



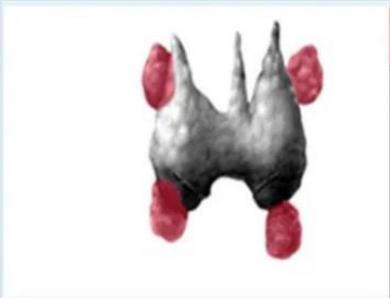
# الطب والجراحة لجنة

Endocrine lab exam

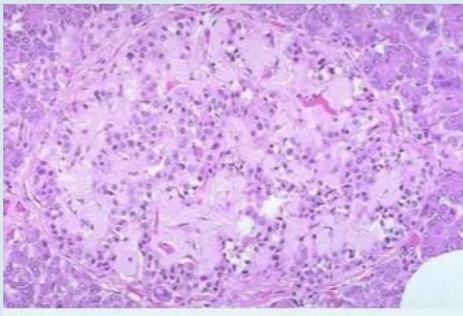
دفعة نبض 2019

1) A 72-year-old woman presents with abdominal pain. Physical examination reveals neuromuscular weakