastolic murmur
- c- In aortic stenosis the murmur is mid diastolic xxx
- d- In aortic regurgitation the murmur is called early diastolic blow
- e- In atrial fibrillation and mitral stenosis the accentuation of presystolic murmur is maintained

9. All the following are occupational aspect of CV disease except :

- a- cold exposure xxx
- b- deep sea diving
- c- vibrating tools
- d- bus driver
- e- organic solvents

10. ECG signs of hyperkalemia may include all of the following except :

- a) Peaked T wave
- b) QRS widening
- c) Delta wave #####
- d) Prolonged P-R interval
- e) Sine wave

11. The murmur of patent ductus arteriosus is one of the following :

a-Pansystolic murmur b-Pandiatolic murmur

c-Systolic and diastolic xxx

d- mid diastolic with pre systolic accentuation . a- Austin Flint murmur.

12 .In the majority of individuals the Av-node supplied by:

a Left main stem artery

b Left anterior descending artery c Circumflex artery

d Right coronary artery ##### e Obtuse marginal artery

13 .Which one of the following is not a cause of sinus tachycardia:

a-Anemia

b-Raised intracranial pressure ##### c-Thyrotoxicosis

d-Phaeochromocytoma e-Nebulized salbutamol

Aortic stenosis in adults is most commonly a result of which of the following?

a-Bicuspid aortic valve disease #####

b-Hypertension

c-Dilated cardiomyopathy d-Cystic medial necrosis e-Hyperlipidemia

15. All the following are the symptoms of CV disease except:

a-Chest pain b-SOB

c-Palpitation d-Syncopy

e-Cough and expectoration xxx

16. In ASD the second heart sound is best described by the following :

a- Splitted and fixed during respiration xxx b-Splited and moves with respiration

c-Paradoxical splitting

d-decrease in the intensity of the second heart sound e-Increase in the intensity of the heart sound

17. Which of the following is LEAST likely to cause hemoptysis?

a-Tuberculosis

b-Acute bronchitis

c-Pulmonary embolism

d-Bronchogenic carcinoma e-Aortic stenosis #####

18. The leading cause of early death in patients with acute myocardial infarction is

a-Rupture of the myocardial wall b-Rupture of the septum

c-Rupture of the cordae tendinea leading to acute mitral regurgitation d-Ventricular arrhythmias ####

e-Ventricular aneurysm

19. The best description of Angina is:

a-pain in both hands

b-pain in the back of the chest c-inter-scapular pain

d-retrosternal heaviness xxx

d-Sharp pain comes on movement or breathing

20. The most common cause of death in hypertensive patients is:

a-CVA

b-Renal failure

c-Congestive heart failure

d-Myocardial infarction ##### e-Dissecting aortic aneurysm

21. All the following are found in left sided heart failure Except.

a- bilateral basal creptations b- third heart sound

c- pulsus alternans d- raised JVP xxx

e- pulmonary oedema

22. All the following may occur in cardiac tamponade Except.

a- raised jugular venous pressure with sharp rise and y descent.

b- Kussmaul's sign (rise JVP/ increased neck vein distension during inspiration) c- pulsus paradoxus

d- visible apex beat. xxx e- reduced cardiac output

23. ONE of the following B-Blockers is cardioselective and lipid soluble.

a- atenolol

b- propranolol

c- metoprolol xxx d- bisoprolol

e- carvedilol

24. In questioning the chest pain the best answer is:

a-Site of the chest pain

b-The character of the chest pain c- The precipitating condition

d-Relieving Factors e-All are true xxx

25. Clubbing of the fingers occurs in all the following except :

a-Cyanotic congenital heart disease b- Bronchial carcinoma

c- intrathoracic suppuration d- hyperlipidaemia xxx

e- hepatic cirrhosis

26. Diastolic murmurs occurs in all the following except:

a-mitral stenosis.

b-aortic stenosis xxx c-tricuspid stenosis

d-aortic regurgitation

e-pulmonary regurgitation.

27. Which of the following measures is least helpful in diagnosing a patient with suspected pulmonary embolism?

a-Coagulation profile ##### b-Spiral CT of the chest

c-Echocardiogram (ECHO) d-ECG(e-Arterial blood gases

28. What is an indication for IVC (Inferior vena cava) or venous filter:

- a- Inability to anticoagulate in a patient with upper extremity DVT due to a vein catheterization xxx
- b- Recurrent PE in a patient already on Warfarin with INR 1.5
- c- Bleeding diathesis in a patient with femur fracture
- d- A thrombus in the right ventricle

29. In conductive system of the heart muscle, all of the following are true, except:

- a- Conduction started in SA node. AV node, bundle of His, left and right bundle branch- Purkinje fibers.
- b- Left bundle branch is shorter than right bundle
- c- Right bundle supplies right ventricle and left bundle supplies left ventricle and septum
- d- Action potential in the ventricle is rapid and generated by rapid transmembrane K diffusion xxx

30. The following diseases cause cardiac pain except :

- a- Angina
- b- Myocardial infarct
- c- Pericarditic pain
- d- Aortic pain
- d- Pectus excavatum xxx

31. You are examining a 63-year old man. You hear a blowing diastolic murmur at the right upper sternal border. What is the probable diagnosis?

- a- Mitral stenosis
- b- Mitral regurgitation
- c- Aortic stenosis
- d- Aortic regurgitation #####
- e- Tricuspid regurgitation

32. In the majority of individuals the AV-node is supplied by:

- a- Left main stem artery
- b- Left anterior descending artery
- c- Circumflex artery
- d- Right coronary artery #####
- e- Obtuse marginal artery

33. All the following drugs reduce mortality in patient with congestive heart failure except:

- a- Angiotensin receptor blockers
- b- ACE inhibitors
- c- B blocker
- d- Loop diuretic #####
- e- Spironolactone

34. Venous thromboembolism prophylaxis with subcutaneous heparin should be given to all of the following patients, EXCEPT :

- A 60-year old woman undergoing total hip arthroplasty
- A 45-year old man undergoing hemicolectomy for colon cancer
- A 35-year old man mechanically ventilated

for severe pneumonia A 70-year old man admitted with thrombotic stroke in the ICU

A 21-year woman who had normal vaginal delivery #####

35. Which of the following is LEAST likely to be a side effect of amiodarone?

a-Hyperthyroidism

b-Pulmonary fibrosis c-Corneal deposits

d-Hypothyroidism

e-Gynecomastia #####

36. You are examining a 63-year old man. You hear a blowing diastolic murmur at the right upper sternal border. What is the probable diagnosis?

a-Mitral stenosis

b-Mitral regurgitation c-Aortic stenosis

d-Aortic regurgitation ##### e-Tricuspid regurgitation

37. all the following is true about heart failure except :-

a-patient should avoid high salt food b-ACEI can be used in treatment

c-sever anemia can causes heart failure

d-right side heart failure causes pulmonary edema xxx e-hyponatremia can occur

38. Which of the following drugs is most likely to cause prolonged QT interval :

a-Omeperazole b- Digoxin

c-Clathramycine ##### d-Diazepam

e- Morphine

39. All of the following are risk factors for coronary artery disease EXCEPT:

a Morbid obesity

b Diabetes mellitus

c Elevated HDL ##### d Elevated LDL

e Elevated homocysteine

40. Which one of the following ECG changes is most typical of hyper kalemia:

a-Peaked P wave

b-Presence of U wave c-Packed T wave ##### d-ST depression

e-Narrowed QRS complex

41. All of the following are recognized to precipitate heart failure EXCEPT

a-High dietary salt intake, such as mansaf b-Pneumonia

c-Non-steroidal anti-inflammatory drugs (NSAIDs) use d-Acute cardiac ischemia

e-Increased water intake #####

42. What is wrong about mitral stenosis :

a-Causes a pansystolic murmur xxx b-Causes a mid-diastolic murmur

c-Most cases are secondary to rheumatic fever. d-May lead to pulmonary congestion

43. a 50 year old was found to have a heart murmur. On examination his BP in the right arm is 160/100 and in the right leg 120/80. CXR showed rib notching in the upper ribs. What's the likely Diagnosis?

a-Coarctation of the aorta xxx b-Supravalvular aortic stenosis

44. Which of the following congenital heart diseases causes cyanosis?

a-TOF(Tetralogy of fallot) xxx b-VSD(ventricular septal defect)

45. All these drugs increase the survival in heart failure except

a-Digoxin

b- loop diuretics xxx c-ACE inhibitors

d-s pironolactone e-Beta blockers

46. What is the most common arrhythmia in Wolff-Parkinson-White syndrome?

a-atrial ectopics

b-Ventricular tachycardia

c-AV nodal re-entry tachycardia xxx d-Ventricular fibrillation

47. Which of the following is associated with ST elevation on the ECG?

a-Right ventricular hypertrophy b-Left ventricular hypertrophy c-Digoxin effect

d-Subendocardial infarction

e-Early in repolarization after angina attack xxx

48. Which of the following is not a minor Duke's criteria?

a-Fever

b-Osler nodules

c-Janeway lesions

d- **New valve regurgitation xxx** e-Myotic aneurysm

49. What is false about amiodarone?

a-can cause hypothyroidism b-can cause hyperthyroidism c-has a very long half-life

d-potentiates the effect of warfarin

e- **Causes irreversible eye lesions xxx**

50. Which of the following signs is associated with cardiac tamponade?

a-Pulsus alternans

b-Pulsus paradoxus xxx c-Pulsus bisferens

d-Pulsus esh ma beddak

51. Which of the following is not a contraindication to stress test?

a-acute pericarditis

b-Unstable angina

c-Uncontrolled hypertension

d- Patient underwent PCI and had a stent xxx e-Heart failure

part 2

1- In ASD the second heart sound is best described by the following:

a- Splitted and fixed during respiration b-Splitted and moves with respiration

c-Paradoxical splitting

d-decrease in the intensity of the second heart sound e-Increase in the intensity of the heart sound

2-Sytolic murmur one of the following is true:

a-Murmur occures between S1 and S2 b-Murmur occures after S2

c- Murmur occures before S1

d-Murmur occures between S! and S2 and after S2

e-In aortic stenosis the murmur is not transmitted to the carotid artery

3- Diastolic Murmur are all true except:

a-Occures after the S2

b-It is divided into an early mid and late diastolic murmur c-In aortic stenosis the murmur is mid diastolic

d- In aortic regurgitation the murmur is called early diastolic blow

e- In atrial fibrillation and mitral stenosis the accentuation of presystolic murmur is not maintained

4- Radiofemoral delay present in one of the following condition;

a- in Angina pectoris

b- **Coarctation of the aorta** c-Renal artery stenosis

d-Heart failure e-COPD

5- In hyperthyroidism Atrial fibrillation is best treated with :

A. Quinidine

B. Digitalis

C. Digitalis and quinidine

D. Pronesty

E. **Antithyroid drugs**

6- Patients with aortic stenosis frequently develop:

A. **Exertional dyspnea and angina**

B. Wide pulse pressure

C. Systemic embolization

D. Atrial fibrillation

E. Right ventricular hypertrophy

7-Edema, ascites , enlarged liver and venous pressure of 180mm. of saline suggest:

A. Laennec's cirrhosis

B. **Congestive failure**

C. Inferior vena caval obstruction

D. Acute glomerulonephritis

E. Cirrhosis of the liver

8- the causative organism in rheumatic

a. fever is A.staph aureus

B. B Haemolytic Streptococcus group A C streptococcus viridians

D; E coli E; virus

9- In pericarditis the chracterstic EKG changes ; A:T wave inversion

B; ST segent depression C Atrial fibrillation

D;ST segment elevation covex upwards

E; ST segment elevation with concave downwards

10-**IN idiopathic hypertrophic sub aortic stenosis (IHSS)** One is true

A; it is a type of dilated cardiomyopathy

B; AN important cause of sudden death in athletes C; Left ventricle is dilated

D; pulse examination is normal in character E: need nitrate for treatment

Answer: b

11) One of the following is not a cause of pericarditis :

a) TB

b) SLE

c) Lymphoma **d) COPD**

e) Uremia

12) In the management of DCM all are true except :

a) Salt and water restriction

b) ACE-inhibitors

c) Diuretics

d) Beta blockers

e) **Complete bed rest**

13) In hypertrophic CMP one statement is false :

a) Diagnosis is based on hypertrophied non-dilated left ventricle in the absence of another disease.

b) Small LV cavity , asymmetrical septal hypertrophy (ASH) and systolic anterior motion of the mitral valve leaflet (SAM) .

c) 50% of cases of familial hypertrophic cardiomyopathy is autosomal dominant **d) Pathophysiologically associated with impaired systolic function.**

e) Patients with HCM usually die because of SCD

Answer: D ☒ Impaired diastolic function ☒ Impaired filling of the left ventricle!

14) Pathophysiological abnormalities in heart failure include all of the following except :

a) Reduced myocyte shortening and wall motion

b) Sodium retention and circulatory congestion

c) **Systemic vasodilation that increase impedance of the LV ejection**

- d) Structural remodelling and dilation of the LV
- e) Renin-Angiotensin-Aldosterone activation

15) Signs of CHF include all of the following except :

- a) Jugular venous distention
- b) S3
- c) Inspiratory rales
- d) Displaced and sustained apical impulses
- e) Bradycardia

16) Systems responsible for BP regulation include all of the following except :

- a) Heart
- b) Blood vessels
- c) Kidney
- d) Baroreceptors in aortic arch and carotid sinuses
- e) Direct CNS control

17) Detrimental effects of HTN include all of the following except :

- a) LVH and diastolic dysfunction
- b) Thromboembolic stroke just thrombotic or hemorrhagic
- c) Sclerotic and markedly spastic retinal arteries
- d) Aortic dissection
- e) Acute renal failure

18) In renovascular hypertension the following statements are true except :

- a) Mechanism of hypertension is increased renin levels
- b) Etiology is fibromuscular dysplasia or atherosclerosis
- c) Onset < 30 years without family history or recent onset >55 years
- d) Treatment is usually by ACE-inhibitors if bilateral
- e) Recurrent pulmonary oedema is a clue for diagnosis

19) Major manifestations of acute rheumatic fever include all of the following except :

- a) Arthralgia)arthritis not arthralgia ..this is minor criteria (

- b) Subcutaneous nodules
- c) Carditis
- d) Chorea
- e) Erythema marginatum

20) In pulmonary hypertension the following statements are true except :

- a) Primary pulmonary hypertension likely to begin with spasm of the muscle layer of pulmonary arteries .
- b) Secondary pulmonary hypertension most probably results from disease that impedes flow of blood through lungs or that causes periods of low oxygen in blood .
- c) In some people the bone marrow responds to hypoxemia by red blood cell production (polycythemia)
- d) Signs and symptoms of right sided heart failure usually dominates the picture in core pulmonale
- e) **Medical treatment of pulmonary hypertension is usually effective**

RA :

- A) Hyper flexion of proximal interphalangeal (PIP) and hyper extension of distal interphalangeal (DIP).
- B) **Hyper extension of PIP and hyper flexion of DIP**
- C) Hyper extension of PIP and hyper extension of DIP.
- D) Subluxation of Metacarpophalangeal.
- E) Non of the above.

22) Which disorder is diagnosed by the presence of calcium pyrophosphate in synovial fluid:

- A) **Chondro calcinosis**
- B) Gouty arthritis.
- C) Psoriatic arthritis.
- D) Psoriatic arthritis.
- E) O.A

23) A patient present with B-Asthma mono neuritis multiplex-esoino phila. ANCA positive ; what is the most likely diagnosis :

- A) SLE.
- B) Wegner granulomatosis.
- C) Microscopic polyangiitis.
- D) Good pasture.
- E) **Currig-strass**

24) Which of the statements isn't true according to myositis: **A) Inclusion body myositis take a good prognosis.**

- B) Helio trope rash is highly specific for dermatomyositis.
- C) steroid is corner stone for treatment.
- D) Statin's can induced myositis.
- E) Subcutaneous calcification a frequent manifestation in juvenile dermatomyositis.

25) A disease modifying anti rheumatic drugs (DMARD) include all f the following except for :

A) Salazo pyrine. B)Hydroxychloro quine. C)Colchicine.

D)Methotrexate E)Ilefenamide

26) All of the following are criteria for Behcet disease except for : A)Mouth ulcer's.

B)Arterial Anuyresm . C)Hypopyron..

D)Pethergy test. E)Acne-like lesion

27) All of the following are criteria for SLE A)Anti RNP.

B)Mouth ulcer's. C)ANA.

D)Photosensitivity. E)Leukopenia.

28) One of the following deformities can't be caused by RA:

A) Swan neck deformity.

B) Genu valgua.

C) Elbow flextion. D)Bouchard nodules E)Z deformity of thumb.

29) All of the following are indications for the treatment of Gouty arthritis exceptfor: A)Chronic Gouty arthritis.

B) Renal stones.

C) Renal failure.

D) Serum uric acid more than 8mg in men. E)All of the above.

30) One of the following isn't a characteristic for spondylo arthropathy:

- A) Strong association with HLA-B27.
- B) Occasional Aortitis.
- C) Association with chronic inflammatory bowel disease.
- D) Tendency for posterior uveitis.
- E) Enthesitis.

31) The _____ isn't a cause of secondary sjogren: A) Reactive arthritis.

- B) SLE.
- C) Scleroderma.
- D) RA.
- E) Hypothyroidism.

32) Differential diagnosis of sacroiliitis includes all of the following except for: A) Psoriatic.

- B) Behcet disease.
- C) Ankylosing spondylitis.
- D) Reactive arthritis.
- E) Chron disease.

33) Boutonniere deformity is seen in:

- a. RA.
- b. Psoriatic arthritis.
- C) Reactive arthritis.
- D) Osteoarthritis.
- E) Tenosynovitis of hand.

34) All of the following are ANCA associated vasculitis except for: A) Microscopic poly angiitis.

- B) Churg-strauss vasculitis.
- C) Kawasaki syndrome.
- D) Wegner granulomatosis.
- E) All of the above.

1- All the following are occupational aspect of CV disease except :

- a- cold exposure
- b- deep sea diving
- c- vibrating tools
- d- bus driver
- e- organic solvents

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- c. Pericarditic pain
- d. Aortic pain
- e- **Pectus excavatum**

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e- Sharp pain comes on movement or breathing

36) **In Paroxysmal nocturnal dyspnoea one is true :**

a-dyspnoea on exertion

b-comes early at night

c-the patient is despenic at rest

d- cough and frothy sputum is not present e-chest pain is a major symptom

37) **In Palpitation all the following are true except :** a- Is the sensation of the heart beating

b- awareness of occasional irregularities c-missed beats

d- cyanosis may be present

e- occur with excessive caffeine intake or coffee,tea .

38) **Clubbing of the fingers occurs in all the following except :** a-Cyanotic congenital heart disease

b- Bronchial carcinoma

c- intrathoracic suppuration **d- hyperlipidaemia**

e- hepatic cirrhosis

39) **On examining the radial pulses, all the following are essential except :** a- rate of the pulses

b- rhythm of the pulses whether is regular or irregular

c- the volume of the pulse

d- the character of the pulse e- thrill of the pulse

40) **Radio-femoral delay is present in one of the following condition :** c- Angina pectoris

d- Coarctation of the aorta

c - Renal artery stenosis

d- Heart failure e- COPD

41) **Estimation of jugular venous pressure is :**

- a- 9–12 cmH₂O
- b- 5– 7 cmH₂O
- c- 15 – 20 cmH₂O
- d- 0 – 5 cmH₂O
- e- 20 – 22 cmH₂O

42) Displacement of apex beat occurs in all the following except: a-pectus excavatum

b-large plural infusion c-mitral stenosis

d- tension pneumothorax

e- left ventricular hypertrophy.

43) fixed splitting of the second heart sound occurs in one of the following : a-left bundle branch block

b- Atrial septal defect c-hypertension

d-aortic stenosis.

e- left ventricular outflow obstruction

44) systolic murmurs occurs in all of the following except:

a-aortic stenosis.

b-pulmonary stenosis. c-mitral stenosis.

d-mitral regurgitation. e-aortic regurgitation.

45) In evaluation of a murmur all are true except:

a- timing either systolic or diastolic. b-duration of the murmur.

c-radiation of the murmur.

d-location of the maximal intensity e-presence or absence of a click.

46) Diastolic murmurs occurs in all the following except: a-mitral stenosis.

b-aortic stenosis

c-tricuspid stenosis

d-aortic regurgitation

e-pulmonary regurgitation.

47) The murmur of patent ductus arteriosus is one of the following except : a-Pansystolic murmur
b-Pandiastolic murmur c-Systolic and diastolic
d- mid diastolic with pre systolic accentuation . f- Austin Flint murmur.

48) Past history should include : a- rheumatic fever.
b- diabetes
c- thyrotoxicosis.
d-glomerulonephritis. e-all of the above.

49) The best description of the physiological cause of a heart murmur are except: a-turbulant blood flow
b-increase blood flow through a normal valve.
c-increase blood flow through an abnormal valve. d-occurs in pregnanacy and athletes

1-Zantholesma is yellowish skin occur in on of the following :

a-Rheumatic heart disease b-Hyperthyrodism
c-Hyperlipedemia
d-Myocardial infarction e-Scar after a trauma

2-Hot sweaty hands occur in all the following except:

a-Aortic regurgitation b-Thyrotoxisis
c-Increase the number of sweat glands d-Anxiety neurosis
e-Acromegaly

3- RT ventricular heave occur in one of the following:

a- LVENlargement
b- RT Ventricular Enlargement c- LA enlargement
d_ RA enlargement
e- Aortic enlargement

4- In measuring the blood pressure one of the following is true:

a- The length of the bladder cuff should be double than the width b- The bladder of the cuff should cover the Brachial artery
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a-Site of the chest pain

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d-Relieving Factors **e-All are true**

7-All the following are the symptoms of CV disease except:

a-Chest pain

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c-Palpitation d-Syncopy

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8- In ASD the second heart sound is best described by the following:

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9- Systolic murmur one of the following is true:

a-Murmur occurs between S1 and S2 b-Murmur occurs after S2

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e-In aortic stenosis the murmur is not transmitted to the carotid artery

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a-Occurs after the S2

b-It is divided into an early mid and late diastolic murmur **c-In aortic stenosis the murmur is mid diastolic**

d-In aortic regurgitation the murmur is called early diastolic blow

e-In atrial fibrillation and mitral stenosis the accentuation of presystolic murmur is maintained

11. Pulsus paradoxus pulse is felt in ONE of the following.

- a- aortic regurgitation
- b- aortic stenosis
- c- mitral stenosis
- d- VSD
- e- Cardiac tamponade

12 . A 30-year-old man admitted with right sided hemiplegia. Clinical examination reveals loss of a wave in JVP with irregular irregular pulse. He has ONE of the following cardiac rhythm abnormalities.

- a- complete heart block
- b- atrial fibrillation
- c- atrial flutter
- d- sinus tachycardia
- e- sinus bradycardia

ONE of the following is the mode of action for B-Blockers in controlling hypertension. a- decrease cardiac out put.

- b- Slow the heart rate
- c- Increase cardiac force of contraction
- d- Increase cardiac output
- e- Decrease plasma volume

20. According to Vaughan Williams Classification of antiarrhythmic drugs, which class would be verapamil belong to?

- a- class 1 A
- b- class 1 B
- c- class 1 C
- d- class III
- e- class IV

31. A 72-year-old woman comes to you to control her high blood pressure (180/100) mmHg. What is the ONE target blood pressure in the long term for this patient?

- a- <160/90
- b- <150/90
- c- <145/90
- d- <130/85
- e- <120/70

38. All the following are found in left sided heart failure Except. a- bilateral basal creptations
b- third heart sound c- pulsus alternans d- raised JVP
e- pulmonary oedema

39. All the following may occur in cardiac tamponade Except. a- raised jugular venous pressure with sharp rise and y descent.
b- Kussmaul's sign (rise JVP/ increased neck vein distension during inspiration) c- pulsus paradoxus
d- visible apex beat.
e- reduced cardiac output.

40. ONE of the following B-Blockers is cardioselective and lipid soluble. a- atenolol
b- propranolol c- metoprolol d- bisoprolol e- carvedilol

45. A 70-year-old woman is referred to hospital due to evidences of congestive heart failure. Blood test reveal the following: Hb 7.4 g/dl, MCV 124 fl, platelets $98 \times 10^9/l$, WBC $3 \times 10^9/L$,

All the following investigations are required to reach a diagnosis Except.

- a. Schilling test
- b. Intrinsic factor antibodies
- c. antiparitel cell antibodies
- d. bone marrow aspiration, looking for megaloblasts
- e. C-reactive protein.

73. Increased rennin and angiotensin II is found in ONE of the following causes of secondary hypertension.

- a- renal artery stenosis
- b- Conn's syndrome
- c- Cushing's syndrome
- d- pheochromocytoma
- e- acromegaly

77. Modifiable risk factors for ischemic heart disease include all the following Except.

- a- smoking
- b- hypertension
- c- hyperlipidaemia
- d- age
- e- diabetes mellitus

81. A 57-year-old man develops acute shortness of breath shortly after a 20-hour automobile ride. He has normal physical examination except for tachycardia, ECG: shows sinus tachycardia, but is otherwise normal.

Which ONE of the following is correct?

- a- the patient should be admitted to hospital and if there is no contraindication to anticoagulant, Heparin should be started while waiting for tests.
- b- Normal finding on examination of the lower limbs are extremely unusual
- c- A definitive diagnosis can be made by history alone
- d- Early treatment has little effect on overall mortality
- e- The disease can be diagnosed definitely by Chest X-Ray

83. A 60-year-old man has an inferior myocardial infarction; his heart rate is 45 /min. The artery most likely to be involved in this process is:

- a- right coronary artery
- b- left main artery
- c- left anterior descending artery
- d- circumflex artery
- e- left mammary artery

Description	ECG Leads With Changes	Artery Occluded
Inferior	II, III and aVF	RCA
Anteroapical	V3 and V4	Distal LAD
Anteroseptal	V1 and V2	LAD
Anterolateral	I, aVL, V5 and V6	Circumflex Artery
Extensive Anterior	I, aVL and V2-V6	Proximal LCA
True Posterior	Tall R in V1	RCA

84. A patient with stable angina on asprine, nitrate and B-Blocker, developed 3 episodes of sever and long – lasting chest pain each day over the past 3 days.

His ECG and cardiac enzymes are normal.

One of the following is the best treatment

- a- admit the patient and start I.V digoxine
- b- admit the patient and start I.V heparine
- c- admit the patient and start I.V prophylactic streptokinase
- d- admit the patient and for observation without changing hismedications
- e- Discharge the patient with increasing the dose of B-blocker and nitrate

85. ONE of the following drugs reduces myocardial remodeling after acute myocardial infarction.

a- ACE inhibitors

b- digoxine

c- verapamil

d- furosemide (lasix)

e- hydralazine.

87. A70 hypertensive woman patient with mild left hemiparesis and finding of peristant atrial fibrillation. Optimal treatment with anti-hypertensive drugs would be ONE of the following

a- close observation

b- permanant pace maker

c- aspirin

d- warfarin

e- I.V heparin

88. ONE of the following is used in treatment of hypertensive Emergency

a- I.V atenolol (tenormin)

b- oral captopril

c- sublingual nifedipine

d- continous infusion of sodium nitroprusside

e- oral alpha methyl dopa

89. Which ONE of the following should be immediately given to a patientwith ventricular fibrillation.

a-I.V amiodrone

b-I.V epinephrinr (adrenaline) c- defibrillation at 200 joules d- I.Vadenosine

e-I.V verapamil

90. Which ONE of the following drugs would be most appropriately used in treatment of patient with inferior myocardial infarction and has a heart rate of 40/minute .

a- atropine b- digoxine

c- propranolol

d- calcium channel blockers e- heparine

93. All the following are early complications of acute myocardial infarction Except. a- cardiogenic shock

b- heart block

c- ventricular fibrillation

d- aneurismal dilatation of infracted area e- sudden cardiac death

94. ECG shows ST elevation in leads II, III, AVF, indicate infarction in ONE of the following

a- anteroseptal MI b- anterolateral MI c- posterior MI

d- inferior MI

e- subendocardial MI

95. All the following ECG findings are found in hypokalemia Except.

a) Flattened T waves

b) U waves

c) Shortened QT interval

d) ST segment depression

e) Ectopic beats

64. All of the following are true for myofibril, except:

a. Each myofibril is made up of a series of sarcomeres b. The basic unit of contraction is intercalated disc

c. A sarcomere is bounded by two transverse Z lines

d. The actin filaments overlap with thicker protein filament called myosin Answer: B

65. In the conduction system of the heart muscle, all of the following are true, except:

a. Conduction started in SA node. AV node, bundle of His, left and right bundle branch-purkinjee fibers.

b. Left bundle branch is shorter than right bundle

c. Right bundle supplies right ventricle and left bundle supplies left ventricle and septum

d. Action potential in the ventricle is rapid and generated by rapid transmembrane K diffusion.

Answer: D (sodium not K)

66. Cause of syncope include all of the following, except:

a. Arrhythmias, atrial and ventricular.

b. Obstruction to cardiac output like aortic stenosis

c. Vasovagal, neurogenic

d. CVA

e. SBE

67. The least common cause of AF is? Or: The commonest cause of AF?

a. WPW syndrome

b. Mitral valve disease c. Hypertension يمكن

d. Pericarditis

e. Thyrotoxicosis

71. Myocardial ischemia is an imbalance between O₂ supply and myocardial demand, all of the following are true except:

- a. Obstruction of coronary arteries by atherosclerosis
- b. Coronary artery spasm
- c. Anemia
- d. Thyrotoxicosis
- e. Pericarditis

Answer: E Conditions that may cause myocardial ischemia include Coronary artery disease (atherosclerosis). Atherosclerosis occurs when plaques made of cholesterol and other cellular waste products build up on your artery walls and restrict blood flow.

Atherosclerosis of the heart arteries is called coronary artery disease and is the most common cause of myocardial ischemia.

Blood clot. The plaques that develop in atherosclerosis can rupture, causing a blood clot, which may lead to sudden, severe myocardial ischemia, resulting in a heart attack.

Coronary artery spasm. A coronary artery spasm is a brief, temporary tightening (contraction) of the muscles in the artery wall. This can narrow and briefly decrease or even prevent blood flow to part of the heart muscle. Coronary artery spasms are more common in people with risk factors for heart disease, such as high cholesterol and high blood pressure, but the spasms can happen in people who have no risk factors, too. Coronary artery spasms can also occur in people who have conditions that affect their immune systems, such as lupus.

Severe illnesses. Myocardial ischemia can occur when the metabolic demands of your heart increase or when blood pressure is very low due to infection, bleeding or other severe illness. Source:

<http://www.mayoclinic.com/health/myocardial-ischemia/DS01179/DSECTION=causes>

72. In acute MI all of the following are true, except:
- Inf MI, ST elevation in I, II, AVF
 - Anteroseptal MI – ST segment elevation in V1-V2-V3
 - In acute MI, thrombolytic therapy achieve 100% reperfusion arate.
 - Treatment of MI include morphine, coronary vasodilation, aspirin.
 - Cardiac markers in acute MI, serial cardiac enzymes, like CPK, troponin.
73. Clinical features in infective endocarditis include all of the following, except:
- Appearnace of new murmur or change in the quantiy of eisting murmur
 - Fever
 - CHF
 - Skin and eye lesions
 - No splenomegaly

Answer: E (A wide variety of diseases are associated with splenomegaly, or enlargement of the ... Such as in subacute bacterial endocarditis or infectious mononucleosis ...

<http://emedicine.medscape.com/article/206208-overview>)

74. Classification of cardiomyopathy include all of the following, except:
- Dilated cardiomyopath
 - Hypertrophic-IHSS
 - Restrictive cardiomyopathy
 - Arrythmogenic right ventricle
 - Prolpase mitral valve

1- Irregular irregularity indicate one of the following; a-multiple premature ventricular contraction
 b-mutiple premature atrial contraction
 c-atrial fibrillation
 d-second degree heart block e-sinus tachycardia

2- normal heart rate is a-60-90
 b-60-100
 c-60-120 d-100-150 e-40-60

3- Organism responsible for rheumatic fever is:
 a-streptococcus pyogens b-mycoplasma
 c- streptococcus viridians
 d- B heamolytic streptococcus e-staphylococcus aures

4- Specific EKG changes of acute pericarditis one is true: a-presence of Q wave
 b-atrial fibrillation
 c-sinus bradycardia d-sinus tachycardia
 e- elevation of ST segment is concave upwards

5- secondary hypertension include all the following except; a-renal causes

b- endocrine causes

c-congenital like coarctation of aorta

d-drugs like NSAID ,contraceptive pill

e. pulmonary hypertension

6-pulmonary hypertension occurs in the following condition except a- Chronic obstructive pulmonary disease (COPD)

b- Mitral stenosis

c- Cyanotic congenital heart disease d- Subacute bacterial endocarditis **e- Right ventricular failure**

7-All the following can cause a Large Cardiomegaly on XRay chest except: a-dilated cardiomyopathy

b-pericardial effusion

c-(HOCM,)hypertrophic obstructive cardiomyopathy **d- multiple myocardial infarction**

e-Aortic stenosis and regurgitation

8-contraindication of thrombolytics in MI are the following except:

- a- Late MI more than 24 hours after MI
- b- Previous surgery before 3 months
- c- Head trauma before 3 months
- d- Elevated ST segment MI
- e- Haemorrhagic diseases

9- Complication of MI all the following are true except a- Arrhythmic complication

- b-mechanical complication
- c-Thromboembolic complication
- d-papillary muscle rupture
- e-Subacute bacterial endocarditis

10-Atrial fibrillation treated by all of the following except: a- Digoxin

- b- cortisone
- c- Quinidine sulphate
- d- Cordarone
- e- B- Blocker

11- normal axis of the heart , one is true : a-zero to + 90

- b- zero to minus 30
- c- 90 to 180
- d- minus 30 to 180
- e- zero to 180

12- signs of Cor pulmonale (RT ventricular failure) all are true except: a- RT ventricular heave

- b- Congested neck vein
- c- Tricuspid regurgitation
- d- Wheezing chest on examination
- e- Pan systolic murmur at the apex transmitted to axilla

13- most specific cause of essential hypertension. One is true

- a-increase of peripheral resistance in medium sized arteries and arterioles
- b-increase of cardiac output
- c-increase of blood volume
- d-increase of heart rate
- e-polycythemia

14- signs and symptoms of severe aortic stenosis all are true except: a-angina pectoris

- b-syncope
- c- heart failure
- d- murmur transmitted to the carotid
- e-double apical impulse

15-signs of tricuspid regurgitation all are true except: a-pulsation of enlarged liver

b-pansystolic murmur at the tricuspid area c-congested neck veins

d- murmur increase by respiration e-murmur transmitted to axilla

16-in Systolic murmurs one of the following is true:

a-Murmur occurs between S1 and S2 b-Murmur occurs after S2

c- Murmur occurs before S1

d-Murmur of aortic regurgitation i e-murmur of mitral stenosis

17-Diastolic Murmur are all true except:

a-occures after the S2

b-It is divided into an early, mid, and late diastolic murmur c-the murmur of aortic stenosis

d- In aortic regurgitation the murmur is called early diastolic blow

e- In atrial fibrillation and mitral stenosis the accentuation of presystolic murmur is lost

19)All of these statement are true except a)classification of heart failure include 4 types A.B.C.D b)type A include risk factors

c)classification of antiarrhythmic drugs include 5 types d)Amiodorone is type III

e)Amiodorone has an iodine molecule

20-IN idiopathic hypertrophic sub aortic stenosis (IHSS)all are false One is true:

a) it is a type of dilated cardiomyopathy

b) AN important cause of sudden death in athletes c)Left ventricle is dilated

d) pulse examination is normal in character

e)need nitrate for treatment

1) All the following are true in diabetes and CAD except:

a) Mortality from CVD is 2-8 folds higher in people with diabetes than in those without.

b) Thiazolidine are Synthetic legends of Newer transcription factor PPAR γ

c) Recent meta analysis questioned the cardiac safety of rosiglitazone by decreasing LV contractility.

d) In recent studies ENHANCED and ACCORD study –mortality has increased in diabetes in those with intensively lowering blood glucose.

e)Thiazolidinediones enhances insulin sensitivity in patients with high risk of CV events.

2) Hypertensive patents all are true except:

a) J curve is the paradoxical increase in CV events with a low blood pressure

b) The most major complications of long standing hypertension ,Stroke are thrombotic rather than haemorrhagic.

c) Beta-blocker is the main drug in treatment of hypertension.

d) In the management of the resistant hypertension the recognition of inappropriate Aldosterone concentration with raised Aldosterone\Renin ratio in 20% of those patients.

e) The recent recommendation of BP in diabetes and Renal impairment was 120/80mm Hg

3) In Aortic stenosis all are true except:

- a) The most Common congenital Anomaly is bicuspid Aortic valve which is about 1-2%.
- b) US guidelines do not recommend balloon valvoplasty in adults because of high risk of complications >10%.
- c) patients with low cardiac output usually have a small aortic area and small gradient, this can be distinguished by doing Dobutamine stimulation.
- d) Degenerative Aortic sclerosis is distinguished from Aortic Stenosis by valvethickening and calcification without obstruction of significant gradient.
- e) In US guidelines severe stenosis valve area is 1-1.5/cm² and the mean gradient is 25- 40 mmHg
- 4) All are true except:
- a) Renin-angiotensin aldosterone sympathetic access and natriuratic peptide system serve to inhibit salt and water retention.
- b) B-type natriuratic peptide(BNP is secreted from overloaded left ventricle).
- c) The levels of BNP decrease with the degree of LV wall stretch and progression of decreased EF.
- d) Plasma BNP levels is important in diagnostic evaluation of acute dyspnea, as well as prognostic evaluation of heart failure
- e) In ADHERE study(acute decompensate heart failure national registry) the hospital mortality increased by elevate BNP.
- 5) In Pulmonary arterial hypertension(PAH) the following are true except:
- a) Drugs and toxins cocaine, amphetamines, and metamphetamines are very important in etiology of PAH.
- b) Left heart disease like mitral stenosis is an important etiological factor in PAH.
- c) Endothelin I antagonist is the treatment of choice in PAH followed by phosphodiesterase 5 inhibitors.
- d) Incidence of PAH associated with scleroderma and CREST syndrome are present in almost all cases.
- e) Embolic or thrombotic diseases of the lung are associated with PAH due to hypoxaemia.
- 6) the degree of obstruction in hypertronic subaortic stenosis is dynamic and depends upon the contractile state of the left ventricle and changes in preload and afterload. All of the following increase the intraventricular gradient except:
- a) Methoxamine
- b) Valsalva maneuver
- c) Hemorrhage
- d) Rapid heart rate
- e) digitalis
- 7) Cardiac biomarkers all are true except:
- a) In acute coronary syndrome there are a high incidence of elevated cTn.
- b) Elevated CK-MB after PCI indicate adverse outcome and this has not been the case with cTn.
- c) In TACTICS-TIMI-18 trial individuals with elevated cTn with normal coronary had an adverse prognosis.
- d) In both sexes with elevated BNP or CRP values seemed to benefit from early PCI even if they have normal cTn.
- e) In acute coronary syndrome elevated CRP indicate a poor prognosis.
- 8) PFO can cause all the following except:
- a) paradoxical systemic embolization.

- b) PFO maybe a possible cause of migraine headache.
- c) Warfarin was better than aspirin in treatment of PFO to prevent Cerebrovascular accident or TIA .
- d) PFO can be detected by TEE using contrast and colour Doppler specially after Valsalva maneuvers
- e) Surgical PFO closure is better than percutaneous transcatherter closure for stroke

9) CAD in women are characterized by all the following except:

- a) In women HDL cholesterol maintain 10mg/dl higher than in men.
- b) Angiographic and intravascular ultrasound studies shows that women have smaller size coronary arteries than men.
- c) Oral post menopausal hormone therapy decrease LDL cholesterol and Lp(a) levels but increase HDL cholesterol and triglyceride levels.
- d) National cholesterol educational program recommend different treatment guidelines for men and women
- e) Elevated Lp(a) levels seems to be more strongly related to CAD events than to the severity of CAD in women.

1- Xanthomas is yellowish skin occur in one of the following :

a- Rheumatic heart disease b- Hyperthyroidism

c- Hyperlipidemia

d- Myocardial infarction e- Scar after a trauma

2- Hot sweaty hands occur in all the following except:

a- Aortic regurgitation b- Thyrotoxicosis

c- Increase the number of sweat glands d- Anxiety neurosis

e- Acromegaly

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- e- In atrial fibrillation and mitral stenosis the accentuation of presystolic murmur is maintained

10- All the following are occupational aspects of CV disease except :

- f- cold exposure
- g- deep sea diving
- h- vibrating tools
- i- bus driver
- j- organic solvents

11- One of the following is the principle symptom of heart disease : a- chest pain with deep inspiration

- b- nervousness
- c- chest pain on movement
- d- edema of the lower limbs
- e- pain in the right arms

12- The following diseases cause cardiac pain except : f- Angina

- g- Myocardial infarct
- h- Pericarditic pain
- i- Aortic pain
- j- Pectus excavatum

13- The best description of Angina is: f- pain in both hands

- g- pain in the back of the chest
- h- interscapular pain
- i- retrosternal heaviness
- j- Sharp pain comes on movement or breathing

14- In Paroxysmal nocturnal dyspnoea one is true : a- dyspnoea on exertion

- b- comes early at night
- c- the patient is despondent at rest
- e- chest pain is a major symptom

15- In Palpitation all the following are true except : f- Is the sensation of the heart beating
g- awareness of occasional irregularities h- missed beats
d- cyanosis may be present
e- occur with excessive caffeine intake or coffee,tea .

16- Clubbing of the fingers occurs in all the following except : a-Cyanotic congenital heart disease
b- Bronchial carcinoma
c- intrathoracic suppuration d- hyperlipidaemia
e- hepatic cirrhosis

17- On examining the radial pulses, all the following are essential except : f- rate of the pulses
g- rhythm of the pulses whether is regular or irregular
h- the volume of the pulse
i- the character of the pulse
j- thrill of the pulse

18- Radio-femoral delay is present in one of the following condition : e- Angina pectoris
f- Coarctation of the aorta
c - Renal artery stenosis
d- Heart failure e- COPD

10- Estimation of jugular venous pressure is : a-9-12 cmH₂O
b- 5- 7 cmH₂O
c- 15 - 20 cmH₂O
e- 20 - 22 cmH₂O

11- Displacement of apex beat occurs in all the following except: a-pectus excavatum
b-large pleural effusion c-mitral stenosis
d- tension pneumothorax
e- left ventricular hypertrophy.

12- fixed splitting of the second heart sound occurs in one of the following : a-left bundle branch block
b- Atrial septal defect c-hypertension
d-aortic stenosis.
e- left ventricular outflow obstruction

13- systolic murmurs occurs in all of the following except: a-aortic stenosis.

b-pulmonary stenosis. c-mitral stenosis.

d-mitral regurgitation. e-aortic regurgitation.

14- In evaluation of a murmur all are true except: a- timing either systolic or diastolic.

b-duration of the murmur. c-radiation of the murmur.

d-location of the maximal intensity

e-presence or absence of a click.

15- Diastolic murmurs occurs in all the following except: a-mitral stenosis.

b-aortic stenosis

c-tricuspid stenosis

d-aortic regurgitation

e-pulmonary regurgitation.

16-The murmur of patent ductus arteriosus is one of the following: a-Pansystolic murmur

b-Pandiastolic murmur c-Systolic and diastolic

d- mid diastolic with pre systolic accentuation . f- Austin Flint murmur.

17- Past history should include :

a- rheumatic fever. b- diabeties

c- thyrotoxicosis.

d-glomerulonephritis. e-all of the above.

18- The best description of the physiological cause of a heart murmur is: a-turbulant blood flow

b-increase blood flow through a normal valve.

c- increase blood flow through an abnormal valve. d-occurs in preganancy and athletes

e-all of the above.

ORGANISM RESPONSIBLE OF SUBACUTE ENDOCARDITIS one is true

- a) streptococcus pyogenes
- b) B haemolytic streptococcus
- c) streptococcus viridians
- d) staphylococcus aureus
- e) H pylori

6- LAD in EKG, all are true except

- a) in LAD the vector is between 0 and -30
- b) maximum deflexion of QRS in lead II is negative
- c) maximum deflexion of QRS in AVF lead is negative
- d) maximum deflexion of lead III is negative
- e) maximum deflexion of lead AVF is positive

8 All are true in mitral regurgitation except:

- a) Pansystolic murmur at the apical area
- b) Transmitted to axilla
- c) The murmur may be short ESM
- d) Apex is deviated laterally and downwards
- e) Is common in dilated cardiomyopathy

9- All are true in Aortic stenosis:

- a) Murmur is ejection systolic
- b) Transmitted to the carotid
- c) Second heart sound is diminished in intensity
- d) Presence of sustained apex
- e) Presence of right ventricular heave

10- Examination of ascitis all are true except:

- a) Presence of fluid thrill
- b) Presence of percussion dullness
- c) treatment needs lasix and aldactone
- d) Presence of flapping tremors
- e) Ballotment can be present

11- Angina pectoris all are true except

- a) Restrosternal chest pain
- b) Comes on exertion
- c) Relieved by rest and Nitroglycerine
- d) Last from 5-10 min
- e) Pain increase by deep breathing and by movement

1-Zantholesma is yellowish skin occur in on of the following: a-Rheumatic heart disease

b-Hyperthyrodism

c-Hyperlipedemia xxx

d-Myocardial infarction e-Scar after a trauma

2-Hot sweaty hands occur in all the following except: a-Aortic regurgitation

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b-SOB

c-Palpitation d-Syncopy

e-Cough and expectoration xxx

8- In ASD the second heart sound is best described by the following:

a- Splitted and fixed during respiration xxx

b-Splited and moves with respiration c-Paradoxical splitting

d-decrease in the intensity of the second heart sound

9- Systolic murmur one of the following is true:

- a- Murmur occurs between S1 and S2 xxx
- b- Murmur occurs after S2
- c- Murmur occurs before S1
- d- Murmur occurs between S1 and S2 and after S2
- e- In aortic stenosis the murmur is not transmitted to the carotid artery

10- Diastolic Murmurs are all true except:

- a- Occurs after the S2
- b- It is divided into an early mid and late diastolic murmur
- c- In aortic stenosis the murmur is mid diastolic xxx
- d- In aortic regurgitation the murmur is called early diastolic blow
- e- In atrial fibrillation and mitral stenosis the accentuation of presystolic murmur is maintained

1. Pulsus paradoxus pulse is felt in ONE of the following. e- aortic regurgitation

- f- aortic stenosis
- g- mitral stenosis
- h- VSD
- e- Cardiac tamponade

2. A 30-year-old man admitted with right sided hemiplegia. Clinical examination reveals loss of a wave in JVP with irregular irregular pulse. He has ONE of the following cardiac rhythm abnormalities.

- a- complete heart block b- atrial fibrillation
- c- atrial flutter
- e- sinus bradycardia

3. Major criteria for Rheumatic fever include all the following Except. k- carditis

- l- Sydenham's chorea
- m- Polyarthralgia
- n- Erythema marginatum o- Subcutaneous nodules

4. ONE of the following drugs is LEAST used in treatment of acute severe asthma. k- nebulized B2 agonist

- l- i.v hydrocortisone

- m- epinephrine (adrenaline) n- oxygen
- o- i.v . aminophylline

5. Hypoxia (decreased PaO₂) and decreased Pa CO₂ is found in all the following Except. k- left ventricular failure

- l- massive pulmonary embolism m- acute sever asthma
- n- acute exacerbation of COPD o- pneumonia

6. All the following are true following splenectomy Except. k- thrombocytopenia

- l- pneumococcal vaccine should be given m- annual influenza vaccine should be given
- n- long term oral penicillin V 500 mg 12 hourly should be given o- Howell-Jolly bodies are characteristically seen on blood film.

7. ONE of the following drugs is most appropriate in treatment of pneumocystiscarinii pneumonia.

- k- clarithromycin
- l- ethambutol
- m- azithromycin
- n- Trimethoprim-Sulphamethoxazole o- INH and rifampicine

8. ONE of the following is the mode of action for B-Blockers in controlling hypertension.

- f- decrease cardiac out put. g- Slow the heart rate
- h- Increase cardiac force of contraction i- Increase cardiac output
- j- Decrease plasma volume

9. A healthy patient who is HLA-B27 is most likely to develop ONE of the following. a- psoriatic arthritis

b- enteropathic spondylitis c- gonococcal arthritis

d- Reiter's disease

e- ankylosing spondylitis

10. According to Vaughan Williams Classification of antiarrhythmic drugs, which class would verapamil belong to?

f- class 1 A

g- class 1 B

h- class 1 C

i- class III

j- class IV

11. Which one of the following is LEAST useful in assessing patient with a poor prognosis in community-acquired pneumonia?

k- mental confusion

l- urea of 11.4 mmol/l

m- positive C-reactive protein n- respiratory rate of 35/ min. o- age 75 years old.

12. All the following are functions of kidney Except. (a). Excretion of waste products.

(b). production of erythropoietin. (c). Metabolism of vitamin D

(d). destruction of rennin.

(e). production of prostaglandins.

13. All the following are causes of sterile pyuria Except:

k) Kidney stones

l) Tubulointerstitial disease

m) Papillary necrosis

n) Tuberculosis

o) Acute pyelonephritis

14. ONE of the following is the most frequent cause of death in acute renal failure.

i) Uremia

- j) Pulmonary edema
- k) Hyperkalemia
- l) Infection
- e) Hyponatremia

15. A 29-year-old medical student developed a positive PPD (purified protein derivative) test. She was started on isoniazid (INH) and rifampin prophylaxis. Three months into her therapy, she began to experience pins and needles (parasthesia) in her lower limbs. Administration of which of the following vitamins might have prevented these symptoms?

- A. Niacin
- B. Pyridoxine
- C. Riboflavin
- D. Thiamine
- E. Vitamin C

16. Increased bleeding time and PTT is found in ONE of the following. a- hemophilia A
b- hemophilia B (Xmas disease) c- Von Willebrand disease
d- treatment with warfarin

e- idiopathic thrombocytopenic purpura

17. All the following may be found in Iron deficiency anemia Except.

- a- Red cell distribution width (RDW) is less than 13.
- b- microcytic RBC
- c- low serum ferritin
- d- low serum iron
- e- increased TIBC

18. Bilateral hilar lymph node enlargement occurs commonly in all the following Except.

- a- pulmonary Tuberculosis
- b- chronic myeloid leukemia
- c- non-Hodgkins lymphoma
- d- Hodgkin lymphoma
- e- sarcoidosis

19. All the following may be found in Intravascular hemolysis Except. a- increased unconjugated bilirubin

- b- increased haptoglobin
- c- increased methemalbumin
- d- reticulocytosis
- e- Hemoglobinuria

20. All the following are causes of WORM autoimmune hemolytic anemia Except. a- SLE

- b- chronic lymphocytic leukemia
- c- methyl dopa
- d- infectious mononucleosis
- e- non-Hodgkins lymphoma

21. A 72-year-old woman comes to you to control her high blood pressure (180/100) mmHg. What is the ONE target blood pressure in the long term for this patient?

- a- <160/90
- f- <150/90
- g- <145/90
- h- <130/85
- i- <120/70

22. All the following are true about side effects of anti-diabetic agents Except. a- metformin carries a risk of lactic acidosis.

b- sulphonylurea is used safely pregnancy

c- glitazones may cause prominent fluid retention d- insulin may cause lipohypertrophy

e- acarbose causes diarrhea

23. Causes of hypoglycemia in diabetes include all the following Except. a- no daily exercise.

b- unrecognized other endocrine diseases like Addison's disease. c- missed, delayed or inadequate meal

d- gastroparesis

e- factitious and deliberately induced.

24. Causes of indirect (unconjugated) hyperbilirubinemia include all the following Except.

a- autoimmune hemolytic anemia b- thalassemia major

c- G6PD deficiency anemia d- Dubin-Johnson syndrome e- Gilbert's syndrome

25. Precipitating factors for hepatic encephalopathy in patient with liver cirrhosis include all the following Except.

a- occult infection

b- aggressive diuresis

c- gastrointestinal bleeding

d- treatment with oral neomycin

e- excess dietary proteins

26. All the following hepatitis viruses are RNA Except. a- hepatitis A

b- hepatitis B c- hepatitis C d- hepatitis D e- hepatitis E

27. ONE of the following statements is true about treatment of pulmonary tuberculosis. a- pyrazinamide may precipitate hyperuricemic gout.

b- INH can cause optic neuritis

c- renal impairment with rifampicine

d- streptomycin is causing reversible damage to vestibular nerve e- hepatitis is usually caused by ethambutol

28. All the following are found in left sided heart failure Except. a- bilateral basal creptations

b- third heart sound c- pulsus alternans d- raised JVP

e- pulmonary oedema

29. All the following may occur in cardiac tamponade Except. a- raised jugular venous pressure with sharp rise and y descent.

b- Kussmaul's sign (rise JVP/ increased neck vein distension during inspiration) c- pulsus paradoxus

d- visible apex beat.

e- reduced cardiac output.

30. ONE of the following B-Blockers is cardioselective and lipid soluble. a- atenolol

b- propranolol c- metoprolol d- bisoprolol e- carvedilol

31. All the following are criteria to define severe attack of ulcerative colitis Except. a- stool frequency > 10 per day with out blood

b- fever > 37.5 C

c- tachycardia >90/min

d- anemia hemoglobin < 10 gram/dl e- albumin < 30 g/L

32. All the following are true about gout except:

f- Is caused by deposition of monosodium urate monohydrate crystals in the joints. g- It is an asymmetric arthritis.

h- Can be caused by thiazide diuretics.

i- It is commoner in females than males 4:1.

j- Attack of gout can be triggered by dehydration.

33. A 32-year-old alcoholic with shock due to bleeding oesophageal varices. After resuscitation. Which ONE of the following is the treatment of choice.

a- intravenous octreotide. b- intravenous terlipressin

c- oesophageal variceal endoscopy ligation

Transjugulartranshepatic portocaval shunt (TIPS) e- oesophageal variceal sclerotherapy

34. A 65-year-old man with liver cirrhosis presented with ascitis, abdominal pain, tenderness and peripheral edema. A diagnostic tap revealed a neutrophil count of 400 /mm³ (normal < 250).

Which ONE of the following would be of the most immediate benefit ?

- k- Fluid restriction and no added salt diet. l- Intravenous antibiotics.
- m- Oral spironolactone.
- n- Therapeutic paracentesis
- o- Trans-jugular intrahepatic porto-systemic shunt.

35. All the following are recognized complications of Hepatitis C infection Except. a- diffuse proliferative glomerulonephritis.

- b- hepatocellular carcinoma c- liver cirrhosis
- d- chronic hepatitis C infection e- cryoglobulinemia

36. ONE of the following tests is most suitable in screening patients for celiac disease. a- Anti-casein antibodies

- b- Anti-endomysial antibodies c- Anti-gliadin antibodies
- d- ESR
- e- Alpha feto protein.

37. All the following are true about Bronchiectasis Except. a- chronic cough with whitish sputum.

- b- May be caused by cystic fibrosis c- Clubbing of fingers
- d- Hemoptysis
- e- Bronchial dilation and wall thickening is shown by high resolution chest CT scan.

38. All the following are true about sarcoidosis Except. a- raised serum level of angiotensin converting enzymes b- Negative tuberculin skin test c- Normochromic normocytic anemia d- Hypercalcemia e- Pulmonary caseating granuloma

39. ONE of the following is found only in Grave's disease. a- atrial fibrillation

- b- Pretibial myxoedema c- heat intolerance
- d- Tremor
- e- Proximal myopathy

40. Rheumatoid factor is positive in all the following diseases except: a.- Rheumatoid arthritis
b- dermatomyocytis
c- ankylosing spondylitis
d- dicoid lupus erythematosis
e- mixed connective tissue diseases.

41. 20-year old woman presents with a week history of fever, rigor and productive rusty cough. The chest X-ray shows left lower lobe consolidation.

Which ONE of the following is most appropriate treatment? k- clarithramycin

- l- gentamycin
m- Cotrimoxazole
n- Benzypenicillin
o- Flucloxacillin

42. ONE of the following is most likely diagnosis for patient with thyroid function test showing elevated serum T4 and low radioactive iodine uptake.

- a- Grave's disease.
b- Hashimoto's thyroiditis. c- subacute thyroiditis.
d- non-toxic goiter. e- pregnancy.

43. A-25- year old man presents with urethritis, painful swollen left knee and conjunctivitis.

ONE of the following is most likely diagnosis. f- SLE

- g- Gonococcal arthritis
- h- Gout
- i- Reiter's syndrome
- j- Ankylosing spondylitis

44. One of the following is true about mangment of diabetes mellitus. a. the latest guide lines recommended HbA1C to be less than 7%.

- b. post prandial blood sugar up to 200 mg/dl is accepted.
- c. fasting blood sugar should be less than 100 mg/dl in all patients.
- d. LDL-cholesterol up to 120 mg/dl is acceptable in diabetics.
- e. blood pressure of 145/95 mm Hg is acceptable in diabetics.

45. One of the following is true about complications of diabetes mellitus. a. HbA1C is the most studied marker for diabetes mellitus complications.

- b. fasting blood sugar dose not attribute to HbA1C level.
- c. Erectile dysfunction is solely (only) due to diabetic vasculopathy.
- d. hard exudates are more serious than soft exudates in diabetic retiopathy.
- e. serum creatinin is the early biochemical marker to change in diabetes nephropathy.

46. All the following are true about calcium metabolism except.

- a. calcitonin inhibit bone resorption
- b. vit. D3. is hydroxylated in the liver to 25-hydroxycholecalciferol
- c-. parathyroid hormone decrease phosphate excretion by the kidneys.
- d. parathyroid hormone is increased renal tubular reabsorption of calcium.
- e. vit. D deficiency is manifested as low parathyroid hormone level.

47. A 54- year- old male with Child's grade C hepatic encephalopathy presents with haemetemesis. Which ONE of the following is most appropriate immediate therapy?

- a. i.v desmopressin
- b. i.v isosorbide dinitrate
- c. i.v. omperazole
- d. i.v. propranolol e. i.v. somatostatin.

48. All the following are risk factors for development of peptic ulcer disease Except.

- a. daily use of NSAID
- b. gastric infection with H.pylori c. sever emotional stress.
- d. cigarette smoking
- e. gastrin-secreting tumors.

49. Which ONE of the following is LEAST associated with hemochromatosis.

- a. cardiomyopathy b.hypogonadism c. Chorea.
- d. diabetes mellitus
- e. liver cirrhosis.

50. A29- year-old man presents with symptoms of gastroesophageal reflux. Which ONE of the following is most useful in assessing the role of surgery.

- a. cardiac sphincter manometry.
- b. gastric emptying study.
- c. intragastric PH monotring off therapy . d. oesophgeal motility study.
- e. oesophgeal PH monotring on therapy

51.All the following are true about hepatitis A ,except.

- a. has an incubation period of 2-4 weeks. b. it is transmitted during vaginal delivery.
- c. does not cause chronic hepatitis.
- d. may cause hepatosplenomegaly.
- e. a vaccine is available.

52. A peripheral blood film shows hypersegmented neutrophils. What is the most likely ONE cause for this ?
- a. Iron deficiency anemia
 - b. myelofibrosis
 - c. thalassemia major
 - d. thalassemia minor
 - e. megaloblastic anemia

53. All the following may be used in treatment of idiopathic thrombocytopenic purpura Except.

- a. oral prednisolone.
- b. Fresh frozen plasma
- c. splenectomy
- d. I.V. immunoglobulin
- e. immunosuppressant drug (cyclophosphamide)

54. A 23-year old woman presents with lethargy, the following blood results are obtained. Hb 10.4 g/dl, platelet $268 \times 10^9/L$, WBC $6.3 \times 10^9/L$, MCV 65 fl, Hb A2 9% (NORMAL < 3.5%),

Which ONE of the following is the most likely diagnosis? a. B-Thalassemia minor

- b. B-Thalassemia major
- c. sickle cell anemia
- d. hereditary spherocytosis
- e. G6PD deficiency

55. A 70-year-old woman is referred to hospital due to evidences of congestive heart failure. Blood test reveal the following: Hb 7.4 g/dl, MCV 124 fl, platelets $98 \times 10^9/l$, WBC $3 \times 10^9/l$,

All the following investigations are required to reach a diagnosis Except.

- a. Schilling test
- b. Intrinsic factor antibodies
- c. antiparietal cell antibodies
- d. bone marrow aspiration, looking for megaloblasts
- e. C-reactive protein.

56. Splenomegaly may be found in all the following Except.

- a. polycythemia rubra vera
- b. essential thrombocythemia
- c. portal hypertension
- d. thalassemia minor.
- e. myelofibrosis.

57. A patient with Hodgki's lymphoma, has cervical lymphadenopathy with splenomegaly. He has no fever, weight loss or drenching sweating.

His clinical staging is ONE of the following.

- a. stage I
- b. stage II
- c. stage III
- B d. stage III
- e. stage IV

58. All the following are true about renal osteodystrophy Except.

- a. reduced conversion of $25(OH)_2 D_3$ to $1,25(OH)_2 D_3$
- b. increased parathyroid hormone
- c. increased intestinal calcium absorption
- d. d. decreased osteoclastic activity
- e. increased reabsorption of calcium from bone.

59. All the following may be found in polycythemia rubra vera Except.

- a. elevated WBC
- b. elevated platelets
- c. splenomegaly
- d. elevated serum uric acid
- e. high erythropoietin level

60. Coomb's test is positive in ONE of the following. a. warm autoimmune hemolytic anemia

b. hereditary spherocytosis

c. G6PD deficiency

d. paroxysmal nocturnal hemoglobinuria

e. malaria

61. All the following are true about thalassemia major Except a. Hb electrophoresis shows mainly increase in Hb A2

b. failure to thrive with short stature

c. severe anemia

d. hepatosplenomegaly

e. treatment is by blood transfusion with iron chelating agent (desferrioxamine)

62. All the following are true about rheumatoid arthritis except. a- it is chronic disease, but curable.

b- it is commonly associated with positive rheumatoid factor

c- antimalarial treatment is one of the lines of management. d- the patients with the disease are liable to infection

e- this disease may affect the patients functionally.

63. All the following are true about uric acid metabolism except. a- 2/3 of body uric acid pool is dietary in origin

b- 2/3 is from endogenous purine metabolism c- 2/3 of uric acid is excreted by the kidney

d- serum uric acid is increased in polycythemia rubra vera e- serum uric acid is increased in eclampsia of pregnancy.

64- All the following are poor prognostic signs in scleroderma except. a- old age of onset.

b- limited skin involvement. c- high ESR

d- renal involvement

e- pulmonary hypertension

65. Pathergy test is positive in one of the following diseases. a- Behcet's syndrome

b- Kawasaki disease

c- erythema multiforme d- osteoarthritis

e- rheumatoid arthritis

66. All the following are most likely causes of pyrexia of unknown origin Except. a- occult bacterial infection

b- lymphoma

c- factitious fever d- viral infection

e- SLE

67. A 50-year old woman has pain in her fingers on exposure to cold, arthralgia, and difficulty in swallowing solid food.

The most useful One test to make a definitive diagnosis is a- rheumatoid factor

b- anti-nuclear antibody c- ECG

d- Blood urea and serum creatinin e- anti-mitochondrial antibody

68. A 20-year-old male is complaining of arthritis and eye irritation. He has a history of burning on urination. On examination, he has Right knee effusion and dermatitis of the glans penis.

Which of the following is ONE most correct statement about this patient?

a- *Nisseria gonorrhoeae* is likely to be cultured from the glans penis b- B- the patient is likely to have positive rheumatoid factor

c- An infectious process of the GI tract may precipitate this disease d- The anti-nuclear antibody is very likely (highly) to be positive e- There is strong association with HLA-B8 antigen.

69. A pleural effusion analysis results: ratio of concentration of total protein in pleural fluid to serum of 0.38, lactate dehydrogenase LDH level of 125 IU, and ratio of LDH in pleural fluid to serum of 0.45.

Which of the following ONE disease is the most likely the cause for this pleural effusion. f- uremia

g- pulmonary embolism

h- sarcoidosis

i- SLE

j- Congestive heart failure

70. All the following criteria indicate severe asthma Except. a- silent chest

- b- respiratory rate of 20/ min.
- c- hypercapnia
- d- thoracoabdominal respiration
- e- confusion

71. A 57-year-old man develops acute shortness of breath shortly after a 20-hour automobile ride. He has normal physical examination except for tachycardia, ECG: shows sinus tachycardia, but is otherwise normal.

Which ONE of the following is correct?

- f- the patient should be admitted to hospital and if there is no contraindication to anticoagulant, Heparin should be started while waiting for tests.
- g- Normal finding on examination of the lower limbs are extremely unusual
- h- A definitive diagnosis can be made by history alone
- i- Early treatment has little effect on overall mortality
- j- The disease can be diagnosed definitely by Chest X-Ray

72. Which ONE of the following Arterial Blood Gases is most likely to be found in a 60-year-old heavy smoker man, He has chronic bronchitis, peripheral edema and cyanosis?

- a- PH 7.50, PO₂ 75, PCO₂ 28
- b- PH 7.15, PO₂ 78, PCO₂ 92
- c- PH 7.06, PO₂ 36, PCO₂ 95
- d- PH 7.06, PO₂ 108, PCO₂ 13
- e- PH 7.39, PO₂ 48, PCO₂ 54

73. A 60-year-old man has an inferior myocardial infarction; his heart rate is 45 /min. The artery most likely to be involved in this process is:

- f- right coronary artery
- g- left main artery
- h- left anterior descending artery
- i- circumflex artery
- j- left mammary artery

74. A patient with stable angina on aspirin, nitrate and B-Blocker, developed 3 episodes of severe and long-lasting chest pain each day over the past 3 days.

His ECG and cardiac enzymes are normal.

One of the following is the best treatment

- f- admit the patient and start I.V digoxin
- g- admit the patient and start I.V heparin
- h- admit the patient and start I.V prophylactic streptokinase
- i- admit the patient and for observation without changing his medications
- j- Discharge the patient with increasing the dose of B-blocker and nitrate

75. ONE of the following drugs reduces myocardial remodeling after acute myocardial infarction.

- a- ACE inhibitors
- b- digoxin
- c- verapamil
- d- furosemide (Lasix)
- e- hydralazine.

76. Autoimmune thyroiditis can be confirmed by ONE of the following. a- thyroid peroxidase antibody

b- anti-nuclear antibody c- thyroid uptake resin

d- fine needle thyroid aspiration e- estimation of TSH

77. A 70 hypertensive woman patient with mild left hemiparesis and finding of persistent atrial fibrillation. Optimal treatment with anti-hypertensive drugs would be ONE of the following

a- close observation

b- permanent pace maker c- aspirin

d- warfarin

e- I.V heparin

78. ONE of the following is used in treatment of hypertensive Emergency a- I.V atenolol (tenormin)

b- oral captopril

c- sublingual nifedipine

d- continuous infusion of sodium nitroprusside e- oral alpha methyl dopa

79. Which ONE of the following should be immediately given to a patient with ventricular fibrillation.

a- I.V amiodrone

b- I.V epinephrine (adrenaline) c- defibrillation at 200 joules d- I.V adenosine

e- I.V verapamil

80. Which ONE of the following drugs would be most appropriately used in treatment of patient with inferior myocardial infarction and has a heart rate of 40/minute .

a- atropine b- digoxine

c- propranolol

d- calcium channel blockers e- heparin

81. All the following are true in Cushing Except

a- ectopic ACTH is associated with severe weight gain without electrolyte disturbances

b- Cushing disease is usually due to pituitary micro-adenoma c- Salivary cortisol level has low sensitivity and specificity

d- Cushing disease is a major component in MEN-1

e- Ectopic ACTH Cushing is associated with metabolic acidosis and hyperkalemia

82. A 50-year-old female, she is 155 cm tall and weighs 100 Kg, her fasting blood sugar is 150 mg/100 ml on 2 occasions, she is asymptomatic and no abnormal physical signs on examination.

The treatment of choice include ONE of the following.

- f- observation
- g- medical nutrition therapy h- insulin
- i- sulphonylurea
- j- biguanides (metformin) !!!!!!!!!!!!!!!

83. Increased rennin and angiotensin II is found in ONE of the following causes of secondary hypertension.

- a- renal artery stenosis
- b- Conn's syndrome
- c- Cushing's syndrome
- d- pheochromocytoma
- e- acromegaly

84. Hypocalcemia with increased serum phosphate is found in ONE of the following

- a- hypoparathyroidism
- b- osteomalacia
- c- acute pancreatitis
- d- chronic renal failure
- e- malabsorption

85. All the following may be findings in primary hypoadrenalism (Addison's disease) Except.

- a- hypernatremia with hypokalemia
- b- palmar creases
- c- skin pigmentation
- d- impotence and amenorrhoea
- e- postural hypotension
- e- weight loss

86. All the following are true about nephrotic syndrome Except. a- dietary sodium restriction is initial treatment.

- b- high protein diet (120-150 gram) daily is recommended
- c- prolonged bed rest should be avoided as thromboembolism is common.
- d- Sepsis is the major cause of death
- e- hyperlipidemia is responsible for increased risk of ischemic heart disease.

87. Modifiable risk factors for ischemic heart disease include all the following Except. a- smoking

- b- hypertension
- c- hyperlipidaemia
- d- age
- e- diabetes mellitus

88. All the following antibiotics may be used in treatment of H.pylori Except. a- amoxicillin

- b- tetracycline
- c- metronidazole
- d- clarithromycin
- e- streptomycin

89. All the following are found in chronic renal failure Except. a- hyperkalemia

b- hyperurecemia

c- hypophosphatemia d- hypocalcemia

e- Low serum erythropitein

90. Treatment of hyperkalemia include all the following Except.

a- i.v calcium gluconate b- i.v salbutamol

c- i.v soluble insulin and glucose d- i.v hydrocortisone

e- hemodialysis

91. After undergoing surgical resection for carcinoma of stomach, a 60-year-old male develop numbness in the lower limb. Blood film shows macrocytosis and MCV = 120fl.

The abnormality is most likely due to ONE of the following

f- folic acid

g- Vit. B12 (IF)

h- thiamin

i- Vit. K

j- Riboflavin

92. ONE of the following is not a disease –modifying anti-rheumatoid arthritis drug. a- sulfasalazine

b- NSAIDs

c- methotrexate d- leflunamide

e- sodium aurothiomalate (Gold)

93. All the following are early complications of acute myocardial infarction Except. a- cardiogenic shock

b- heart block

c- ventricular fibrillation

d- aneurismal dilatation of infarcted area e- sudden cardiac death

94. ECG shows ST elevation in leads II, III, AVF, indicate infarction in ONE of the following

a- anteroseptal MI b- anterolateral MI

c- posterior MI d- inferior MI

e- subendocardial MI

95. All the following ECG findings are found in hypokalemia Except.

- f) Flattened T waves
- g) U waves
- h) Shortened QT interval
- i) ST segment depression
- j) Ectopic beats

96. ONE of the following is LEAST common cause of Microscopical hematuria a-Minimal change disease (lipoid nephrosis)

- b-Membranous glomerulonephritis
- c-Proliferative glomerulonephritis
- d-Membranoproliferative glomerulonephritis
- e-Lupus nephritis

97. Causes of nephrotic syndrome include all the following Except.

- k) SLE
- l) DM
- m) Amyloidosis
- n) Membranous glomerulonephritis
- o) Autosomal-dominant polycystic kidney disease

98. All the following are true regarding the pathogenesis of lupus erythematosus except. a- the exact cause is unknown.

- b- It is a chronic inflammatory disease.
- c- the basic pathological unit is vasculitis
- d- it is due to type I hypersensitivity reaction.
- e- genetic and environmental factors may play a role in the disease.

99. All the following are causing hypokalemia Except. a- Conn's syndrome

- b- Addison's disease
- c- B-agonist (salbutamol) therapy
- d- Alkalosis
- e- Thiazide diuretics

100. Repeated multiple mouth ulcers are seen in the following conditions EXCEPT: a- Behcet's disease.

- b- Systemic lupus erythematosus.
- c- Herpes simplex virus infection.
- d- Ankylosing spondylitis.
- e- Mental stress.

1. A 50 year old man with no past medical history is found to be in atrial fibrillation during routine medical examination. He reports no history of palpitation or dyspnea. Normal physical examination. He refused DC

cardioversion. If the patient remains in chronic Atrial fibrillation.

Which ONE of the following is most suitable treatment to offer? a- Asprine.*****

b- warfarin,target INR 2-3. c- no anticoagulation.

d- warfarin, target INR3-4.

e- warfarin, target INR2-3, for 6 months then Asprin.

2. Pulsus paradoxus pulse is felt in ONE of the following. i- aortic regurgitation

j- aortic stenosis

k- mitral stenosis

l- VSD

m- Cardiac tamponade.*****

3. A 30-year-old man admitted with right sided hemiplegia.Clinical examination reveals loss of a wave in JVP.He has ONE of the following cardiac rhythm abnormality.

a- complete heart block

b- atrial fibrillation***** c- atrial flutter

d- sinus tachycardia e- sinus bradycardia

##4. All the following occurs usually in 3rd week of Enteric (Typhoid) fever Except. f- meningitis

g- lobar pneumonia

h- maculopapular rash (rose spots)***** i- oestomyelitis

j- intestinal perforation

##5. All the following are Zoonotic infections Except. f- rabies

g- brucellosis

h- anthrax

i- toxoplasmosis

j- cholera*****

6. Major criteria for Rheumatic fever include all the following Except. p- carditis

q- Sydenham's chorea

r- Polyarthralgia***** s- Erythema marginatum

t- Subcutaneous nodules

7. Pathergy test is positive in one of the following diseases. a- Behcet;s syndrome.*****

b- Kawasaki disease.

c- Erythema multiforme. d- Osteoarthritis.

e- Rheumatoid arthritis.

8. ONE of the following drugs is LEAST used in treatment of acute sever asthma.

p- nebulized B2 agonist q- i.v hydrocortisone

r- epinephrine (adrenaline)***** s- oxygen

t- i.v . aminophylline

9. Hypoxia (decreased PaO₂) and decreased Pa CO₂ is found in all the following Except. p- left ventricular failure

- q- massive pulmonary embolism
- r- acute severe asthma
- s- acute exacerbation of COPD
- t- pneumonia

##10. All the following are true in osteomalacia Except. f- may be caused by primary biliary cirrhosis

- g- low serum 25-hydroxy vitamin D₃
- h- normal serum alkaline phosphatase
- i- pelvic x-ray may show linear areas of low density surrounded by sclerotic borders (looser's zones)
- j- treated by alfacalcidol.

##11. All the following are causes of eosinophilia Except. f- ascaris infestation

- g- malaria
- h- bronchial asthma
- i- Hodgkin's lymphoma
- j- Drug hypersensitivity

##12. All the following are true about Giardia lamblia Except.

- f- Is usually acquired by ingestion of food or water contaminated by trphozoites.
- g- Can cause malabsorption
- h- Both cystic and trophozoites can be found in stool
- i- Can be effectively treated by metonidazole (flagyl)
- j- Cysts are destroyed by boiling.

19- All the following are occupational aspect of CV disease except : k- cold exposure xxx
l- deep sea diving m- vibrating tools n- bus driver
o- organic solvents

- 20- One of the following is the principle symptoms of heart disease : a- chest pain with deep inspiration
b- nervousness
c- chest pain on movement
d- edema of the lower limbs
e- pain in the right arms

- 21- The following diseases cause cardiac pain except : k- Angina
l- Myocardial infarct m- Pericarditic pain n- Aortic pain
o- Pectus excavatum xxx

- 22- The best description of Angina is:
k- pain in both hands
l- pain in the back of the chest m- interscapular pain
n- retrosternal heaviness xxx
o- Sharp pain comes on movement or breathing

- 23- In Paroxysmal nocturnal dyspnoea one is true : a-dyspnoea on exertion
b-comes early at night xxx
c-the patient is despondent at rest
d- cough and frothy sputum is not present e-chest pain is a major symptom

- 24- In Palpitation all the following are true except : i- Is the sensation of the heart beating
j- awareness of occasional irregularities k- missed beats
d- cyanosis may be present xxx
e- occur with excessive caffeine intake or coffee,tea .

- 25- Clubbing of the fingers occurs in all the following except :
a-Cyanotic congenital heart disease b- Bronchial carcinoma
c- intrathoracic suppuration
d- hyperlipidaemia xxx
e- hepatic cirrhosis

- 26- On examining the radial pulses, all the following are essential except: k- rate of the pulses
l- rhythm of the pulses whether is regular or irregular m- the volume of the pulse xxx
n- the character of the pulse o- thrill of the pulse

- 27- Radio-femoral delay is present in one of the following condition : g- Angina pectoris

- h- Coarctation of the aorta xxx
- c - Renal artery stenosis d- Heart failure
- e- COPD

10- Estimation of jugular venous pressure is :

- a- 9–12 cmH₂O xxx
- b- 5– 7 cmH₂O
- c- 15 – 20 cmH₂O
- d- 0 – 5 cmH₂O
- e- 20 – 22 cmH₂O

11- Displacement of apex beat occurs in all the following except: a-pectus excavatum

b-large pleural effusion

c-mitral stenosis xxx

d- tension pneumothorax

e- left ventricular hypertrophy.

12- fixed splitting of the second heart sound occurs in one of the following : a-left bundle branch block

b- Atrial septal defect xxx

c-hypertension

d-aortic stenosis.

e- left ventricular outflow obstruction

13- systolic murmurs occurs in all of the following except: a-aortic stenosis.

b-pulmonary stenosis. c-mitral stenosis.

d-mitral regurgitation.

e-aortic regurgitation. ?xxx

14- In evaluation of a murmur all are true except: a- timing either systolic or diastolic.

b-duration of the murmur. c-radiation of the murmur.

d-location of the maximal intensity

e-presence or absence of a click. xxx

15- Diastolic murmurs occurs in all the following except: a-mitral stenosis.

b-aortic stenosis xxx

c-tricuspid stenosis

d-aortic regurgitation

e-pulmonary regurgitation.

16- The murmur of patent ductus arteriosus is one of the following except: a-Pansystolic murmur
b-Pandiastolic murmur
c-Systolic and diastolic xxx
d- mid diastolic with pre systolic accentuation . f- Austin Flint murmur.

17- Past history should include :

a- rheumatic fever. b- diabeties
c- thyrotoxicosis.
d-glomerulonephritis.
e-all of the above. xxx

18- The best description of the physiological cause of a heart murmur is: a-turbulant blood flow
b-increase blood flow through a normal valve.
c-increase blood flow through an abnormal valve. xxx
d-occurs in preganancy and athletes e-all of the above.

Gastroenterology

16. One of the following is the least likely future of Hemochromatosis:
- A. Fulminant liver failure**
 - B. Pseudogout
 - C. Diabetes
 - D. Bronze skin
 - E. Hepatocellular carcinoma
17. Upper GI bleeding secondary to Dieulafoy is characterized by all of the following except:
- A. Presents as massive and recurrent bleeding
 - B. Extramural artery present in the Submucosa.
 - C. Most commonly in the gastric fundus
 - D. Easily diagnosed and treated by endoscopy**
 - E. High mortality
18. One of the following causes of portal hypertension is caused by Presinusoidal intrahepatic pathology:
- A. Veno-occlusive disease
 - B. Schistosomiasis**
 - C. Viral hepatitis
 - D. Alcohol Hepatitis
 - E. Congestive heart failure
19. All of the following are subclinical presentations of Celiac disease except:
- A. Mood changes
 - B. Iron deficiency
 - C. B12 deficiency**
 - D. Unexplained elevation of liver enzymes
 - E. Recurrent abdominal pain
20. All of the following factors are associated with rapid progression of chronic hepatitis C to cirrhosis except:
- A. Acquiring the infection at older age
 - B. Female sex**
 - C. Alcohol use
 - D. HIV Co-infection
 - E. HBV Co-infection
21. The most common complication after Endoscopic retrograde cholangiopancreatography (ERCP) is:
- A. Perforation**

B. Pancreatitis

- C. Cholangitis
- D. Bleeding
- E. Sepsis

22. All of the following regarding Vibrio Cholera except:

- A. Most vibrio cholera infections are Asymptomatic.
- B. Antibiotic therapy is effective in decreasing mortality.**
- C. Transmission by Contaminated Water and Food and very rarely by person-to- person transmission.
- D. Requires large inoculum to get the infection
- E. "Rice water" diarrhea is characteristic feature.

23. All of the following are risk factors for Squamous cell carcinoma of the esophagus except:

- A. Zinc Deficiency
- B. Low serum Selenium
- C. Infection with Human Papilloma virus
- D. Chronic Gastroesophageal reflux disease**
- E. Alcoholism

24. All of the following are accepted initial management strategies in patients with upper GI bleeding except:

- A. Somatostatin
- B. Bleeding scan**
- C. Esophagogastroduodenoscopy EGD
- D. Acid suppressive medication
- E. Gastric Lavage

25. Wilson's disease should be considered in all of the following medical scenarios except:

- A. Abnormal liver enzymes and non-immune hemolytic anemia
- B. Exaggerated high bilirubin level and depressed serum alkaline phosphatase
- C. Decrease serum ceruloplasmin
- D. Elderly patients with neuropsychiatric problem**
- E. Fulminant liver failure with low uric acid

26. All of the following medications are being used for Non Alcohol steatohepatitis NASH except:

- A. Betaine
- B. Ursodeoxycholic acid
- C. Ribavirin**
- D. Vitamin E
- E. Beta- Carotene

27. In treatment of patients with Spontaneous Bacterial peritonitis, all of the following are true except:

- A. Initiate therapy when ascitic fluid Neutrophils > 250/mm²

- B. Majority sterile at presentation (culture negative)
- C. Gentamycin is the drug of choice**
- D. Treat for at least 5 days
- E. 30% of patients are Asymptomatic at presentation and during follow up

28. In regard to hepatitis C and pregnancy, all of the following is true except:

- A. The rate of transmission from mother to baby during delivery is around 6%.
- B. Transmission is higher in vaginal delivery comparing to ceserian.**
- C. Higher rate of transmission is seen if the mother is co-infected with HIV
- D. Severe hepatitis is rare in infected infants Breast-feeding is safe

29. All of the following medications are being used in chronic hepatitis B except:

- A. Lamivudine
- B. Ribavirin**
- C. Pegylated interferon
- D. Adefovir Dipivoxil
- E. Entecavir

30. All of the following micro organisms can cause infectious diarrhea with positive fecal leucocytes except:

- A. Shigella
- B. Yersinia
- C. Giardia**
- D. Campylobacter
- E. Salmonella

31. All of the following are protective from colo-rectal cancer except:

- A. Aspirin
- B. Folic Acid
- C. Fiber Diet
- D. Calcium
- E. Moderate use of Alcohol**

23. A 32-year-old alcoholic with shock due to bleeding oesophageal varices. After resuscitation. Which ONE of the following is the treatment of choice.

- a- intravenous octreotide. b- intravenous glypressin
- c- **oesophagial variceal endoscopy ligation**
- d- Transjugulartranshepatic portocaval shunt (TIPS) e- oesophagial variceal sclerotherapy

24 A 65-year-old man with liver cirrhosis presented with ascitis, abdominal pain, tenderness and peripheral edema. A diagnostic tap revealed a neutrophil count of 400 /mm³ (normal < 250).

Which ONE of the following would be of the most immediate benefit ? a- Fluid restriction and no added salt diet.

- b- Intravenous antibiotics.
- c- Oral spironolactone.
- d- Therapeutic paracentesis
- e- Trans-jugular intrahepatic porto-systemic shunt.

5

25. All the following are recognized complications of Hepatitis C infection Except. a- diffuse proliferative glomerulonephritis.

- b- hepatocellular carcinoma
- c- liver cirrhosis
- d- chronic hepatitis C infection
- e- cryoglobulinemia

26 ONE of the following tests is most suitable in screening patients for celiac disease. a- Anti-casein antibodies

- b- Anti-endomyseal antibodies
- c- Anti-gliadin antibodies
- d- ESR
- e- Alpha feto protein.

57. A 54- year- old male with Child's grade C hepatic encephalopathy presents with haemetemesis. Which ONE of the following is most appropriate immediate therapy?

- a. i.v desmopressin
- b. i.v isosorbide dinitrate
- c. i.v. omperazole
- d. i.v. propranolol
- e. i.v. somatostatin.

58. All the following are risk factors for development of peptic ulcer disease Except.

- a. daily use of NSAID
- b. gastric infection with H.pylori
- c. sever emotional stress.
- d. cigarette smoking
- e. gastrin-secreting tumors.

78. All the following antibiotics may be used in treatment of H.pylori Except. a- amoxicillin

- b- tetracycline
- c- metronodazole
- d- clarithramycin
- e- Streptomycin

38. One of the following is least likely feature of hemochromatosis:

- a. Fulminant liver failure

- b. Psuedogout
- c. Diabetes
- d. Bronze skin
- e. Hepatocellular carcinoma

39. All the following are subclinical presentations of celiac disease, except:

- a. Mood changes
- b. Iron def **c. B12 dfe**
- d. Unexplained elevation of liver enzymes
- e. Recurrent abdominal pain

Ans: C (Mild to moderate anemia is present in 50% of cases. Folate deficiency is common, often causing macrocytosis. B12 deficiency is rare. Iron deficiency due to malabsorption of iron and increased loss of desquamated cells is common).

40. All of the following are associated with rapid progression of chronic hepatitis C to cirrhosis, except:

- a. Acquiring the infection at older age **b. Female sex**
- c. Alcohol use
- d. HIV co-infection
- e. HBV co-infection Ans: Female sex (akeed)

41. The most common complication after ERCP: answer: b

45. All of the following are initial management strategies in patients with upper GI bleeding, except:

- a. Somatostatins **b. Bleeding scan**
- c. Esophagogastroduodenoscopy
- d. Acid suppressing medication
- e. Gastric lavage Answer: b

46. Wilson's disease should be considered in all of the following medical scenarios, except:

- a. Abnormal liver enzymes and non-immune hemolytic anemia
- b. Exaggerated high bilirubin level and depressed alkaline phosphatase **c. Decreases serum ceruloplasmin**
- d. Elderly patient with neuropsychiatric problem
- e. Fulminant liver failure with low uric acid

47. All of the following medications are being used for non-alcohol steatohepatitis (NASH), except:

- a. Betaite
- b. Ursodeoxycholic acid
- c. **ribaverin**
- d. Vitamin e
- e. Beta carotene Answer: C (akeed)

48. All of the following medications are being used in chronic hepatitis B, except:

- a. Lamivudine **b. Ribavirin**

- c. Pregylded interferon
- d. Adefovir dig
- e. Entovavir

49. All of the following micro-organisms can cause infectious diarrhea with positive fecal leucocytes, except:

- a. Shigella
- b. Yersinia
- c. Giardia
- d. Campylobacter
- e. Salmonella

50. All of the following are protective from colo-rectal cancers, except:

- a. Aspirin
 - b. Folic acid
 - c. Fier diet
 - d. calcium
 - e. moderate use of alcohol
- Answer: E.

51. The most common cause of GI bleeding is:

- a. Peptic ulcer disease

52. Regarding achalasia, all of the following are true, except:

- a. There is increase of intramural inhibitory signals

53. Regarding Crohn's disease, all of the following are true, except:

- a. The rectum is often spared
- b. Fistulae and abscesses can occur in patients with colo-rectal Crohn's
- c. The disease is limited to the mucosa
- d. The mucosa can appear as cobble stone

54. All of the following are true regarding ulcerative colitis, except:

- a. Azathioprine can be used in treatment
- b. Maybe associated with Pyoderma gangrenosum
- c. Patients may be P-ANCA positive
- d. The rectum is never involved

55. Regarding IBD, all of the following are true, except:

- a. UC patients usually smoke more than Crohn's patients (Unlike Crohn's disease, ulcerative colitis has a lesser prevalence in smokers than non-smokers.)
- b. Incidence is about 7/100,000
- c. Jewish affected more often than Asians
- d. Iliocolic area is frequently involved in Crohn's disease

Haematology

6. Increased bleeding time and PTT is found in ONE of the following. a- hemophilia A

b- hemophilia B (Xmas disease) c- Von Willebrand disease

d- treatment with warfarin

e- idiopathic thrombocytopenic purpura

7. All the following may be found in Iron deficiency anemia Except. a- Red cell distribution width (RDW) is less than 13.

b- microcytic RBC c- low serum ferritin d- low serum iron

e- increased TIBC

8. Bilateral hilar lymph nodes enlargement occurs commonly in all the following Except. a- pulmonary Tuberculosis

b- chronic myeloid leukemia c- non-Hodgkins lymphoma d- Hodgkin lymphoma

e- sarcoidosis

9. All the following may be found in Intravascular hemolysis Except. a- increased unconjugated bilirubin

b- increased haptoglobin

c- increased methemalbumin d- reticulocytosis

10. All the following are causes of WORM autoimmune hemolytic anemia Except. a- SLE

b- chronic lymphocytic leukemia c- methyl dopa

d- infectious mononucleosis e- non-Hodgkins lymphoma

42. A peripheral blood film shows hypersegmented neutrophils. What is the most likely ONE cause for this ?

a. Iron deficiency anemia

b. myelofibrosis

c. thalassemia major

d. thalassemia minor

e. megaloblastic anemia

43. All the following may be used in treatment of idiopathic thrombocytopenic purpura Except.

a. oral prednisolone. b. Fresh frozen plasma

c. splenectomy

d. I.V. immunoglobulin

44. A 23-year-old woman presents with lethargy, the following blood results are obtained. Hb 10.4 g/dl, platelet $268 \times 10^9/L$, WBC $6.3 \times 10^9/L$, MCV 65 fl, Hb A2 9% (NORMAL < 3.5%),

Which ONE of the following is the most likely diagnosis? **a. B-Thalassemia minor**

- b. B-Thalassemia major
- c. sickle cell anemia
- d. hereditary spherocytosis
- e. G6PD deficiency

45. A 70-year-old woman is referred to hospital due to evidence of congestive heart failure. Blood test reveals the following: Hb 7.4 g/dl, MCV 124 fl, platelets $98 \times 10^9/L$, WBC $3 \times 10^9/L$,

All the following investigations are required to reach a diagnosis Except.

- a. Schilling test
- b. Intrinsic factor antibodies
- c. antiparietal cell antibodies
- d. bone marrow aspiration, looking for megaloblasts
- e. C-reactive protein.**

46. Splenomegaly may be found in all the following Except.

- a. polycythemia rubra vera
- b. essential thrombocythemia
- c. portal hypertension
- d. thalassemia minor.**
- e. myelofibrosis.

47. A patient with Hodgkin's lymphoma, has cervical lymphadenopathy with splenomegaly. He has no fever, weight loss or drenching sweating.

His clinical staging is ONE of the following.

- a. stage I
- b. stage II
- c. stage III
- d. stage III**
- e. stage IV

49. All the following may be found in polycythemia rubra vera Except.

- a. elevated WBC
- b. elevated platelets
- c. splenomegaly
- d. elevated serum uric acid
- e. high erythropoietin level

50. Coomb's test is positive in ONE of the following. a. warm autoimmune hemolytic anemia

- b. hereditary spherocytosis
- c. G6PD deficiency
- d. paroxysmal nocturnal hemoglobinuria
- e. malaria

59. Which ONE of the following is LEAST associated with hemochromatosis.

- a. cardiomyopathy
- b. hypogonadism
- c. Chorea.
- d. diabetes mellitus
- e. liver cirrhosis.

61. All the following are true about thalassemia major Except a. Hb electrophoresis shows mainly increase in Hb A2

failure to thrive with short stature

- b. severe anemia
- c. hepatosplenomegaly
- d. treatment is by blood transfusion with iron chelating agent (desferrioxamine)

Rheumatology and bone disease

21) What is swan neck deformity in RA :

- A) Hyper flexion of proximal interphalangeal (PIP) and hyper extension of distal interphalangeal (DIP).
- B) Hyper extension of PIP and hyper flexion of DIP.
- C) Hyper extension of PIP and hyper extension of DIP.
- D) Subluxation of Metacarpophalangeal.
- E) Non of the above.

22) Which disorder is diagnosed by the presence of calcium pyrophosphate in synovial fluid:

- A) Chondro calcinosis.
- B) Gouty arthritis.
- C) Psoriatic arthritis.
- D) Psoriatic arthritis.
- E) O.A

23) A patient present with B-Asthma mono neuritis multiplex-esoino phila. ANCA positive ; what is the most likely diagnosis :

- A) SLE.

B) Wegner granulomatosis. C) Microscopic polyangiitis. D) Good pasture.
E) Curr-j-strass.

24) Which of the statements isn't true according to myositis : A) Inclusion body myositis take a good prognosis.

B) Helio trope rash is highly specific for dermatomyositis.

C) steroid is corner stone for treatment. D) Statin's can induced myositis.

E) Subcutaneous calcification a frequent manifestation in juvenile dermatomyositis.

25) A disease modifying anti rheumatic drugs (DMARD) include all of the following except for :

A) Salazopyrine. B) Hydroxychloroquine. C) Colchicine.

D) Methotrexate E) Leflenamide

26) All of the following are criteria for Behcet disease except for : A) Mouth ulcer's.

B) Arterial Anuyresm . C) Hypopyron..

D) Pethergy test. E) Acne-like lesion

27) All of the following are criteria for SLE A) Anti RNP.

B) Mouth ulcer's. C) ANA.

D) Photosensitivity. E) Leukopenia.

28) One of the following deformities can't be caused by RA: A) Swan neck deformity.

B) Genu valgua.

C) Elbow flexion.

D) Bouchard nodules.

E) Z deformity of thumb.

29) All of the following are indications for the treatment of Gouty arthritis except for: A) Chronic Gouty arthritis.

B) Renal stones.

C) Renal failure.

D) Serum uric acid more than 8mg in men. E)All of the above.

30) One of the following isn't a characteristic for spondyloarthropathy: A)Strong association with HLA-B27.

B)Occasional Aortitis.

C)Assocoation with chronic inflammatory bowel disease. D)Tendency for posterior uveitis.

E)Enthesitis.

31) The _____ isn't a cause of secondary sjogren: A)Reactive arthritis.

B)SLE.

C)Scleroderma.

D)RA.

E)Hypothyroctism.

32) Differential diagnosis of sacroiliitis includes all of the following except for: A)Psoriatic.

B)Behcet disease. C)Aukylosing spondylitis. D)Reactive arthritis.

E)Chron disease.

33) Boutonniere deformity is seen in:

- A) RA.
- B) Psoriatic arthritis. C) Reactive arthritis.
- D) Osteoarthritis. E) Tenosynovitis of hand.

34) All of the following are ANCA associated vasculitis except for: A) Microscopic polyangiitis.

- B) Churg-Strauss vasculitis. C) Kawasaki syndrome.
- D) Wegner granulomatosis.
- E) All of the above.

19. A healthy patient who is HLA-B27 is most likely to develop ONE of the following. a- psoriatic arthritis

b- enteropathic spondylitis c- gonococcal arthritis

d- Reiter's disease

e- ankylosing spondylitis

22. All the following are true about gout except:

a- Is caused by deposition of monosodium urate monohydrate crystals in the joints. b- It is an asymmetric arthritis.

c- Can be caused by thiazide diuretics.

d- It is commoner in females than males 4:1.

e- Attack of gout can be triggered by dehydration. f-

- g- 30. Rheumatoid factor is positive in all the following diseases except: h- a.- Rheumatoid arthritis
i- b- dermatomyocytis
j- c- ankylosing spondylitis
k- d- discoid lupus erythematosus
l- e- mixed connective tissue diseases.

53. A 25-year old man presents with urethritis, painful swollen left knee and conjunctivitis.

ONE of the following is most likely diagnosis. a- SLE

- b- Gonococcal arthritis
- c- Gout
- d- Reiter's syndrome
- e- Ankylosing spondylitis

62. All the following are true about rheumatoid arthritis except. a- it is chronic disease, but curable.

- b- it is commonly associated with positive rheumatoid factor
- c- antimalarial treatment is one of the lines of management.
- d- the patients with the disease are liable to infection
- e- this disease may affect the patients functionally.

63. All the following are true about uric acid metabolism except. a- 2/3 of body uric acid pool is dietary in origin

- b- 2/3 is from endogenous purine metabolism
- c- 2/3 of uric acid is excreted by the kidney
- d- serum uric acid is increased in polycythemia rubra vera
- f- serum uric acid is increased in eclampsia of pregnancy.

64- All the following are poor prognostic signs in scleroderma except. a- old age of onset.

- b- limited skin involvement.
- c- high ESR
- d- renal involvement
- e- pulmonary hypertension

65. Pathergy test is positive in one of the following diseases. a- Behcet's syndrome

- b- Kawasaki disease
- c- erythema multiforme
- d- osteoarthritis
- e- rheumatoid arthritis

67. A 50-year old woman has pain in her fingers on exposure to cold, arthralgia, and difficulty in swallowing solid food.

The most useful One test to make a definitive diagnosis is a- rheumatoid factor

- b- anti-nuclear antibody
- c- ECG

d- Blood urea and serum creatinin e- anti-mitochondrial antibody

92. ONE of the following is not a disease –modifying anti-rheumatoid arthritis drug. a- sulfasalazine

b- NSAIDs

c- methotrexate d- leflunamide

e- sodium aurothiomalate (Gold)

98. All the following are true regarding the pathogenesis of lupus erythematosus except. a- the exact cause is unknown.

b- It is a chronic inflammatory disease.

c- the basic pathological unit is vasculitis

d- **it is due to type I hypersensitivity reaction.**

e- genetic and environmental factors may play a role in the disease.

100. Repeated multiple mouth ulcers are seen in the following conditions EXCEPT: a- Behcet's disease.

b- Systemic lupus erythematosus. c- Herpes simplex virus infection. **d- Ankylosing spondylitis.**

e- Mental stress.

26. A 70-year-old man with 3 months headache, stiffness, low grade fever, jaw claudication, and amuresiss fugax, his ESR is 100, all of the following statements are true regarding this condition, except:

a. Increased risk of permanent blindness

b. Tongue claudication

c. Weight loss

d. **Drug therapy can only be started after tissue biopsy**

e. Dramatic response to steroids

27. All of the following are true about vasculitis, except:

a. PAN is associated with hypertension

b. Wegner granulomatosis is associated with +ve C-ANCA

c. **Hypersensitivity vasculitis mainly presents with large vessel involvement of the aortic arch vessels in females younger than 40 years of age.**

d. Giant cell arteritis affects mainly people above the age of 50

e. Churg-struss disease occurs in people with history of atopy

28. Which of the following associations is true?

a. Hepatitis a with PAN

b. RF and Riter's syndroe

c. **Giant cell arteritis and blindness**

d. RA and addison's disease

e. TB and reactive arthritis

29. Which of the following is true about septic arthritis?

a. **Hematogenous spread is the most common route of infection**

b. Joint involvement is typically episodic recurrent polyarticular

c. Almost always occur in normal joints

d. Presence of urate crystals exclude its diagnosis

e. Gram negative bacteria is the leading cause f.

30. Which statement about rheumatoid arthritis is not correct?

a. **The commonest cause of anemia seen in pts with the diseas is due to hemolysis?**

b. Synovitis characerisically involves Metarasephalangeal joints

c. RF is of an IGM type

- d. Joint effusions occur in the first several months
- e. Felty's disease is more common in seropositive patients

31. Which antibody is rather specific for diffuse scleroderma?

- a. Anticentromere AB
- b. Anti-myeloperoxidase AB (p-ANCA)
- c. Anti-Jo1 AB
- d. Antimitochondrial AB
- e. Anti-Scl70

32. All of the following statements about gout are true, except:

- a. In adult men the solubility of monosodium urate is 7 mg/dL
- b. Women of child-bearing age have lower serum uric acid
- c. Initial treatment of acute attack should include NSAIDs, colchicine, and allopurinol
- d. Diuretics should elevate serum uric acid
- e. Attacks can be precipitated by acute MI.

Answer: C (allopurinol and colchicine never in acute treatment)

1) 35 year old man presented to ER after an episode of Grand mal seizure and by exam he was afebrile , Bp 130/95 and confused .

Labs showed : Cr 1.0 mg/dl , BUN 12mg/dl , Na 140 meq/L , K 4.8 meq /L , Cl 100 meq/L , HCO₃ 12 meq/L .

ABG : PH 7.25 , PCO₂ 28 mmHg , HCO₃ 12 meq/L .

Which of the following is the most appropriate initial treatment for the Metabolic Acidosis :

a. Observation and repeat ABG in 2 hours

b. NaHCO₃ 2 ampoules (100 meq) by Iv push

c. L of 5 % dextrose in H₂O & HCO₃ 3 ampoules (150 meq) infused over 3 hours Hemodialysis

d. Fomepizole

2) All the following affect short term survival in kidney transplant except :

a) Delayed Allograft function HLA antibodies

b) Acute rejection

c) Type of Donor kidney

d) Donor illness

3) 25 year old man was found to have microscopic hematuria by chance . Urine analysis showed many RBC /HPF, no RBC casts , no Dysmorphic RBC

a) IVP showed Medullary Sponge Kidney , but no stones

b) The most appropriate counseling for this patient includes which of the following :

c) Advice him that this disorder is likely to progress to CRF over 10-20 years

d) Advice him that this is a benign finding , there may be a risk for nephrolithiasis but it never progresses to Renal failure

e) Advice him to have his children undergo genetic testing and get treatment early Advice him that ACE inhibitor can modify course of disease

4)) All the following are mechanism – drug induced Hyperkalemia except :

a) Trimethoprim inhibits Na channels

b) cyclosporin and Cl shunting

c) Heparin decreases Aldosterone level

d) Digoxin inhibits K-ATP ase

e) NSAID blocks PG stimulated Renin secretion

5) 35 year old female is evaluated because of an elevated Bp 160/105 for the past 2-3 months . Her mother has hypertension and kidney disease , and a maternal aunt is now on hemodialysis

Labs : Cr 0.8 mg/dl , Na 140 meq/ L , K 5.0 meq /L , Cl 102 meq / L , HCO₃ 25 MEQ / l , Urine Analysis is negative

Which of the following is most likely to provide information regarding cause of her hypertension .

- a) Captopril Renal Scan
- b) 24 hour urine for Vanillyl Mandelic Acid
- c) **Renal U/S**
- d) Plasma Renin activity & aldosterone level Plasma PTH

6) All the following are Renal changes expected in normal pregnancy except :

- a) Dilation of pelvicaliceal system
- b) **Serum HCO₃ is 4-5 mmol/L higher than normal**
- c) GFR increase by 35-50 %
- d) Serum osmolality decreases by 10 mosmol/L Renal length increases by 1 cm on U/S

7) 50 year old man has history of recurrent kidney stones which were Ca containing stones .

- a) **All of the following are risk factors for formation of these stones except :**
- b) Hypercalciuria
- c) Hyperoxaluria
- d) Low urine volume
- e) **Hypercitrauria Hyperuricosuria**

6) All the following can be clinical & lab manifestations of hypokalemia except :

- a) Nephrogenic
- b) DI
- c) Tubular vacuolization
- d) Rhabdomyolysis
- e) **Decreased Aminoacidogenesis Tetany**

9) According to National kidney foundation guidelines . All the following are acceptable target PTH levels in CRF as per stage except :

- a) Stage I , PTH 10-65 pg /ml
- b) Stage II 25-50 pg/ml**
- c) Stage III 35 -70 pg/ml
- d) Stage IV 70-110 pg/ml
- e) Stage V 150-300 pg/ml

10) All the following diuretic site of action combinations are true except :

- a) Indapamide is a Na channel blocker in CD**
- b) Ethacrynic acid blocks NaK₂Cl in TALH
- c) Acetazolamide inhibits CA in PT
- d) Spironolactone inhibits Aldosterone in Principal cell
- e) Mannitol act on both PT & TALH

11) 30 year old male has IDDM for the past 15 years , now presenting with lower limb edema . Cr 2.0 mg/dl , urea 70 mg/dl . 24 hour urine collection 4.0 gm/24 hrs

All the following have a role in the progression of his renal disease except :

- a) Degree of Mesangial expansion on kidney biopsy
- b) Decrease in intraglomerular pressure**
- c) Duration since onset of DM
- d) Amount of proteinuria Quitting smoking

12) All the following are true about Focal Segmental Sclerosis (FSGS) except :

- a) **Familial type has better prognosis**

- b) Progresses fast in Renal failure
- c) Collapsing type is associated with
- d) HIV Recurrence after transplant is high
- e) Main presentation is Nephrotic syndrome

13) 25 year old female presented to OPD with Bp 160/100 , she stated that her Bp was the same over the past 2 weeks .

All the following are first line investigations for this patient except :

- a) Urine analysis
- b) Lipid profile
- c) Fasting blood sugar
- d) **MRA for renal arteries**

14) 35 year old female previously healthy presented to ER c/o generalised weakness , Bp 110/80 . Irregular irregular pulse

Labs : K 2.5 meq / L , Cl 100 meq /L , Na 135 meq /L ABG : PH 7.48 , HCO₃ 30 meq/L , PCO₂ 40 mm Hg

All the following can be in the differential diagnosis of this case except :

- a) Bulimia
- b) Barter syndrome
- c) Hypercalcemia
- d) **Primary Hyperaldosteronism**
- e) Diuretic abuse

15) 20 year old male came to OPD with c/o of passing red urine , which was preceded by URTI the previous morning .Upon exam Bp 170/95 otherwise Negative :All the following can present in the above disease except :

- a) More common in males May run in families
- b) Mesangial expansion by kidney
- c) iopsy Symptoms may recur with
- d) uture URTI
- e) **Low complement**

16) 25 year old female was admitted to hospital with referred to OPD due to incidental finding of the following labs & ABG :

PH 7.32 , HCO₃ 15

Cr 1.0 mg/dl , urea 35 meq/l , Na 135 meq /L , Cl 110 meq/l

All the following may cause the above except :

- a) Acetazolamide
- b) treatment Fanconi syndrome
- c) **Treatment with Thiazide**
- d) Primary hyper parathyroid Diarrhea

17) Platelets	65 * 10 ⁹ /l
WCC	11.1 * 10 ⁹ /l
Urea	23.1 mmol/l
Creatinin	366 μmol/l

What is the most likely diagnosis?

- A. Wegener's granulomatosis
- B. **Thrombotic thrombocytopenic purpura**
- C. **Haemolytic uraemic syndrome**
- D. Idiopathic thrombocytopenic purpura
- E. Rapidly progressive glomerulonephritis

- HUS or TTP? Neuro signs and purpura point towards TTP

The combination of neurological features, renal failure, pyrexia and thrombocytopenia point towards a diagnosis of thrombotic thrombocytopenic purpura

Thrombotic thrombocytopenic purpura

Pathogenesis of thrombotic thrombocytopenic purpura (TTP)

- abnormally large and sticky multimers of von Willebrand's factor cause platelets to clump within vessels
- in TTP there is a deficiency of caspase which breakdowns large multimers of von Willebrand's factor
- overlaps with haemolytic uraemic syndrome (HUS)

Features

- rare, typically adult females
- fever
- fluctuating neuro signs (microemboli)
- microangiopathic haemolytic anaemia
- thrombocytopenia
- renal failure

Causes

- post-infection e.g. urinary, gastrointestinal
 - pregnancy
 - drugs: ciclosporin, oral contraceptive pill, penicillin, clopidogrel, aciclovir
 - tumours
 - SLE
 - HIV
-

2-A 25-year-old man has a renal biopsy due to worsening renal function. This reveals linear IgG deposits along the basement membrane. What is the most likely diagnosis?

- A. Systemic lupus erythematosus
- B. IgA nephropathy
- C. Minimal change disease
- D. Post-streptococcal glomerulonephritis
- E. **Goodpasture's syndrome**

These changes are characteristic of Goodpasture's syndrome

Goodpasture's syndrome

Goodpasture's syndrome is rare condition associated with both pulmonary haemorrhage and rapidly progressive glomerulonephritis. It is caused by anti-glomerular basement membrane (anti-GBM) antibodies against type IV collagen. Goodpasture's syndrome is more common in men (sex ratio 2:1) and has a bimodal age distribution (peaks in 20-30 and 60-70 age bracket). It is associated with HLA DR2

Features

- pulmonary haemorrhage
- followed by rapidly progressive glomerulonephritis

Factors which increase likelihood of pulmonary haemorrhage

- young males
- smoking
- lower respiratory tract infection
- pulmonary oedema
- inhalation of hydrocarbons

Investigations

- renal biopsy: linear IgG deposits along basement membrane
- raised transfer factor secondary to pulmonary haemorrhages

Management

- plasma exchange
- steroids
- cyclophosphamide

3- Which one of the following is the most common cause of nephrotic syndrome in children?

- A. Minimal change disease
- B. IgA nephropathy
- C. Focal segmental glomerulosclerosis
- D. Chronic pyelonephritis
- E. Infantile microcystic disease

Minimal change glomerulonephritis nearly always presents as nephrotic syndrome, accounting for 75% of cases in children and 25% in adults. The main causes are drugs (NSAIDs, gold), Hodgkin's lymphoma and thymoma. The majority of cases respond well to steroids

Glomerulonephritides

Knowing a few key facts is the best way to approach the difficult subject of glomerulonephritis:

Membranous glomerulonephritis

- presentation: proteinuria / nephrotic syndrome / CRF
- cause: infections, rheumatoid drugs, malignancy
- 1/3 resolve, 1/3 respond to cytotoxics, 1/3 develop CRF

IgA nephropathy - aka Berger's disease, mesangioproliferative GN

- typically young adult with haematuria following an URTI

Diffuse proliferative glomerulonephritis

- classical post-streptococcal glomerulonephritis in child
- presents as nephritic syndrome / ARF

Minimal change disease

- typically a child with nephrotic syndrome (accounts for 80%)
- causes: Hodgkin's, NSAIDs
- good response to steroids

Focal segmental glomerulosclerosis

- may be idiopathic or secondary to HIV, heroin
- presentation: proteinuria / nephrotic syndrome / CRF

Rapidly progressive glomerulonephritis - aka crescentic glomerulonephritis

- rapid onset, often presenting as ARF
- causes include Goodpasture's, ANCA positive vasculitis, SLE

Mesangiocapillary glomerulonephritis (membranoproliferative)

- type 1: cryoglobulinaemia, hepatitis C
- type 2: partial lipodystrophy

4-A 5-year-old boy is seen in A&E due to lethargy and pallor. There is no recent history of diarrhoea. The following results are obtained:

Hb 8.4 g/dl

Platelets 30 * 10⁹/l
Urea 24 mmol/l

Creatinine 164 µmol/l

Urinalysis reveals proteinuria and haematuria. What is the most appropriate management?

- A. IV cyclophosphamide
- B. Ciprofloxacin
- C. Oral prednisolone
- D. IV methylprednisolone followed by oral prednisolone
- E. Plasma exchange

There is no role for antibiotics, steroids or immunosuppressants in haemolytic uraemic syndrome (HUS). Plasma exchange may be indicated, particularly in severe cases of HUS not associated with diarrhoea

Haemolytic uraemic syndrome

Haemolytic uraemic syndrome is generally seen in young children Causes

- post-dysentery - classically E coli 0157:H7 ('verotoxigenic', 'enterohaemorrhagic')
- tumours
- pregnancy
- ciclosporin, the Pill
- systemic lupus erythematosus
- HIV

Management

- treatment is supportive e.g. fluids, blood transfusion and dialysis if required
- there is no role for antibiotics, despite the preceding diarrhoeal illness in many patients

- the indications for plasma exchange in HUS are complicated. As a general rule plasma exchange is reserved for severe cases of HUS not associated with diarrhoea

5- Which

of the following types of renal tubular acidosis is associated with hyperkalaemia?

- A. Type 1 renal tubular acidosis
- B. Type 2 renal tubular acidosis
- C. Type 3 renal tubular acidosis
- D. Type 4 renal tubular acidosis
- E. Type 5 renal tubular acidosis

Type 4 renal tubular acidosis is associated with hyperkalaemia

Renal tubular acidosis

All three types of renal tubular acidosis (RTA) are associated with hyperchloraemic metabolic acidosis (normal anion gap)

Type 1 RTA (distal)

- inability to generate acid urine (secrete H⁺) in distal tubule
- causes hypokalaemia
- complications include nephrocalcinosis and renal stones
- causes include idiopathic, RA, SLE, Sjogren's

Type 2 RTA (proximal)

- decreased HCO₃⁻ reabsorption in proximal tubule
- causes hypokalaemia
- complications include osteomalacia
- causes include idiopathic, as part of Fanconi syndrome, Wilson's disease, cystinosis, outdated tetracyclines

Type 4 RTA (hyperkalaemic)

- causes hyperkalaemia
- causes include hypoaldosteronism, diabetes

year-old woman with a history membranous glomerulonephritis secondary to systemic lupus erythematosus is admitted to hospital. Her previous stable renal function has deteriorated rapidly. The following blood tests were obtained:

Na⁺ 139 mmol/l

K⁺ 5.8 mmol/l

Urea 44 mmol/l

Creatinine 867 μmol/l

Albumin 17 g/l

Urinary protein 14 g/24 hours

Urine dipstick protein +++
blood ++

What has likely caused the sudden deterioration in renal function?

- A. Exacerbation of SLE
- B. Renal vein thrombosis
- C. Bilateral hydronephrosis
- D. Acute interstitial nephritis
- E. Analgesic nephropathy

Nephrotic syndrome predisposes to thrombotic episodes, possibly due to loss of antithrombin III. These commonly occur in the renal veins and may be bilateral. Common symptoms include loin pain and haematuria

Nephrotic syndrome: complications

Complications

- increased risk of infection due to urinary immunoglobulin loss
- increased risk of thromboembolism related to loss of antithrombin III and plasminogen in the urine
- hyperlipidaemia
- hypocalcaemia (vitamin D and binding protein lost in urine)
- acute renal failure

one of the following types of glomerulonephritis is most characteristically associated with partial lipodystrophy?

- A. Minimal change disease
- B. Diffuse proliferative glomerulonephritis
- C. **Mesangiocapillary glomerulonephritis**
- D. Membranous glomerulonephritis
- E. Rapidly progressive glomerulonephritis

Type 2 mesangiocapillary glomerulonephritis is associated with partial lipodystrophy. Type 1 is seen in association with hepatitis C and cryoglobulinaemia

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8- What is the most common site for extra-renal cysts in a patient with autosomal dominant polycystic kidney disease (ADPKD)?

- A. Pancreas
- B. Brain
- C. Liver
- D. Spleen
- E. Thyroid

Most common location of extra-renal cysts in ADPKD is liver

Liver cysts are present in 70% of patients with ADPKD. Around 8% of patients have berry aneurysms

ADPKD features

Features

- hypertension
- recurrent UTIs
- abdominal pain
- renal stones
- haematuria
- CRF

Extra-renal manifestations

- liver cysts (70%)
- berry aneurysms (8%)
- CVS: mitral valve prolapse, mitral/tricuspid incompetence, aortic root dilation, aortic dissection
- cysts in other organs: pancreas, spleen, thyroid

9- A 65-

year-old female with a 20 year history of rheumatoid arthritis is referred to the acute medical unit with bilateral leg oedema. The following results are obtained:

Urea 11.2 mmol/l

Creatinine 205 µmol/l

Albumin 26 g/l

Bilirubin 12 mmol/l

ALP 120 IU/l

Urine protein 6.2 g/24 hours

Which investigation is most likely to lead to the correct diagnosis?

- A. CT abdomen
- B. Plasma magnesium
- C. Intravenous urogram
- D. **Rectal biopsy**
- E. Renal angiogram



This rather odd question fooled most candidates when it appeared. The chronic inflammatory process (rheumatoid) predisposes to amyloidosis which in turn can cause nephrotic syndrome. Rectal biopsy is an (infrequent) test done to look for amyloidosis.

Rheumatoid drugs such as gold may cause nephrotic syndrome but none of the other options point to this as an answer

Amyloidosis: types

AL amyloid

- L for immunoglobulin Light chain fragment
- due to myeloma, Waldenstrom's, MGUS
- features include: cardiac and neurological involvement, macroglossia, periorbital ecchymoses

AA amyloid

- A for precursor serum amyloid A protein, an acute phase reactant
- seen in chronic infection/inflammation
- e.g. TB, bronchiectasis, rheumatoid arthritis
- features: renal involvement most common feature

Beta-2 microglobulin amyloidosis

- precursor protein is beta-2 microglobulin, part of the major histocompatibility complex
- associated with patients on renal dialysis

10-Which one of the following types of glomerulonephritis is most characteristically associated with Goodpasture's syndrome?

- A. Diffuse proliferative glomerulonephritis
- B. Mesangiocapillary glomerulonephritis
- C. Membranous glomerulonephritis
- D. Rapidly progressive glomerulonephritis
- E. Focal segmental glomerulosclerosis



Goodpasture's syndrome is rare condition associated with both pulmonary haemorrhage and rapidly progressive glomerulonephritis. It is caused by anti-glomerular basement membrane (anti-GBM) antibodies against type IV collagen

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- type 1: cryoglobulinaemia, hepatitis C
- type 2: partial lipodystrophy

11- Which one of the following is least recognised as a cause of membranous glomerulonephritis?

- A. Malaria
- B. Lymphoma
- C. Hepatitis B
- D. Cryoglobulinaemia
- E. Gold

Membranous glomerulonephritis

Membranous glomerulonephritis is the commonest type of glomerulonephritis in adults and is the third most common cause of end-stage renal failure (ESRF). It usually presents as nephrotic syndrome or proteinuria

Renal biopsy demonstrates:

- sub-epithelial immune complex (mainly IgG and C3) deposition in the glomerulus
- electron microscopy: the basement membrane is thickened with sub-epithelial electron dense deposits

Causes

- idiopathic
- infections: hepatitis B, malaria
- malignancy: lung cancer, lymphoma, leukaemia
- drugs: gold, penicillamine, NSAIDs
- systemic lupus erythematosus (class V disease)

Prognosis - rule of thirds

- one-third: spontaneous remission
- one-third: remain proteinuric
- one-third: develop ESRF

Management

- immunosuppression: steroids, chlorambucil e.g. Ponticelli regime
- BP control
- consider anticoagulation

12- Each one of the following is a recognised side-effect of erythropoietin, except:

- A. Urticaria
- B. Hypertension
- C. Bone aches
- D. Long bone fractures
- E. Pure red cell aplasia

Erythropoietin

Erythropoietin is a haematopoietic growth factor that stimulates the production of erythrocytes. The main uses of erythropoietin are to treat the anaemia associated with chronic renal failure and that associated with cytotoxic therapy

Side-effects of erythropoietin

- accelerated hypertension --> encephalopathy, seizures (blood pressure increases in 25% of patients)
- bone aches
- skin rashes, urticaria, flu-like symptoms
- pure red cell aplasia (due to antibodies against erythropoietin)
- raised PCV increases risk of thrombosis (e.g. fistula)
- iron deficiency 2nd to increased erythropoiesis

There are a number of reasons why patients may failure to respond to erythropoietin therapy

- iron deficiency
- inadequate dose
- concurrent infection/inflammation
- hyperparathyroid bone disease
- aluminium toxicity

13-A 10-year-old boy is taken to see the GP by his mother. For the past two days he has had a sore throat associated with blood in his urine. There is no significant past medical history. The GP suspects glomerulonephritis and refers the patient to hospital. What would a renal biopsy most likely show?

- A. Proliferation of endothelial cells
- B. No change
- C. Mesangial hypercellularity
- D. Basement membrane thickening

E. Capillary wall necrosis

This boy is likely to have IgA nephropathy. Histological features include mesangial hypercellularity and positive immunofluorescence for IgA & C3

IgA nephropathy

Basics

- also caused Berger's disease or mesangioproliferative glomerulonephritis
- commonest cause of glomerulonephritis worldwide
- pathogenesis unknown, ?mesangial deposition of IgA immune complexes
- histology: mesangial hypercellularity, positive immunofluorescence for IgA & C3

Differentiating between IgA nephropathy and post-streptococcal glomerulonephritis

- post-streptococcal glomerulonephritis is associated with low complement levels
- main symptom in post-streptococcal glomerulonephritis is proteinuria (although haematuria can occur)
- there is typically an interval between URTI and the onset of renal problems in post-streptococcal glomerulonephritis

Presentations

- young male, recurrent episodes of macroscopic haematuria
- typically associated with mucosal infections e.g., URTI
- nephrotic syndrome
- renal failure

Associated conditions

- alcoholic cirrhosis
- coeliac disease/dermatitis herpetiformis

Management

- steroids/immunosuppressants not be shown to be useful

Prognosis

- 25% of patients develop ESRF

Which one of the following would have been most likely to prevent the deterioration in renal function?

- A. Low dose dopamine
- B. Urinary acidification
- C. **Intravenous fluids**
- D. Frusemide
- E. Mannitol

Collapse + ARF --> rhabdomyolysis - treat with IV fluids

Intravenous fluids are the most important management step in the prevent of rhabdomyolysis in such patients

Rhabdomyolysis

Rhabdomyolysis will typically feature in the exam as a patient who has had a fall or prolonged epileptic seizure and is found to have acute renal failure on admission

Features

- acute renal failure with disproportionately raised creatinine
- elevated CK
- myoglobinuria
- hypocalcaemia (myoglobin binds calcium)
- elevated phosphate (released from myocytes)

Causes

- seizure
- collapse/coma (e.g. elderly patients collapses at home, found 8 hours later)
- ecstasy
- crush injury
- McArdle's syndrome
- drugs: statins

Management

- IV fluids to maintain good urine output
- urinary alkalinization is sometimes used

15-Which one of the following drugs may be safely continued at the same dose in renal failure?

- A. Tetracycline
- B. Diclofenac
- C. Warfarin
- D. Nitrofurantoin
- E. Lithium

Drugs in renal failure

Questions regarding which drugs to avoid in renal failure are common in the MRCP Drugs to avoid in renal failure

- antibiotics: tetracycline, nitrofurantoin
- NSAIDs
- lithium

Drugs likely to accumulate in renal failure - need dose adjustment

- most antibiotics including penicillins, cephalosporins, vancomycin, streptomycin
- digoxin, atenolol
- methotrexate
- sulphonylureas
- frusemide

Drugs relatively safe - use in normal dose

- antibiotics: erythromycin, rifampicin
- diazepam
- warfarin

_____16-Each of the following is a risk factor for renal stone formation, except:

- A. Renal tubular acidosis
- B. Cadmium

- C. Hyperparathyroidism
- D. Dehydration
- E. **Cystinosis**

Renal stones: risk factors

Risk factors

- dehydration
- hypercalciuria, hyperparathyroidism, hypercalcaemia
- cystinuria
- high dietary oxalate
- renal tubular acidosis
- medullary sponge kidney, polycystic kidney disease
- beryllium or cadmium exposure

Risk factors for urate stones

- gout
- ileostomy: loss of bicarbonate and fluid results in acidic urine, causing the precipitation of uric acid

Drug causes

- drugs that promote calcium stones: loop diuretics, steroids, acetazolamide, theophylline
- thiazides can prevent calcium stones (increase distal tubular calcium resorption)

17- Which one of the following causes of glomerulonephritis is associated with normal complement levels?

- A. Post-streptococcal glomerulonephritis
- B. Mesangiocapillary glomerulonephritis
- C. Subacute bacterial endocarditis
- D. **Goodpasture's syndrome**
- E. Systemic lupus erythematosus

Goodpasture's syndrome is a rare condition associated with both pulmonary haemorrhage and rapidly progressive glomerulonephritis. It is caused by anti-glomerular basement membrane (anti-GBM) antibodies against type IV collagen. Complement levels are normal

Glomerulonephritis and low complement

Disorders associated with glomerulonephritis and low serum complement levels

- post-streptococcal glomerulonephritis
- subacute bacterial endocarditis
- systemic lupus erythematosus
- mesangiocapillary glomerulonephritis

Autosomal dominant polycystic kidney disease type 1 is associated with a gene defect in:

- A. Chromosome 4
- B. Chromosome 8
- C. Chromosome 12
- D. **Chromosome 16**
- E. Chromosome 20

ADPKD type 1 = chromosome 16 = 85% of cases

ADPKD

Autosomal dominant polycystic kidney disease (ADPKD) is the most common inherited cause of kidney disease, affecting 1 in 1,000 Caucasians. Two disease loci have been identified, PKD1 and PKD2, which code for polycystin-1 and polycystin-2 respectively

ADPKD type 1

85% of cases

Chromosome 16

Presents with ESRF earlier

ADPKD type 2

15% of cases

Chromosome 4

The screening investigation for relatives is abdominal ultrasound: Ultrasound diagnostic criteria (in patients with positive family history)

- two cysts, unilateral or bilateral, if aged < 30 years
- two cysts in both kidneys if aged 30-59 years
- four cysts in both kidneys if aged > 60 years

year-old man is diagnosed with Goodpasture's syndrome. Which one of the following does not increase the likelihood of a pulmonary haemorrhage?

- A. Smoking
- B. Inhalation of hydrocarbons
- C. Male gender

- ✓ D. Dehydration
- E. Lower respiratory tract infection

Dehydration may decrease the likelihood of a pulmonary haemorrhage. Pulmonary oedema is associated with an increased risk

Goodpasture's syndrome

Goodpasture's syndrome is rare condition associated with both pulmonary haemorrhage and rapidly progressive glomerulonephritis. It is caused by anti-glomerular basement membrane (anti-GBM) antibodies against type IV collagen. Goodpasture's syndrome is more common in men (sex ratio 2:1) and has a bimodal age distribution (peaks in 20-30 and 60-70 age bracket). It is associated with HLA DR2

Features

- pulmonary haemorrhage
- followed by rapidly progressive glomerulonephritis

Factors which increase likelihood of pulmonary haemorrhage

- young males
- smoking
- lower respiratory tract infection
- pulmonary oedema
- inhalation of hydrocarbons

Investigations

- renal biopsy: linear IgG deposits along basement membrane
- plasma exchange
- steroids
- cyclophosphamide

20-A

patient with type 1 diabetes mellitus is reviewed in the nephrology outpatient clinic. He is known to have stage 1 diabetic nephropathy. Which of the following best describes his degree of renal involvement?

- A. Latent phase
- B. Hyperfiltration
- C. End-stage renal failure
- D. Overt nephropathy
- E. Microalbuminuria

For the purposes of the MRCP, increase in the glomerular filtration rate (GFR) is most characteristic of stage 1

diabetic nephropathy. It is however known that elevation of the GFR usually persists into stage 2

Diabetic nephropathy: stages

Diabetic nephropathy may be classified as occurring in five stages*:

Stage 1

- hyperfiltration: increase in GFR
- may be reversible

Stage 2 (silent or latent phase)

- most patients do not develop microalbuminuria for 10 years
- GFR remains elevated

- microalbuminuria (albumin excretion of 30 - 300 mg/day, dipstick negative)

Stage 4 (overt nephropathy)

- persistent proteinuria (albumin excretion > 300 mg/day, dipstick positive)
- hypertension is present in most patients
- histology shows diffuse glomerulosclerosis and focal glomerulosclerosis (Kimmelstiel-Wilson nodules)

Stage 5

- end-stage renal disease, GFR typically < 10ml/min
- renal replacement therapy needed

The timeline given here is for type 1 diabetics. Patients with type 2 diabetes mellitus (T2DM) progress through similar stages but in a different timescale - some T2DM patients may progress quickly to the later stages

21- Alport's syndrome is due to a defect in:



A. Type I collagen



B. Type II collagen



C. Type III collagen



D. Type IV collagen



E. Type V collagen

Alport's syndrome

Alport's syndrome is a hereditary condition, usually X-linked dominant but may be autosomal recessive or dominant. It is due to a defect in the gene which codes for type IV collagen resulting in an abnormal glomerular-basement membrane (GBM). The disease is more severe in males with females rarely developing renal failure

This may be caused by the presence of anti-GBM antibodies leading to a Goodpasture's syndrome like picture

Alport's syndrome usually presents in childhood. The following features may be seen:

- microscopic haematuria
- progressive renal failure
- bilateral sensorineural deafness
- retinitis pigmentosa
- lenticonus: protrusion of the lens surface into the anterior chamber

22-Which

one of the following may be useful in the prevention of calcium renal stones?

- A. Pyridoxine
- B. Allopurinol
- C. Lithium
- D. Ferrous sulphate
- E. **Thiazide diuretics**

Renal stones: management

Calcium stones

- high fluid intake
- low animal protein, low salt diet (a low calcium diet has not been shown to be superior to a normocalcaemic diet)
- thiazide diuretics (reduce distal tubule calcium resorption)
- stones < 5 mm will usually pass spontaneously
- lithotripsy, nephrolithotomy may be required

Oxalate stones

- cholestyramine reduces urinary oxalate secretion
- pyridoxine reduces urinary oxalate secretion

Uric acid stones

- allopurinol
- urinary alkalinization e.g. oral bicarbonate

23-Which

one of the following types of glomerulonephritis is associated with fusion of podocytes on electron microscopy?

- A. Membranous glomerulonephritis
- B. IgA nephropathy
- C. Focal segmental glomerulosclerosis
- D. Mesangiocapillary glomerulonephritis
- E. Minimal change glomerulonephritis

Minimal change glomerulonephritis

Minimal change glomerulonephritis nearly always presents as nephrotic syndrome, accounting for 75% of cases in children and 25% in adults

Causes

- drugs: NSAIDs, gold
- Hodgkin's lymphoma
- thymoma

Features

- nephrotic syndrome
- hypertension
- highly selective proteinuria
- renal biopsy: electron microscopy shows fusion of podocytes

Management

- majority of cases (80%) are steroid responsive
- cyclophosphamide is the next step for steroid resistant cases
- good prognosis

24- Fanconi syndrome is associated with each one of the following, except:

- A. Hydronephrosis
- B. Osteomalacia
- C. Aminoaciduria
- D. Glycosuria
- E. Proximal renal tubular acidosis

Fanconi syndrome

A disorder of renal tubular function Features

- type 2 (proximal) renal tubular acidosis
 - aminoaciduria
 - glycosuria
 - phosphaturia
 - osteomalacia Causes

 - inherited: cystinosis, Wilson's disease
 - acquired: renal, Sjogren's
-

25-A 54-year-old man presents with nephrotic syndrome thought to be secondary to amyloidosis. A renal biopsy is taken. Which one of the following stains should be applied to the tissue?

- A. Rose Bengal
- B. Pearl's stain
- C. Congo red
- D. Periodic acid Schiff
- E. Cresyl blue

Amyloidosis

 Overview

- amyloidosis is a term which describes the extracellular deposition of an insoluble fibrillar protein termed amyloid
- amyloid is derived from many different precursor proteins
- in addition to the fibrillar component, amyloid also contains a non-fibrillary protein called amyloid-P component, derived from the acute phase protein serum amyloid P
- other non-fibrillary components include apolipoprotein E and heparansulphate proteoglycans
- the accumulation of amyloid fibrils leads to tissue/organ dysfunction

Classification

- systemic or localized
- further characterised by precursor protein (e.g. AL in myeloma - A for Amyloid, L for immunoglobulin Light chain fragments)

Diagnosis

- Congo red staining
- serum amyloid precursor (SAP) scan
- biopsy of rectal tissue

26-Each

one of the following is associated with Bartter's syndrome, except:

- A. Failure to thrive
- B. Hypertension
- C. Weakness
- D. Autosomal recessive inheritance
- E. Hypokalaemia



Bartter's syndrome is associated with normotension

Bartter's syndrome

Bartter's syndrome is an inherited cause (usually autosomal recessive) of severe hypokalaemia due to defective chloride absorption at the Na⁺ K⁺ 2Cl⁻ cotransporter in the ascending loop of Henle. It should be noted that is associated with normotension (unlike other endocrine causes of hypokalaemia such as Conn's, Cushing's and Liddle's syndrome which are associated with hypertension)

Features

- usually presents in childhood, e.g. failure to thrive
- hypokalaemia
- normotension
- weakness

27-Which one of the following is least associated with focal segmental glomerulosclerosis?

- A. **Alport's syndrome**
- B. Heroin
- C. Sickle-cell anaemia
- D. **Sarcoidosis**
- E. HIV infection

Focal segmental glomerulosclerosis

Causes

- idiopathic
- secondary to other renal pathology e.g. IgA nephropathy, reflux nephropathy
- HIV
- heroin
- Alport's syndrome
- sickle-cell

Presentations

- nephrotic syndrome

Focal segmental glomerulosclerosis is noted for having a high recurrence rate in renal transplants

28-A 45-year-old female with nephrotic syndrome develops renal vein thrombosis. What changes in patients with nephrotic syndrome predispose to the development of venous thromboembolism?

- A. Reduced excretion of protein S
- B. Loss of antithrombin III
- C. Reduced excretion of protein C
- D. Loss of fibrinogen
- E. Reduced metabolism of vitamin K

Nephrotic syndrome

Triad of

1. Proteinuria ($> 3\text{g}/24\text{hr}$) causing
2. Hypoalbuminaemia ($< 30\text{g/L}$) and
3. Oedema

Loss of antithrombin-III, proteins C and S and a associated rise in fibrinogen levels predispose to thrombosis.
Loss of TBG lowers total, but not free thyroxine levels

29- Each of the following is a risk factor for renal stone formation, except:

- A. Cystinuria
- B. Beryllium
- C. Hypoparathyroidism
- D. Renal tubular acidosis
- E. Dehydration



Renal stones: risk factors

Risk factors

- dehydration
- hypercalciuria, hyperparathyroidism, hypercalcaemia
- cystinuria
- high dietary oxalate
- renal tubular acidosis
- medullary sponge kidney, polycystic kidney disease
- beryllium or cadmium exposure

Risk factors for urate stones

- gout
- ileostomy: loss of bicarbonate and fluid results in acidic urine, causing the precipitation of uric acid

Drug causes

- drugs that promote calcium stones: loop diuretics, steroids, acetazolamide, theophylline
- thiazides can prevent calcium stones (increase distal tubular calcium resorption)

3 0-A 45-year-old woman with nephrotic syndrome is noted to have marked loss of subcutaneous tissue from the face. What is the most likely underlying cause of her renal disease?

- A. **Mesangiocapillary glomerulonephritis type II**
- B. Focal segmental glomerulosclerosis
- C. Minimal change glomerulonephritis
- D. Renal vein thrombosis
- E. Membranous glomerulonephritis

This patient has partial lipodystrophy which is associated with mesangiocapillary glomerulonephritis type II

Overview

- aka membranoproliferative glomerulonephritis
- may present as nephrotic syndrome, haematuria or proteinuria
- poor prognosis

Type 1

- subendothelial immune deposits
- cause: cryoglobulinaemia, hepatitis C

Type 2 - 'dense deposit disease'

- intramembranous deposits of electron dense material
- causes: partial lipodystrophy, factor H deficiency
- reduced serum complement
- C3b nephritic factor (an antibody against C3bBb) found in 70%

Type 3

- causes: hepatitis B and C

Management

- steroids may be effective

31-Which one of the following is not a recognised risk factor for the development of diabetic nephropathy?

- A. Poor glycaemic control
- B. Smoking
- C. Male sex
- D. Low dietary protein
- E. Hypertension

Basics

- commonest cause of ESRF in western world
- mechanism in type 1 and type 2 diabetes thought to be same
- T1DM: 33% of patients by 40 years have diabetic nephropathy
- some patients with T1DM seem immune from developing nephropathy, if hasn't developed by 40 years then low chance of future development
- approximately 5-10% of patients with T2DM develop ESRF

Pathological changes

- basement membrane thickening
- capillary obliteration
- mesangial widening

Risk factors for developing diabetic nephropathy

- male sex
- poor glycaemic control
- hypertension, hyperlipidaemia, smoker
- raised dietary protein
- genetic predisposition (e.g. ACE gene polymorphisms)

32- What is the most common type of renal stone?

- A. Calcium phosphate
- B. Cystine stones
- C. Triple phosphate stones
- D. Calcium oxalate
- E. Xanthine stones

Renal stones: imaging

Type	Frequency	Radiograph appearance
Calcium oxalate	40%	Opaque
Mixed calcium oxalate/phosphate stones	25%	Opaque
Triple phosphate stones	10%	Opaque
Calcium phosphate	10%	Opaque
Urate stones	5-10%	Radio-lucent
Cystine stones	1%	Semi-opaque, 'ground-glass' appearance
Xanthine stones	<1%	Radio-lucent

33-Which

one of the following is least associated with retroperitoneal fibrosis?

- A. Riedel's thyroiditis
- B. Previous radiotherapy
- C. Inflammatory abdominal aortic aneurysm
- D. Methysergide
- E. Sulphonamides

Retroperitoneal fibrosis

Lower back pain is the most common presenting feature Associations

- Riedel's thyroiditis
- previous radiotherapy
- sarcoidosis
- inflammatory abdominal aortic aneurysm
- drugs: methysergide

34-Microalbuminuria may be defined as an albumin excretion of:

- A. 0.1 - 1 mg/day
- B. 30 - 300 mg/day
- C. 1 - 10 mg/day
- D. 10 - 100 mg/day
- E. 3 - 30 mg/day

Proteinuria

Microalbuminuria

- defined as an albumin excretion of 30 - 300 mg/day

Albumin:creatinine excretion ratio (ACR)

- used in clinical practice to quantify degree of proteinuria
- first morning urine sample
- urine albumin (mg) / creatinine (mmol)
- normal ACR < 2.5
- microalbuminuric range = 2.5 - 33

35-What percentage of cardiac output does renal blood flow accounts for:

- A. 5%
- B. 10%
- C. 15%
- D. 20-25%
- E. 30-35%

Renal physiology

Renal blood flow is 20-25% of cardiac output

Renal cortical blood flow > medullary blood flow (i.e. tubular cells more prone to ischaemia)

36- Which one of the following types of glomerulonephritis is most characteristically associated with streptococcal infection in children?

- A. Focal segmental glomerulosclerosis
- B. Diffuse proliferative glomerulonephritis
- C. Membranous glomerulonephritis
- D. Mesangiocapillary glomerulonephritis
- E. Rapidly progressive glomerulonephritis

Glomerulonephritides

Knowing a few key facts is the best way to approach the difficult subject of glomerulonephritis:

Membranous glomerulonephritis

- presentation: proteinuria / nephrotic syndrome / CRF
- cause: infections, rheumatoid drugs, malignancy
- 1/3 resolve, 1/3 respond to cytotoxics, 1/3 develop CRF

IgA nephropathy - aka Berger's disease, mesangioproliferative GN

- typically young adult with haematuria following an URTI

Diffuse proliferative glomerulonephritis

- classical post-streptococcal glomerulonephritis in child
- presents as nephritic syndrome / ARF

Minimal change disease

- typically a child with nephrotic syndrome (accounts for 80%)
- causes: Hodgkin's, NSAIDs
- good response to steroids

Focal segmental glomerulosclerosis

- may be idiopathic or secondary to HIV, heroin

- presentation: proteinuria / nephrotic syndrome / CRF

Rapidly progressive glomerulonephritis - aka crescentic glomerulonephritis

- rapid onset, often presenting as ARF
- causes include Goodpasture's, ANCA positive vasculitis, SLE

Mesangiocapillary glomerulonephritis (membranoproliferative)

- type 1: cryoglobulinaemia, hepatitis C
- type 2: partial lipodystrophy

37-Which

one of the following is least recognised as an indication for plasma exchange?

- A. Guillain-Barre syndrome
- B. Churg-Strauss syndrome
- C. Myasthenia gravis
- D. Cerebral malaria
- E. Goodpasture's syndrome

Cerebral malaria is not a standard indication for plasma exchange. Exchange transfusions have been tried but it is generally only justified when peripheral parasitemia is greater than 10% of circulating erythrocytes. The role of blood transfusions remains controversial, as they are both expensive and potentially dangerous in many malaria areas

Plasma exchange

Indications for plasma exchange

- Guillain-Barre syndrome
- myasthenia gravis
- Goodpasture's syndrome
- ANCA positive vasculitis e.g. Wegener's, Churg-Strauss
- TTP/HUS
- cryoglobulinaemia
- hyperviscosity syndrome e.g. secondary to myeloma

the most significant factor leading to the development of anaemia in patients with chronic kidney disease?

- A. Reduced absorption of iron
- B. Increased erythropoietin resistance
- C. **Reduced erythropoietin levels**
- D. Reduced erythropoiesis due to toxic effects of uraemia on bone marrow
- E. Blood loss due to capillary fragility and poor platelet function

Chronic kidney disease: anaemia

Patients with chronic kidney disease (CKD) may develop anaemia due to a variety of factors, the most significant of which is reduced erythropoietin levels. This is usually a normochromic normocytic anaemia and becomes apparent when the GFR is less than 35 ml/min (other causes of anaemia should be considered if the GFR is > 60 ml/min).

Anaemia in CKD predisposes to the development of left ventricular hypertrophy - associated with a three fold increase in mortality in renal patients

Causes of anaemia in renal failure

- reduced erythropoietin levels - the most significant factor
- reduced erythropoiesis due to toxic effects of uraemia on bone marrow
- reduced absorption of iron
- anorexia/nausea due to uraemia
- reduced red cell survival (especially in haemodialysis)
- blood loss due to capillary fragility and poor platelet function
- stress ulceration leading to chronic blood loss

Management

- the 2006 NICE guidelines suggest a target haemoglobin of 10.5 - 12.5 g/dl
- determination and optimisation of iron status should be carried out prior to the administration of erythropoiesis-stimulating agents (ESA). Many patients, especially those on haemodialysis, will require IV iron

3 9-A patient with type 1 diabetes mellitus is reviewed in the nephrology outpatient clinic. He is known to

have stage 4 diabetic nephropathy. Which of the following best describes his degree of renal involvement?

- A. Microalbuminuria
- B. End-stage renal failure
- C. Latent phase
- D. Hyperfiltration
- E. Overt nephropathy

The timeline given here is for type 1 diabetics. Patients with type 2 diabetes mellitus (T2DM) progress through similar stages but in a different timescale - some T2DM patients may progress quickly to the later stages

40-Each

one of the following is associated with papillary necrosis, except:

- A. Acute pyelonephritis
- B. Tuberculosis
- C. Chronic analgesia use
- D. Syphilis
- E. Sickle cell disease

Papillary necrosis

Causes

- chronic analgesia use
- sickle cell disease
- TB
- acute pyelonephritis
- diabetes mellitus

\\Features

- fever, loin pain, haematuria
- IVU - papillary necrosis with renal scarring - 'cup & spill'

-Renal cell carcinoma is least associated with which one of the following hormones?

- A. Erythropoietin
- B. Parathyroid hormone
- ✓ C. Growth hormone
- D. ACTH
- E. Renin

Renal cell cancer

Overview

- also known as: hypernephroma
- accounts for 85% of primary renal neoplasms
- arises from proximal renal tubular epithelium

Associations

- more common in middle-aged men
- smoking
- von Hippel-Lindau syndrome
- autosomal dominant polycystic kidney disease
- tuberose sclerosis

Features

- classical triad: haematuria, loin pain, abdominal mass
- pyrexia of unknown origin
- left varicocele (due to occlusion of left testicular vein)
- endocrine effects: may secrete EPO (polycythaemia), PTH (hypercalcaemia), renin, ACTH

Management

- radical nephrectomy for confined disease
- in disseminated disease, recent studies have shown a survival advantage for nephrectomy prior to interferon-alpha

year-old boy presents is diagnosed as having nephrotic syndrome. A presumptive diagnosis of minimal change glomerulonephritis is made. What is the most appropriate treatment?

- A. Cyclophosphamide

- B. Supportive treatment as an inpatient
- C. Plasma exchange
- D. Renal biopsy followed by prednisolone
- E. **Prednisolone**

A renal biopsy is only indicated if response to steroids is poor

Minimal change glomerulonephritis

Minimal change glomerulonephritis nearly always presents as nephrotic syndrome, accounting for 75% of cases in children and 25% in adults

Causes

- drugs: NSAIDs, gold
- Hodgkin's lymphoma
- thymoma

Features

- nephrotic syndrome
- hypertension
- highly selective proteinuria
- renal biopsy: electron microscopy shows fusion of podocytes

Management

- majority of cases (80%) are steroid responsive
- cyclophosphamide is the next step for steroid resistant cases
- good prognosis

43-What is the best way to differentiate between acute and chronic renal failure?

- A. 24 hr creatinine

- B. Urinary albumin
- C. Serum creatinine
- D. Renal ultrasound
- . Serum urea

Small kidneys is (usually) a sign of chronic renal failure

Acute vs. chronic renal failure

Best way to differentiate is renal ultrasound - most patients with CRF have bilateral small kidneys

Exceptions

- autosomal dominant polycystic kidney disease
- diabetic nephropathy
- amyloidosis

Other features suggesting CRF rather than ARF

- hypocalcaemia (due to lack of vitamin D)

44-Which one of the following features is least likely to be seen in Henoch-Schonlein purpura?

- A. Abdominal pain
- B. Renal failure
- C. Polyarthrititis
- D. Thrombocytopenia

 E. Purpuric rash over buttocks

Henoch-Schonlein purpura

Henoch-Schonlein purpura (HSP) is an IgA mediated small vessel vasculitis. There is a degree of overlap with IgA nephropathy (Berger's disease). HSP is usually seen in children following an infection

Features

- palpable purpuric rash (with localized oedema) over buttocks and extensor surfaces of arms and legs
- abdominal pain
- polyarthritits
- features of IgA nephropathy may occur e.g. haematuria, renal failure

45-Which of the following factors would suggest that a patient has established acute tubular necrosis rather than pre-renal uraemia?

- A. Urine sodium = 10 mmol/L
- B. Fractional urea excretion = 20%
- C. Increase in urine output following fluid challenge
- D. Specific gravity = 1025
- E. **Fractional sodium excretion = 1.5%**

ATN or prerenal uraemia? In prerenal uraemia think of the kidneys holding on to sodium to preserve volume

ARF: ATN vs. prerenal uraemia

Prerenal uraemia - kidneys hold on to sodium to preserve volume

	Pre-renal uraemia	Acute tubular necrosis
Urine sodium	< 20 mmol/L	> 30 mmol/L
Fractional sodium excretion*	< 1%	> 1%

Fractional urea excretion**	< 35%	>35%
Urine:plasma osmolality	> 1.5	< 1.1
Urine:plasma urea	> 10:1	< 8:1
Specific gravity	> 1020	< 1010
Urine	'bland' sediment	brown granular casts
Response to fluid challenge	Yes	No

*fractional sodium excretion = (urine sodium/plasma sodium) / (urinecreatinine/plasma creatinine) x 100

**fractional urea excretion = (urine urea /blood urea) / (urinecreatinine/plasma creatinine) x 100

46-Each

one of the following is seen in renal osteodystrophy, except:

- A. Osteitis fibrosa cystica
- B. Primary hyperparathyroidism
- C. High phosphate
- D. Low calcium
- E. Low vitamin D

Chronic kidney disease: bone disease

Basic problems in chronic kidney disease

- low vitamin D (1-alpha hydroxylation normally occurs in the kidneys)
- high phosphate
- low calcium: due to lack of vitamin D, high phosphate
- secondary hyperparathyroidism: due to low calcium, high phosphate and low vitamin D

Several clinical manifestations may result: Osteitis fibrosa cystica

- aka hyperparathyroid bone disease

Adynamic

- may be due to over treatment with vitamin D

Osteomalacia

- due to low vitamin D

Osteosclerosis Osteoporosis

47-A 26-year-old man with loin pain and haematuria is found to have autosomal dominant polycystic kidney disease. A defect in which one of the following genes is likely to be responsible?

- Fibrillin-2 gene
- Polycystin gene
- Fibrillin-1 gene
- Von Hippel-Lindau gene
- PKD1 gene

Most cases of autosomal dominant polycystic kidney disease (ADPKD) are due to a mutation in the PKD1 gene. The PKD1 gene encodes for a polycystin-1, a large cell- surface glycoprotein of unknown function

ADPKD

Autosomal dominant polycystic kidney disease (ADPKD) is the most common inherited cause of kidney disease, affecting 1 in 1,000 Caucasians. Two disease loci have been identified, PKD1 and PKD2, which code for polycystin-1 and polycystin-2 respectively

ADPKD type 1

ADPKD type 2

85% of cases

Chromosome 16

15% of cases

Chromosome 4

Ultrasound diagnostic criteria (in patients with positive family history)

- two cysts, unilateral or bilateral, if aged < 30 years
 - two cysts in both kidneys if aged 30-59 years
 - four cysts in both kidneys if aged > 60 years
-

48- What is the most likely outcome following the diagnosis of minimal change nephropathy in a 20-year-old male?

- A. Chronic renal impairment requiring renal replacement therapy
- B. Persistent proteinuria
- C. Full recovery
- D. Chronic renal impairment not requiring renal replacement therapy
- E. Relapsing-remitting course

Minimal change glomerulonephritis

Minimal change glomerulonephritis nearly always presents as nephrotic syndrome, accounting for 75% of cases in children and 25% in adults

Causes

- drugs: NSAIDs, gold
- Hodgkin's lymphoma
- thymoma

Features

- nephrotic syndrome
- hypertension
- highly selective proteinuria
- renal biopsy: electron microscopy shows fusion of podocytes

- majority of cases (80%) are steroid responsive
- cyclophosphamide is the next step for steroid resistant cases
- good prognosis

49-Each

one of the following is a cause of sterile pyuria, except:

- A. Renal stones
- B. Acute glomerulonephritis
- C. Renal TB
- D. Bladder/renal cell cancer
- E. Appendicitis

Sterile pyuria

Causes

- partially treated UTI
- renal TB
- appendicitis
- bladder/renal cell cancer
- calculi
- adult polycystic kidney disease

50-Which

of the following types of renal stones are said to have a semi-opaque appearance on x-ray?

- A. Calcium oxalate
- B. Cystine stones
- C. Urate stones
- D. Xanthine stones

Renal stones on x-ray

- cystine stones: semi-opaque
- urate + xanthine stones: radio-lucent

Renal stones: imaging

The table below summarises the appearance of different types of renal stone on x-ray

Type	Frequency	Radiograph appearance
Calcium oxalate	40%	Opaque
Mixed calcium oxalate/phosphate stones	25%	Opaque
Triple phosphate stones	10%	Opaque
Calcium phosphate	10%	Opaque
Urate stones	5-10%	Radio-lucent
Cystine stones	1%	Semi-opaque, 'ground-glass' appearance
Xanthine stones	<1%	Radio-lucent

51-A 61-year-old man with a history of hypertension presents with central chest pain. Acute coronary syndrome is diagnosed and conventional management is given. A few days later a diagnostic coronary angiogram is performed. The following week a deteriorating of renal function is noted associated with a purpuric rash on his legs. What is the most likely diagnosis?

- A. Aspirin-induced interstitial nephritis
- B. Heparin-induced thrombocytopenia
- C. Renal artery stenosis
- D. **Cholesterol embolisation**
- E. Antiphospholipid syndrome



Cholesterol embolisation is a well-documented complication of coronary angiography

Cholesterol embolisation

Overview

- cholesterol emboli may break off causing renal disease
- seen more commonly in arteriopathies, abdominal aortic aneurysms

Features

- eosinophilia
- purpura
- renal failure
- livedo reticularis

52-Which one of the following statements is true regarding autosomal recessive polycystic kidney disease?

- A. Onset is typically in the third decade
- B. Liver involvement is rare
- C. Is due to a defect on chromosome 16
- D. More common than autosomal dominant polycystic kidney disease
- E. **May be diagnosed on prenatal ultrasound**

ARPKD

Autosomal recessive polycystic kidney disease (ARPKD) is much less common than autosomal dominant disease (ADPKD). It is due to a defect in a gene located on chromosome 6

Diagnosis may be made on prenatal ultrasound or in early infancy with abdominal masses and renal failure. End-stage renal failure develops in childhood. Patients also typically have liver involvement, for example portal and interlobular fibrosis

Alport's syndrome is associated with each one of the following, except:

- A. Chronic renal failure
- B. Presentation in childhood
- C. Microscopic haematuria
- D. Lenticonus
- E. Anosmia

Alport's syndrome

Alport's syndrome is a hereditary condition, usually X-linked dominant but may be autosomal recessive or dominant. It is due to a defect in the gene which codes for type IV collagen resulting in an abnormal glomerular-basement membrane (GBM). The disease is more severe in males with females rarely developing renal failure

A favourite question in the MRCP is an Alport's patient with a failing renal transplant. This may be caused by the presence of anti-GBM antibodies leading to a Goodpasture's syndrome like picture

Alport's syndrome usually presents in childhood. The following features may be seen:

- microscopic haematuria
- progressive renal failure
- bilateral sensorineural deafness
- retinitis pigmentosa
- lenticonus: protrusion of the lens surface into the anterior chamber

one of the following is a recognised complication of nephrotic syndrome, except:

- A. Hyperlipidaemia
- B. Acute renal failure
- C. Increased risk of infection
- D. Hypercalcaemia
- E. Increased risk of thromboembolism

are asked to review a 75-year-old female on the surgical wards due to hyperkalaemia. Results are as follows:

	Plasma	Urine
Na ⁺ (mmol/l)	129	5
K ⁺ (mmol/l)	6.8	
Urea (mmol/l)	26	350
Creatinine (μmol/l)	262	
Osmolality (mosmol/kg)	296	470

What is the most likely diagnosis?

- A. Acute tubular necrosis
- B. Hyperosmolar non-ketotic coma
- C. Hydronephrosis
- D. **Prerenal uraemia**
- E. Pyelonephritis

ATN or prerenal uraemia? In prerenal uraemia think of the kidneys holding on to sodium to preserve volume

The low urine sodium points towards prerenal uraemia, as does the urine:plasma osmolality and urea ratio

ARF: ATN vs. prerenal uraemia

Prerenal uraemia - kidneys hold on to sodium to preserve volume

	Pre-renal uraemia	Acute tubular necrosis
Urine sodium	< 20 mmol/L	> 30 mmol/L
Fractional sodium excretion*	< 1%	> 1%
Fractional urea excretion**	< 35%	>35%
Urine:plasma osmolality	> 1.5	< 1.1
Urine:plasma urea	> 10:1	< 8:1
Specific gravity	> 1020	< 1010
Urine	'bland' sediment	brown granular casts

Response to fluid
challenge

Yes

No

*fractional sodium excretion = (urine sodium/plasma sodium) / (urine creatinine/plasma creatinine) x 100

**fractional urea excretion = (urine urea /blood urea) / (urine creatinine/plasma creatinine) x 100

5 6-A

patient with type 1 diabetes mellitus is reviewed in the nephrology outpatient clinic. He is known to have stage 3 diabetic nephropathy. Which of the following best describes his degree of renal involvement?

- A. Overt nephropathy
- B. **Microalbuminuria**
- C. Latent phase
- D. End-stage renal failure
- E. Hyperfiltration

Diabetic nephropathy: stages

Diabetic nephropathy may be classified as occurring in five stages*: Stage 1

- hyperfiltration: increase in GFR
- may be reversible

Stage 2 (silent or latent phase)

- most patients do not develop microalbuminuria for 10 years
- GFR remains elevated

Stage 3 (incipient nephropathy)

- microalbuminuria (albumin excretion of 30 - 300 mg/day, dipstick negative)

Stage 4 (overt nephropathy)

- persistent proteinuria (albumin excretion > 300 mg/day, dipstick positive)
- hypertension is present in most patients
- histology shows diffuse glomerulosclerosis and focal glomerulosclerosis (Kimmelstiel-Wilson nodules)

Stage 5

- end-stage renal disease, GFR typically < 10ml/min
- renal replacement therapy needed

The timeline given here is for type 1 diabetics. Patients with type 2 diabetes mellitus (T2DM) progress through similar stages but in a different timescale - some T2DM patients may progress quickly to the later stages

57-A two-year old boy presents with an abdominal mass. Which of the following is associated with Wilm's tumour (nephroblastoma)?

- A. Deletion on short arm of chromosome 12
- B. Tuberosc sclerosis
- C. Beckwith-Wiedemann syndrome
- D. Autosomal dominant polycystic kidney disease
- E. Autosomal recessive polycystic kidney disease

Beckwith-Wiedemann syndrome is an inherited condition associated with organomegaly, macroglossia, abdominal wall defects, Wilm's tumour and neonatal hypoglycemia.

Wilm's tumour

Wilm's nephroblastoma

- occurs mostly < 3 years (80% < 5 years); 20% of all childhood malignancies

Features

- abdo mass in otherwise well child
- also: painless haematuria, abdo pain, anorexia, BP, fever

Associations

- Beckwith-Wiedemann syndrome
- AGR triad of Aniridia, Genitourinary, Retardation
- deletion on short arm of chromosome 11

Management

- USS --> nephrectomy, chemo
- prognosis: good, 80% cure rate

5 8-A 45-year-old presents to A&E with chest pain. An ECG shows anterior ST elevation and he is thrombolysed with alteplase. His chest pain settles and he is started on aspirin, atorvastatin, bisoprolol and ramipril. Three days later his blood results are as follows:

Urea 16 mmol/l

Creatinine 277 μ mol/l

What is the most likely cause for the deterioration in renal function?

- A. Renal artery stenosis
- B. NSAID related nephropathy
- C. Statin nephropathy
- D. Dressler's syndrome
- E. Haemorrhage into renal cyst

Flash pulmonary oedema, U&Es worse on ACE inhibitor, asymmetrical kidneys --> renal artery stenosis - do MR angiography

There is likely underlying renal artery stenosis revealed by the addition of an ACE inhibitor

Renal vascular disease

Renal vascular disease is most commonly due to atherosclerosis (> 95% of patients). It is associated with risk factors such as smoking and hypertension that cause atheroma elsewhere in the body. It may present as hypertension, chronic renal failure or 'flash' pulmonary oedema. In younger patients however fibromuscular dysplasia (FMD) needs to be considered. FMD is more common in young women and characteristically has a 'string of beads' appearance on angiography. Patients respond well to balloon angioplasty

Investigation

- MR angiography is now the investigation of choice
- CT angiography
- conventional renal angiography is less commonly performed used nowadays, but may still have a role when planning surgery

59-Which one of the following may be useful in the prevention of oxalate renalstones?

- A. Ferrous sulphate
- B. Thiazide diuretics
- C. Lithium
- D. Pyridoxine
- E. Allopurinol

Renal stones: management

Calcium stones

- high fluid intake
- low animal protein, low salt diet (a low calcium diet has not been shown to be superior to a normocalcaemic diet)
- thiazide diuretics (reduce distal tubule calcium resorption)
- stones < 5 mm will usually pass spontaneously
- lithotripsy, nephrolithotomy may be required

Oxalate stones

- cholestyramine reduces urinary oxalate secretion
- pyridoxine reduces urinary oxalate secretion

Uric acid stones

- allopurinol
- urinary alkalization e.g. oral bicarbonate

60-In

Goodpasture's syndrome anti-glomerular basement membrane (anti-GBM) antibodies are directed against which type of collagen?

- A. Type I collagen
- B. Type II collagen
- C. Type III collagen
- D. Type IV collagen
- E. Type VI collagen

6 1-A 24-

year-old man who has a sister with polycystic kidney diseases asks his GP if he could be screened for the disease. What is the most appropriate screening test?

- A. PKD1 gene testing
- B. CT abdomen
- C. Urine microscopy
- D. Ultrasound abdomen
- E. Anti-polycystin 1 antibodies levels

Ultrasound is the screening test for adult polycystic kidney disease

ADPKD

Autosomal dominant polycystic kidney disease (ADPKD) is the most common inherited cause of kidney disease, affecting 1 in 1,000 Caucasians. Two disease loci have been identified, PKD1 and PKD2, which code for polycystin-1 and polycystin-2 respectively

ADPKD type 1

85% of cases

Chromosome 16

Presents with ESRF earlier

ADPKD type 2

15% of cases

Chromosome 4

The screening investigation for relatives is abdominal ultrasound: Ultrasound diagnostic criteria (in patients with positive family history)

- two cysts, unilateral or bilateral, if aged < 30 years
- two cysts in both kidneys if aged 30-59 years
- four cysts in both kidneys if aged > 60 years

62- Which one of the following is the most common type of SLE associated renal disease?

- A. Class II: mesangial glomerulonephritis
- B. Class III: focal (and segmental) proliferative glomerulonephritis
- C. **Class IV: diffuse proliferative glomerulonephritis**
- D. Class V: diffuse membranous glomerulonephritis
- E. Class VI: sclerosing glomerulonephritis

SLE: renal complications

WHO classification

- class I: normal kidney
- class II: mesangial glomerulonephritis
- class III: focal (and segmental) proliferative glomerulonephritis
- class IV: diffuse proliferative glomerulonephritis
- class V: diffuse membranous glomerulonephritis
- class VI: sclerosing glomerulonephritis

Class IV (diffuse proliferative glomerulonephritis) is the most common and severe form Management

- treat hypertension
- corticosteroids if clinical evidence of disease

_____ -Each one of the following is a recognised side-effect of erythropoietin, except:

- A. Hypertension
- B. Flu-like symptoms
- C. Encephalopathy
- D. Pure red cell aplasia
- E. **Thrombocytopenia**

-Each one

of the following is a feature of renal cell cancer, except:

- A. **Right-sided varicocele**
- B. Pyrexia of unknown origin
- C. Loin pain
- D. Haematuria
- E. Polycythaemia

Renal cell cancer

Overview

- also known as: hypernephroma
- accounts for 85% of primary renal neoplasms
- arises from proximal renal tubular epithelium

Associations

- more common in middle-aged men
- smoking
- von Hippel-Lindau syndrome
- autosomal dominant polycystic kidney disease
- tuberose sclerosis

Features

- classical triad: haematuria, loin pain, abdominal mass
- pyrexia of unknown origin

- left varicocele (due to occlusion of left testicular vein)
- endocrine effects: may secrete EPO (polycythaemia), PTH (hypercalcaemia), renin, ACTH
- 25% have metastases at presentation

Management

- radical nephrectomy for confined disease
- in disseminated disease, recent studies have shown a survival advantage for nephrectomy prior to interferon-alpha

65-Which

one of the following types of glomerulonephritis is most characteristically associated with Wegener's granulomatosis?

- A. Mesangiocapillary glomerulonephritis
- B. Membranous glomerulonephritis
- C. Rapidly progressive glomerulonephritis
- D. Focal segmental glomerulosclerosis
- E. Diffuse proliferative glomerulonephritis

Glomerulonephritides

Knowing a few key facts is the best way to approach the difficult subject of glomerulonephritis:

Membranous glomerulonephritis

- presentation: proteinuria / nephrotic syndrome / CRF
- cause: infections, rheumatoid drugs, malignancy
- 1/3 resolve, 1/3 respond to cytotoxics, 1/3 develop CRF

IgA nephropathy - aka Berger's disease, mesangioproliferative GN

- typically young adult with haematuria following an URTI

Diffuse proliferative glomerulonephritis

- classical post-streptococcal glomerulonephritis in child
- presents as nephritic syndrome / ARF

Minimal change disease

- typically a child with nephrotic syndrome (accounts for 80%)

- causes: Hodgkin's, NSAIDs
- good response to steroids

Focal segmental glomerulosclerosis

- may be idiopathic or secondary to HIV, heroin
- presentation: proteinuria / nephrotic syndrome / CRF

Rapidly progressive glomerulonephritis - aka crescentic glomerulonephritis

- rapid onset, often presenting as ARF
- causes include Goodpasture's, ANCA positive vasculitis, SLE

Mesangiocapillary glomerulonephritis (membranoproliferative)

- type 1: cryoglobulinaemia, hepatitis C
- type 2: partial lipodystrophy

66-Each

one of the following is typically seen in patients with rhabdomyolysis, except:

- A. Elevated urea
- B. **Hypercalcaemia**
- C. Elevated serum phosphate
- D. Elevated creatinine kinase
- E. Myoglobinuria

Rhabdomyolysis

Rhabdomyolysis will typically feature in the exam as a patient who has had a fall or prolonged epileptic seizure and is found to have acute renal failure on admission

Features

- acute renal failure with disproportionately raised creatinine
- elevated CK
- myoglobinuria
- hypocalcaemia (myoglobin binds calcium)
- elevated phosphate (released from myocytes)

Causes

- seizure
- collapse/coma (e.g. elderly patients collapses at home, found 8 hours later)
- ecstasy
- crush injury
- McArdle's syndrome
- drugs: statins

Management

- IV fluids to maintain good urine output
- urinary alkalinization is sometimes used

67-A 33-year-old man is admitted with bilateral leg oedema and heavy proteinuria. He has a history of coeliac disease. What is the likely diagnosis?

- A. Diffuse proliferative glomerulonephritis
- B. IgA nephropathy
- C. Membranous glomerulonephritis
- D. Minimal change disease

68-Which one of the following is not a feature of HIV-associated nephropathy?

- A. Small kidneys
- B. Normotension
- C. Elevated urea and creatinine
- D. Proteinuria
- E. Focal segmental glomerulosclerosis on renal biopsy

HIV: renal involvement

Renal involvement in HIV patients may occur as a consequence of treatment or the virus itself. Protease inhibitors such as indinavir can precipitate intratubular crystal obstruction

HIV-associated nephropathy (HIVAN) accounts for up to 10% of end-stage renal failure cases in the United States. Antiretroviral therapy has been shown to alter the course of the disease. There are five key features of

HIVAN:

- massive proteinuria
- normal or large kidneys
- focal segmental glomerulosclerosis with focal or global capillary collapse on renal biopsy
- elevated urea and creatinine
- normotension

69- Which one of the following is least recognised as a cause of membranous glomerulonephritis?



- A. Streptococcal infection
- B. Penicillamine
- C. Hepatitis B
- D. SLE
- E. Lymphoma

71-Which one of the following is least associated with minimal change glomerulonephritis?

- A. Hodgkin's lymphoma
- B. Goodpasture's syndrome
- C. Thymoma
- D. Non-steroidal anti-inflammatory drugs
- E. Gold therapy

Goodpasture's syndrome is associated with rapidly progressive glomerulonephritis

Minimal change glomerulonephritis

Minimal change glomerulonephritis nearly always presents as nephrotic syndrome, accounting for 75% of cases in children and 25% in adults

Causes

- drugs: NSAIDs, gold
- Hodgkin's lymphoma
- thymoma

Features

- nephrotic syndrome
- hypertension
- highly selective proteinuria
- renal biopsy: electron microscopy shows fusion of podocytes

Management

- majority of cases (80%) are steroid responsive
- cyclophosphamide is the next step for steroid resistant cases
- good prognosis

72-Which one of the following types of glomerulonephritis is most characteristically associated with cryoglobulinaemia?

- A. Rapidly progressive glomerulonephritis
- B. **Mesangiocapillary glomerulonephritis**
- C. Focal segmental glomerulosclerosis
- D. IgA nephropathy
- E. Diffuse proliferative glomerulonephritis

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- causes include Goodpasture's, ANCA positive vasculitis, SLE

Mesangiocapillary glomerulonephritis (membranoproliferative)

- type 1: cryoglobulinaemia, hepatitis C
- type 2: partial lipodystrophy

7 3-Which one of the following is not a risk factor for the development of calcium oxalate and calcium phosphate renal stones?

- A. Bendrofluazide
- B. Aminophylline
- C. Acetazolamide
- D. Frusemide
- E. Prednisolone

Bendrofluazide may help prevent the formation of calcium based renal stones. It may however theoretically increase the risk of urate based stones

Renal stones: risk factors

Risk factors

- dehydration
- hypercalciuria, hyperparathyroidism, hypercalcaemia
- cystinuria
- high dietary oxalate
- renal tubular acidosis
- medullary sponge kidney, polycystic kidney disease
- beryllium or cadmium exposure

Risk factors for urate stones

- gout
- ileostomy: loss of bicarbonate and fluid results in acidic urine, causing the precipitation of uric acid

Drug causes

- drugs that promote calcium stones: loop diuretics, steroids, acetazolamide, theophylline
- thiazides can prevent calcium stones (increase distal tubular calcium resorption)

74-The albumin:creatinine excretion ratio (ACR) may be used to quantify the degree of proteinuria in renal disease. A normal ACR may be defined as:



- A. 2.5 - 5
- B. < 0.25
- C. < 2.5
- D. 5 - 50
- E. < 25

Proteinuria

Microalbuminuria

- defined as an albumin excretion of 30 - 300 mg/day Albumin:creatinine excretion ratio (ACR)
- used in clinical practice to quantify degree of proteinuria
- first morning urine sample
- urine albumin (mg) / creatinine (mmol)
- normal ACR < 2.5
- microalbuminuric range = 2.5 - 33

75- Which one of the following causes of glomerulonephritis is associated with low complement levels?

- A. IgA nephropathy

- B. Membranous glomerulonephritis
- C. Minimal change disease
- D. Post-streptococcal glomerulonephritis
- E. Focal segmental glomerulosclerosis

Glomerulonephritis and low complement

Disorders associated with glomerulonephritis and low serum complement levels

- post-streptococcal glomerulonephritis
 - subacute bacterial endocarditis
 - systemic lupus erythematosus
 - mesangiocapillary glomerulonephritis
-

Which of the following types of renal stones are radio-lucent?

- A. Triple phosphate stones
- B. Cystine stones
- C. Calcium phosphate
- D. Xanthine stones
- E. Calcium oxalate

Renal stones on x-ray

- cystine stones: semi-opaque
- urate + xanthine stones: radio-lucent

Renal stones: imaging

The table below summarises the appearance of different types of renal stone on x-ray

Type	Frequency	Radiograph appearance
Calcium oxalate	40%	Opaque
Mixed calcium oxalate/phosphate stones	25%	Opaque
Triple phosphate stones	10%	Opaque
Calcium phosphate	10%	Opaque
Urate stones	5-10%	Radio-lucent
Cystine stones	1%	Semi-opaque, 'ground-glass' appearance
Xanthine stones	<1%	Radio-lucent

of the following types of renal tubular acidosis is most likely to cause osteomalacia?

- A. Type 1 renal tubular acidosis
- B. Type 2 renal tubular acidosis
- C. Type 3 renal tubular acidosis
- D. Type 4 renal tubular acidosis
- E. Type 5 renal tubular acidosis

Renal tubular acidosis

All three types of renal tubular acidosis (RTA) are associated with hyperchloraemic metabolic acidosis (normal anion gap)

Type 1 RTA (distal)

- inability to generate acid urine (secrete H⁺) in distal tubule
- causes hypokalaemia
- complications include nephrocalcinosis and renal stones
- causes include idiopathic, RA, SLE, Sjogren's Type 2 RTA (proximal)

- decreased HCO₃⁻ reabsorption in proximal tubule
- causes hypokalaemia
- complications include osteomalacia
- causes include idiopathic, as part of Fanconi syndrome, Wilson's disease, cystinosis, outdated tetracyclines

Type 4 RTA (hyperkalaemic)

- causes hyperkalaemia
- causes include hypoaldosteronism, diabetes

78- Which one of the following is least recognised as an indication for plasma exchange?

- A. Myasthenia gravis
- B. Goodpasture's syndrome
- C. Multiple sclerosis
- D. Churg-Strauss syndrome
- E. Cryoglobulinaemia

Plasma exchange

Indications for plasma exchange

- Guillain-Barre syndrome

- myasthenia gravis
- Goodpasture's syndrome
- ANCA positive vasculitis e.g. Wegener's, Churg-Strauss
- TTP/HUS
- cryoglobulinaemia
- hyperviscosity syndrome e.g. secondary to myeloma

79-Which

of the following factors would suggest that a patient has pre-renal uraemia rather than established acute tubular necrosis?

- A. Urine sodium = 70 mmol/L
- B. Fractional urea excretion = 20%
- C. No response to fluid challenge
- D. Urine:plasma urea ratio 5:1
- E. Specific gravity = 1005

ATN or prerenal uraemia? In prerenal uraemia think of the kidneys holding on to sodium to preserve volume

ARF: ATN vs. prerenal uraemia

Prerenal uraemia - kidneys hold on to sodium to preserve volume

Pre-renal uraemia Acute tubular necrosis

Urine sodium	< 20 mmol/L	> 30 mmol/L
Fractional sodium excretion*	< 1%	> 1%
Fractional urea excretion**	< 35%	>35%
Urine:plasma osmolality	> 1.5	< 1.1
Urine:plasma urea	> 10:1	< 8:1
Specific gravity	> 1020	< 1010
Urine	'bland' sediment	brown granular casts
Response to fluid challenge	Yes	No

*fractional sodium excretion = (urine sodium/plasma sodium) / (urinecreatinine/plasma creatinine) x 100

**fractional urea excretion = (urine urea /blood urea) / (urine creatinine/plasma creatinine) x 100

8 0-Autosomal dominant polycystic kidney disease type 2 is associated with a genedefect in:

- A. **Chromosome 4**
- B. Chromosome 8
- C. Chromosome 12
- D. Chromosome 16
- E. Chromosome 20

ADPKD type 2 = chromosome 4 = 15% of cases

ADPKD

Autosomal dominant polycystic kidney disease (ADPKD) is the most common inherited cause of kidney disease, affecting 1 in 1,000 Caucasians. Two disease loci have been identified, PKD1 and PKD2, which code for polycystin-1 and polycystin-2 respectively

ADPKD type 1

85% of cases

Chromosome 16

Presents with ESRF earlier

ADPKD type 2

15% of cases

Chromosome 4

The screening investigation for relatives is abdominal ultrasound: Ultrasound diagnostic criteria (in patients with positive family history)

- two cysts, unilateral or bilateral, if aged < 30 years
- two cysts in both kidneys if aged 30-59 years
- four cysts in both kidneys if aged > 60 years

8 1-A patient with type 1 diabetes mellitus is reviewed in the nephrology outpatient clinic. He is known to have stage 2 diabetic nephropathy. Which of the following best describes his degree of renal involvement?

- A. Microalbuminuria
- B. End-stage renal failure
- C. Latent phase
- D. Hyperfiltration
- E. Overt nephropathy



Diabetic nephropathy: stages

Diabetic nephropathy may be classified as occurring in five stages*: Stage 1

- hyperfiltration: increase in GFR
- may be reversible

Stage 2 (silent or latent phase)

- most patients do not develop microalbuminuria for 10 years
- GFR remains elevated

Stage 3 (incipient nephropathy)

- microalbuminuria (albumin excretion of 30 - 300 mg/day, dipstick negative)

Stage 4 (overt nephropathy)

- persistent proteinuria (albumin excretion > 300 mg/day, dipstick positive)
- hypertension is present in most patients
- histology shows diffuse glomerulosclerosis and focal glomerulosclerosis (Kimmelstiel-Wilson nodules)

Stage 5

- end-stage renal disease, GFR typically < 10ml/min
- renal replacement therapy needed

The timeline given here is for type 1 diabetics. Patients with type 2 diabetes mellitus

(T2DM) progress through similar stages but in a different timescale - some T2DM patients may progress quickly to the later stages

8 2-A 14-year-old boy develops haematuria following an upper respiratory tract infection. What is the likely diagnosis?

- A. IgA nephropathy
- B. Focal segmental glomerulosclerosis
- C. Diffuse proliferative glomerulonephritis
- D. Rapidly progressive glomerulonephritis
- E. Mesangiocapillary glomerulonephritis

8 3-Which one of the following statements regarding minimal change glomerulonephritis is incorrect?

- A. Has a good prognosis
- B. The majority of cases are steroid responsive
- C. Is a common cause of nephrotic syndrome
- D. Hypertension is found in approximately 50% of patients
- E. Haematuria is rare

Hypertension and haematuria are rare in minimal change glomerulonephritis

Minimal change glomerulonephritis

Minimal change glomerulonephritis nearly always presents as nephrotic syndrome, accounting for 75% of cases in children and 25% in adults

The majority of cases are idiopathic, but in around 10-20% a cause is found:

- drugs: NSAIDs, rifampicin
- Hodgkin's lymphoma, thymoma
- infectious mononucleosis

Features

- nephrotic syndrome
- normotension - hypertension is rare
- highly selective proteinuria
- renal biopsy: electron microscopy shows fusion of podocytes

Management

- majority of cases (80%) are steroid responsive
- cyclophosphamide is the next step for steroid resistant cases
- good prognosis

RS MCQs Dr. Samah 2019

1. In interstitial lung diseases, lung function tests most often show:

- a. Reduced FEV1 and VC xxx
- b. Increased total lung capacity (TLC)
- c. Airflow obstruction
- d. Elevated arterial PCO₂.

2. In patients with suspected idiopathic pulmonary fibrosis, the most valuable measure is:

- a. Bronchoscopy
- b. Sedimentation rate
- c. Trial of steroids
- d. Open lung biopsy xxx

3. "Egg shell" calcification is seen in :

- a-Bronchiolitis b-Silicosis xxx
- c-Bronchogenic carcinoma d-Pulmonary TB

4. Honeycombing of lung in chest radiograph is seen in :

- a-pleural effusion b-Bronchial asthma
- c- Bronchial Carcinoma
- e-Interstitial lung disease xxx

5. Most common symptom of interstitial Lung disease is:

- a-Hemoptysis
- b-Progressive dyspnea xxx c-Substernal discomfort
- d-Wheezing

6. Which of the following is one form of "interstitial lung disease".

- a-Asthma
- b-Bronchiectasis
- c-Idiopathic pulmonary fibrosis xxx d-Pulmonary hypertension

7. the following does not occur with asbestosis

- a. Interstitial fibrosis
- b. pleural mesothelioma
- c. pleural calcification
- d. Methaemoglobinemia xxx

8. which of the following disease coexists with silicosis ?

- a. sarcoidosis
- b. tuberculosis xxx
- c. lymphoma
- d. rheumatoid arthritis

9. Which of the following is NOT a common radiological feature of interstitial lung disease:

- a- Ground glass pattern
- b- Nodular infiltrates
- c- Honeycombing
- d- Generalized hypertranslucency xxx

10. The main treatment for interstitial lung diseases is:

- a- Inhaled steroid
- b- Antibiotic
- c- Systemic steroid xxx
- d- Anticoagulant

11. Which of the following is NOT a feature of idiopathic pulmonary fibrosis?

- a- Age of onset greater than 50 years
- b- Bilateral apical inspiratory crackles xxx (it is basal not apical)
- c- Restrictive pulmonary function test
- d- Bilateral basal reticular abnormalities in chest CT

12. Pneumoconiosis is a group of diseases caused by inhalation of:

- a- smoke
- b- Organic dust
- c- Mineral dust xxx
- d- Pollens

1) All of the followings are useful for the assessment of the severity of patients with bronchial asthma except :

- a- Spirometry .
- b- Methacholine tests**
- c- ABG (arterial blood gases)
- d- Peak expiratory flow rate for variability.
- e- Physical examination .

2) Which one of the following pulmonary function values indicates airflow limitation .

- a- FEV1 of 60% of predicted .
- b- FVC of 60% of predicted .
- c- FEV1/FVC of 60% of predicted .**
- d- DLCO of 60% of predicted .
- e- Residual volume of 60% of predicted .

3) All of the followings can be used as a challenge tests for patients with bronchial asthma except ;

- a- Methacholine .
- b- Histamine .
- c- Normal saline .
- d- Exercise .
- e- Hypertonic saline .

4) Lung's failure type respiratory failure is characterized by which one of the followings :

- a- Normal chest X ray .
- b- Hypocapnia or normocapnia .

c-Diffusion is the main mechanism of hypoxia . d- Easy to correct hypoxia .

e- PEEP is contraindicated .

5) All of the following conditions typically can cause pump failure's type respiratory failure except :

a-Myasthenia gravis .

b-Multiple rib fractures .

c-Bronchiolitis obliterans . d-Severe chest pain .

e-Gullien-Barrie syndrome

6- Wide alveolar-arterial Po₂ (PA-a O₂) gradient can be increased in all of the following conditions except :

a-Morphine over dose .

b-Severe pneumonia .

c-Acute Bronchial Asthma . d-Acute Pulmonary edema .

e-ARDS (acute respiratory distress syndrome) .

7)Atopic bronchial asthma is characterized by all of the followings except :

a-Positive family history .

b-Positive immediate reaction to skin prik test to allergiens.

c-Elevated Ig E level .

d-Affects patients after age of 40 y.

e-Elevated serum eosinophills .

8) – All of the followings are true regarding home monitoring with the PEFr except

a-Usefull in diagnosing asthma

b- Usefull in Identifying environmental triggers of asthma

c- Can detect early signs of deterioration before symptoms change. d-Long term monitoring is useful for severe brittle asthma .

e- It is less effort dependent than spirometry .

9) The treatment of Bronchial asthma by Anti-inflammatory agents may cause all of the following except:

a-It reduces symptoms .

b-It improves lung function .

C-It decreases BHR (bronchial hyper reactivity).

d-It improves quality of life

e-It may cure the patient from the disease .

10)Treatment of bronchial asthma by Leukotriene pathway modifiers is more effective in which of the following conditions ?

- a- aspirin and exercise induced asthma . b-Cough variant asthma .
- c-Old age asthmatics .
- d- Nocturnal asthma e-Female asthmatics.

11) The main mechanism of dyspnea is

- b. Hypercapnia.
- c. alkalosis.
- d. Increased work of breathing.**
- e. Increased deoxygenated Hb .
- f. Hypoxia .

12) Noninvasive intermittent positive pressure ventilation (NIIPPV) in acute exacerbations of COPD patients improves all of the followings except :

- a. Blood gases and pH.
- b. Airway secretions .**
- c. In-hospital mortality.
- d. The need for invasive mechanical ventilation . e.The length of hospital stay.

13) One of the following treatment for patients with advanced COPD may improve their survival

- a. Exercise and rehabilitation.
- b. Nocturnal O2 therapy .
- c. Long term O2 therapy (more than 15Hrs) .**
- d. Prophylactic nebulized antibiotics .
- e. Nebulized steroids (budesonide).

14) All of the followings are risk factors for pulmonary tuberculosis except : a-Close contacts to TB patient

b-Immigration from an endemic area c-Exposure to under treated cases

-Young adults

-Residence of high incidence location .

15) Regarding pleural effusion caused by TB

- a- Fluid analysis Predominated by lymphocytes

b-Fluid positive for AFB stain in less than one third of patients . c-Negative culture for AFB can't exclude the disease.

d-Pleural biopsy increases the yield for AFB culture.

e-Usually it is difficult to treat ,and need treatment for 9-12 months .

16) All of the followings are associated with Worse prognosis in sarcoidosis except :

a- Incidious onset

b- Multiple extrathoracic lesion. c- Blacks..

d- Erythema nodosum.

e- Lupus pernio.

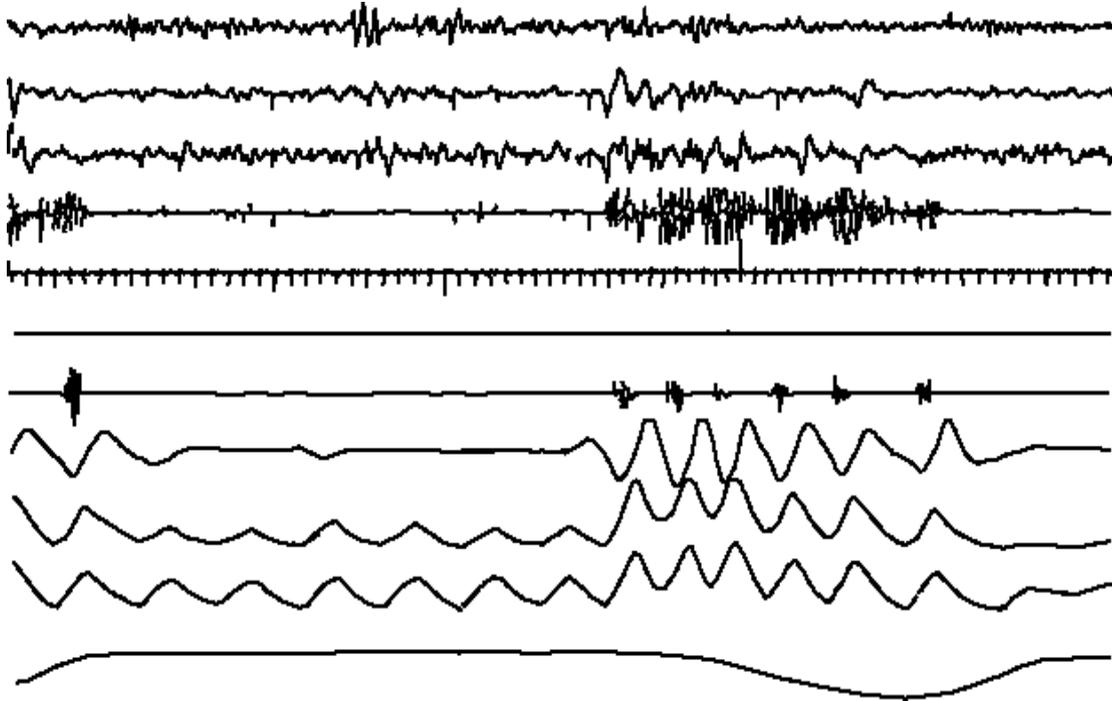
17) All of the followings are true combination between a risk factors and pathgens causing pneumonia except :

a-Alcoholism and klebsella pneumonia a- old age and mycoplasma pneumonia b Cigarette smokers and H .influenza

c-Mechanical ventilation and pseudomonal pneumonia.

d-Abnormal level of consciousness and anaerobic bacteria

18) This is atypical part of 8 hours polysomnography for a 45 year old male patient .



What is the diagnosis of this patient ?

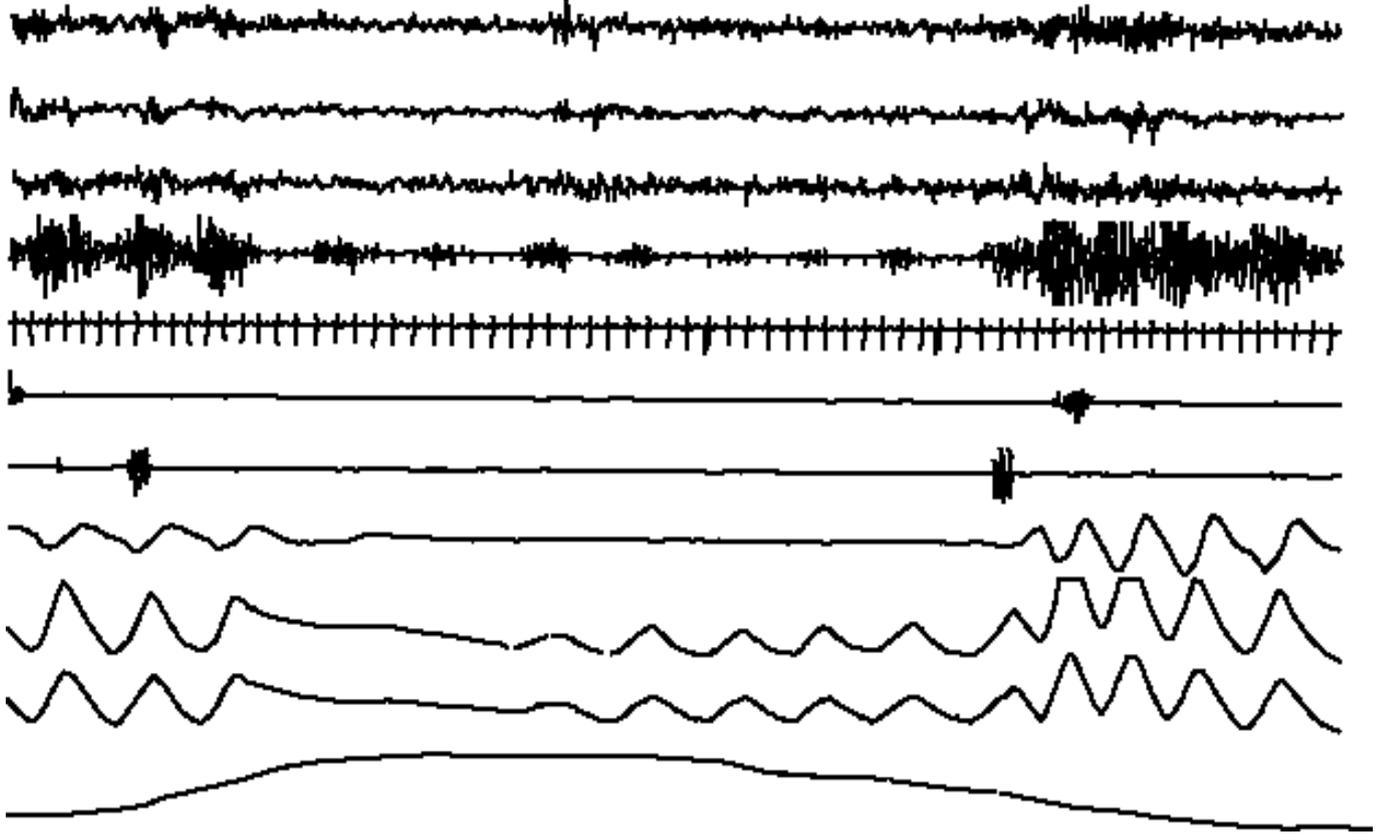
a-Narcolepsy.

b-Central apnea

c-Obstructive sleep apnea.

d-Mixed apnea . Hypopnea .

19)) Next is a typical part of 8 hours polysomnography for a 45 year old male patient .



What is the diagnosis of this patient ?

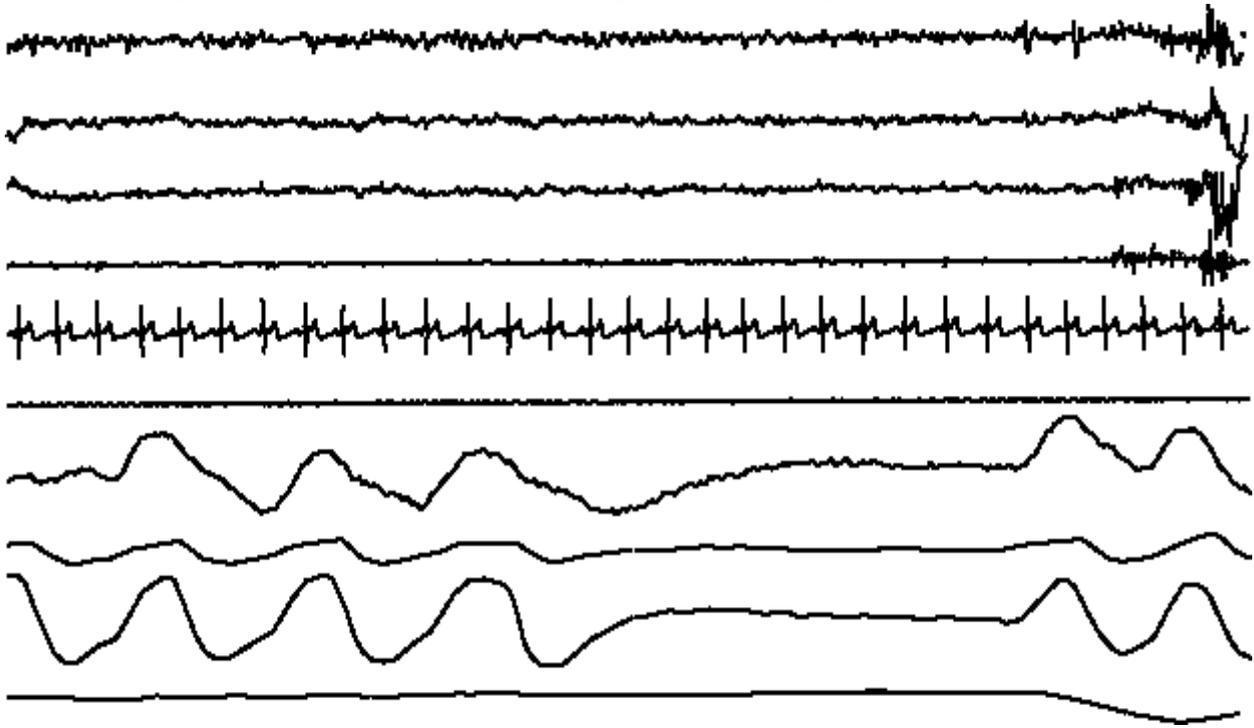
- a-Narcolepsy.
- b-Central apnea
- c-Obstructive sleep apnea.
- d-Mixed apnea** . e-Hypopnea .

20) 19year old man previously healthy presented to the emergency room coughing frish red blood , AFB stain is negative and the AFB culture is pending , he was given three units of blood after which he remained thermodynamically stable . a spiral CT scan of the chest using PE protocol showed airspace changes in the Rt lower lobe ,a bronchoscopy showed large clot in the Rt lower lobe. with no other abnormalities seen

.Which one of the following is the most appropriate next step in the management of this patient ?

- a - Start the patient on anticoagulation as therapeutic dose for PE . b - Start the patent on anti TB treatment.
- c - Ask for conventional CT scan.
- d - Ask for conventional pulmonary and bronchial angiogram. e - Sent the patient for Rt lower lobectomy.

21) This is a typical part of 8 hours polysomnography for a 45 year old male patient .



What is the diagnosis of this patient ?

a-Narcolepsy.

b-Central apnea

c-Obstructive sleep apnea. d-Mixed apnea .

e-Hypopnea

22) All of the followings can be caused by sarcoidosis except :

a- Stridor .

b- Wheezes .

c- Heart block .

d- Facial nerve weakness

e- Hypercalcemia and Hypocalciuria .

23) Which one of the following conditions is an absolute indication for thrombolytic therapy in patients with PE ?

a- Contraindication for anticoagulation .

b- Large filling defect(s) on spiral CT scan . c- Hypotension caused by PE .

d- Bilateral PE .

e- presence of ECG changes suggestive of PE .

24) All of the followings are known complications of non invasive ventilation NIV except.

- a- Gastric insufflations .
- b- Conjunctival Irritation .. c- Hypotension.
- d- Pulmonary edema . e- Pneumothorax.

25) A 60 year old man , long standing smoker , has progressive dyspnea and productive cough for the last 2 years .1 week ago had flue like symptoms followed by increase in his symptoms .His best Spirometry taken 2 months ago showed FEV1 1.1 Liter ,FVC 2.2 without changed after inhaled B2 agonist . The ABG taken 10 minuets ago while breathing room air was PH 7.29 , Pa Co2 56 HCO3 32 Po2 35 .

One of the followings is true regarding this patient except :

- a- O2 therapy by non rebreathing mask should be started immediately. b- Hypoventilation is the main mechanism of hypoxia in this patient . c- CPAP is superior to BiPAP in this patient .
- d- After discharge exercise training may improved his survival. e- After discharge tiotropium is appropriate therapy .

26) A 24 year old female patient has 4 days history of fever .chills and left sided chest pain which increased by inspiration .Chest x ray showed consolidation in the left lower zone with signs of pleural effusion on the same side .All of the followings are indications for insertion of chest tube and intrapleural thrombolytic therapy except ;

- a- multiloculated fluid by CT scan . b- LDH of 1500 mg/l
- c- Gram stain of the pleural fluid is positive for Gram positive cocci . d- Fever remained >39 in spite of IV antibiotics .
- e- Pleural fluid culture +ve for strep.pneumonia .

27) All of the following statements are true regarding avian influenza except :

- a- H5N1 is the killing type.
- b- The mortality rate is around 50% .
- c- Tamiflu is an effective treatment if given early.
- d- Spread from human to human was documented in some cases. e - R-t PCR is a specific test for the disease .

28) In patients with idiopathic pulmonary fibrosis (usual interstitial pneumonia) all of the followings are expected physiological changes except :

- f. Low DLCO .
- g. **Decreased FEV1/FVC .**
- h. Severe O2 desaturation on exercise.
- i. Reduced vital capacity and total lung capacity .
- j. Increased pulmonary artery pressure .

29) Bronchiolitis obliterans characterized by all of the following conditions except a- Obstructive changes by spirometry .
b Can complicate bone marrow transplant . c- Good response to systemic corticosteroid .
d- HRCT scan of the chest typically shows mosaic appearance of air trapping . e- Transbronchial lung biopsy is inadequate for the diagnosis in most of cases .

30) All of the followings may improve obstructive sleep apnea except : a- Dental extraction .
b- Weight Reduction .
c- Decrease alcohol consumption . d- Nasal CPAP
e- Tracheostomy .

31) Nasl CPAP/BiPAP can be used to treat all of the following conditions except :
a- Myasthnia gravis
b- Acute pulmonary edema . c- Obstructive sleep apnea .
c- Respiratory failure due to severe kyphoscoliosis . e- Narcolepsy .

32) All of the following statement regarding lung cancer are true except :
f. Smoking is a known risk factor for all types of bronchogenic carcinoma .
g. Adenocarcinoma usually is a peripheral lung tumor .
h. Adenocarcinoma in some cases is difficult to be differentiated from mesothelioma .
i. Thromboembolic disease can be the first manifestation of the disease.
j. Surgery can be curative for early diagnosed cases .

14. ONE of the following drugs is LEAST used in treatment of acute sever asthma. a- nebulized B2 agonist
b- i.v hydrocortisone
c- epinephrine (adrenaline) d- oxygen
e- i.v . aminophylline

15. Hypoxia (decreased PaO₂) and decreased Pa CO₂ is found in all the following Except. a- left ventricular failure
b- massive pulmonary embolism c- acute sever asthma
d- acute exacerbation of COPD e- pneumonia

ONE of the following drugs is most appropriate in treatment of pneumocystis carinii pneumonia. a- clarithromycin
b- ethambutol
c- azithromycin
d- Trimethoprim-Sulphamethoxazole e- INH and rifampicine

27. All the following are true about Bronchiectasis Except. a- chronic cough with whitish sputum.
b- May be caused by cystic fibrosis
c- Clubbing of fingers d- Hemoptysis

e- Bronchial dilation and wall thickening is shown by high resolution chest CT scan.

28. All the following are true about sarcoidosis Except. a- raised serum level of angiotensin converting enzymes b- Negative tuberculin skin test
c- Normochromic normocytic anemia d- Hypercalcemia

e- Pulmonary caseating granuloma

37. ONE of the following statements is true about treatment of pulmonary tuberculosis. a- pyrazinamide may precipitate hyperuricemic gout.

b- INH can cause optic neuritis

c- renal impairment with rifampicin

d- streptomycin is causing reversible damage to vestibular nerve e- hepatitis is usually caused by ethambutol

51. 20-year old woman presents with a week history of fever, rigor and productive rusty cough. The chest X-ray shows left lower lobe consolidation.

Which ONE of the following is most appropriate treatment? a- clarithromycin

b- gentamycin

c- Cotrimoxazole d- Benzylpenicillin e- Flucloxacillin

69. A pleural effusion analysis results: ratio of concentration of total protein in pleural fluid to serum of 0.38, lactate dehydrogenase LDH level of 125 IU, and ratio of LDH in pleural fluid to serum of 0.45.

Which of the following ONE disease is the most likely the cause for this pleural effusion. a- uremia

b- pulmonary embolism

c- sarcoidosis d- SLE

e- Congestive heart failure

70. All the following criteria indicate severe asthma Except. a- silent chest

b- respiratory rate of 20/min. c- hypercapnia

d- thoracoabdominal respiration e- confusion

82. Which ONE of the following Arterial Blood Gases is most likely to be found in a 60-year-old heavy smoker man, He has chronic bronchitis, peripheral edema and cyanosis?

a- PH 7.50, PO₂ 75, PCO₂ 28

b- PH 7.15, PO₂ 78, PCO₂ 92

c- PH 7.06, PO₂ 36, PCO₂ 95

d- PH 7.06, PO₂ 108, PCO₂ 13

87. All of the following associations between conditions and mechanisms of hypoxia are true, except:
- COPD and V/Q mismatch (The principal contributor to hypoxemia in COPD patients is ventilation/perfusion (V/Q) mismatch resulting from progressive airflow limitation)
 - ARDS and pulmonary shunt (edema in patients with ALI/ARDS is impaired gas exchange with intrapulmonary shunt,)
 - Multiple rib fractures and hypoventilation**
 - Hepatopulmonary syndrome and V/Q mismatch (The hepatopulmonary syndrome is characterized by a defect in arterial oxygenation induced by pulmonary vascular dilatation in the setting of liver disease1) (Dyspnea and hypoxemia are worse in the upright position (which is called platypnea and orthodeoxia, respectively))
 - Motor neuron disease and hypoventilation
88. IN patients with sarcoidosis, all of the following are associated with good prognosis, except:
- Fever
 - Erythema nodosum
 - Age less than 40 years
 - Black race**
 - Presence of polyarthritis
89. Regarding the pathogenesis of bronchial asthma, one of the following is specific for the disease:Air flow limitation
- Airway hyper-responsiveness
 - Inflammation of the mucosa**
 - Peak flow variability
 - Brochioalveolar eosinophils
90. The most common organism responsible for severe community pneumonia needing ICU care is:
- Strep. pneumonia**
 - Legionella
 - H. influenza
 - Gram negative bacilli
 - Mycoplasma pneumonia

2. Which one of the following arterial blood gas sets on room air is compatible with completely compensated metabolic acidosis?

	A	B	C	D	E
PH	7.44	7.38	7.60	7.36	7.56
PaCO2 mmHg	26	25	25	95	40

Bicarb. MEq	18	15	24	49	34
B. Excess	-4.0	-10	+4	+15	+11

The pH must be normal. Therefore, exclude "E" and "C". The correction will be respiratory in the form of "washed-out" CO₂ need to be low. Therefore, exclude D. Bicarbonate will be low. The remaining options are A & B.

3. Lung's failure type respiratory failure is characterized by which one o the followings :

- f. Normal chest X ray .
- g. Hypocapnia or normocapnia .
- h. Diffusion is the main mechanism of hypoxia .
- i. Easy to correct hypoxia .
- j. PEEP is contraindicated .

Answer: B (Lung's type respiratory failure = type 1 respiratory failure).

Respiratory failure is a syndrome in which the respiratory system fails in one or both of its gas exchange functions: oxygenation and carbon dioxide elimination. In practice, it may be classified as either hypoxemic or hypercapnic.

Hypoxemic respiratory failure (type I) is characterized by an arterial oxygen tension (Pa O₂) lower than 60 mm Hg with a normal or low arterial carbon dioxide tension (Pa CO₂). This is the most common form of respiratory failure, and it can be associated with virtually all acute diseases of the lung, which generally involve fluid filling or collapse of alveolar units. Some examples of type I respiratory failure are cardiogenic or noncardiogenic pulmonary edema, [pneumonia](#), and pulmonary hemorrhage.

Hypercapnic respiratory failure (type II) is characterized by a PaCO₂ higher than 50 mm Hg. Hypoxemia is common in patients with hypercapnic respiratory failure who are breathing room air. The pH depends on the level of bicarbonate, which, in turn, is dependent on the duration of hypercapnia. Common etiologies include drug overdose, neuromuscular disease, chest wall abnormalities, and severe airway disorders (eg, asthma and [chronic obstructive pulmonary disease](#) [COPD]).

Source: Medscape, <http://emedicine.medscape.com/article/167981-overview>

3. All of the followings can be caused by sarcoidosis EXCEPT :

- a. Stridor .
- b. Wheezes .
- c. Heart block .
- d. Facial nerve weakness
- e. Hypercalcemia and Hypocalciuria .

4. In patients with idiopathic pulmonary fibrosis (usual interstitial pneumonia) all of the followings are expected patho physiological changes EXCEPT :

- k. Low DLCO .
- l. Decreased FEV1/FVC .
- m. Severe O2 desaturation on exercise.
- n. Reduced vital capacity and total lung capacity .
- o. Increased pulmonary artery pressure

Answer: B (increased FEV1/FVC ratio).

5. All of the followings may improve obstructive sleep apnea EXCEPT:

- a. Dental extraction .
- b. Weight Reduction .
- c. Decrease alcohol consumption .
- d. Nasal CPAP
- e. Tracheostomy

9. All of the following statement regarding lung cancer are true EXCEPT :

- k. Small cell lung carcinoma metastasizes late in the course of the disease
- l. Adenocarcinoma usually is a peripheral lung tumor .
- m. Adenocarcinoma in some cases is difficult to be differentiated from mesothelioma .
- n. Thromboembolic disease can be the first manifestation of the disease.
- o. Surgery can be curative for early diagnosed cases .

Answer: "A. Compared to non-small cell lung cancer, small cell lung cancer is just bad disease. The tumor grows fast and metastasizes early. Small cell is more often associated with paraneoplastic syndromes (e.g., Eaton- Lambert) and ectopic hormonal syndromes (e.g., SIADH).

10. All of the followings are useful for the assessment of the severity of an attack of bronchial asthma, EXCEPT :

- a. Spirometry .
- b. Methacholine test
- c. ABG (arterial blood gases)

- d. Peak expiratory flow rate
- e. Physical examination.

Answer: B. Methacholine tes: methacholine challenge test: a test that involves the inhalation of increasing concentrations of methacholine, a potent bronchoconstrictor, in patients with possible bronchial hyperreactivity; usually performed when a diagnosis of asthma or bronchospastic lung disease is not clinically obvious. Source: Stedman's.

11. Which one of the following pulmonary function values indicates airflow limitation

- a. FEV1 of 60% of predicted .
- b. FVC of 60% of predicted .
- c. FEV1/FVC of 60% of predicted .
- d. DLCO of 60% of predicted.
- e. Residual volume of 60% of predicted.

Answer: C. FEV1/FVC of 60%. Total lung capacity (TLC) is used to assess interstitial lung disease. Expiratory flow rate (FEV1/FVC is used to assess obstructive lung disease. Airway obstruction is diagnosed when the FEV1/FVC is <0.7 (70%). (Source: MedStudy Pulmonology 2013, p. 6)

9. Wide alveolar-arterial Po₂ (PA-a O₂) gradient can be increased in all of the following conditions EXCEPT:

- a. Morphine overdose .
- b. Severe pneumonia .
- c. Acute Bronchial Asthma .
- d. Acute Pulmonary edema .
- e. ARDS (acute respiratory distress syndrome)

Answer: In morphine overdose ☒ Hypoventilation ☒ No washout of alveolar CO₂ and replacement with new O₂ ☒ Both arterial and alveolar O₂ are decreased. Therefore, the PAa O₂ gradient is decreased.

10. Atopic bronchial asthma is characterized by all of the followings EXCEPT:

- a. Positive family history .
- b. Positive immediate reaction to skin prik test to allergens.
- c. Elevated IgE level .
- d. Affects patients after age of 40.

e. Elevated serum eosinophils count.

Answer: D. Onset of asthma early in life.

11. The main mechanism of dyspnea is

- k. Hypercapnia.
- l. Alkalosis.
- m. Increased work of breathing.
- n. Increased deoxygenated hemoglobin.
- o. Hypoxia .

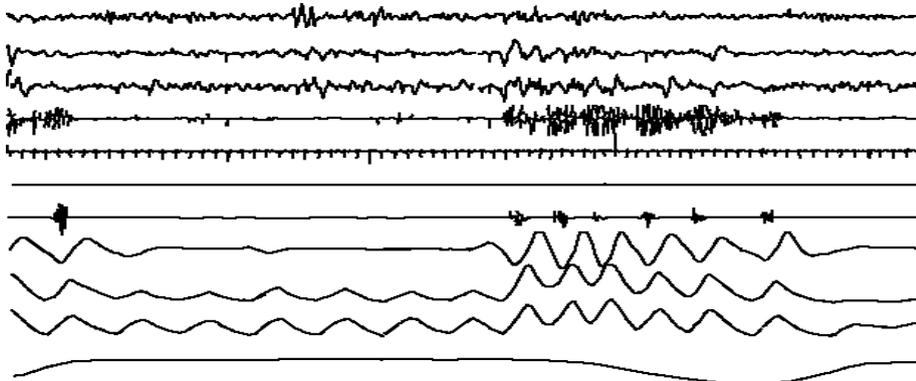
Answer: A? Hypercapnia & metabolic acidosis?. For hypoxia and deoxygenated hemoglobin, it is true that they cause dyspnea. But in metabolic acidosis, for example, there is no hypoxia. Nonetheless, there is "dyspnea".

12. All of the followings are true combination between a risk factor and pathogens causing pneumonia EXCEPT :

- a. Alcoholism and klebsella pneumonia
- b. Old age and mycoplasma pneumonia
- c. Cigarette smoking and H .influenza
- d. Mechanical ventilation and pseudomonal pneumonia.
- e. Abnormal level of consciousness and anaerobic bacteria

Answer: B (Mycoplasma & Young, otherwise healthy patients).

13. This is atypical part of 8 hours polysomnography for a 45 year old male patient



What is the diagnosis of this patient?

- a. Narcolepsy.

- b. Central apnea
- c. Obstructive sleep apnea.
- d. Mixed apnea .
- e. Hypopnea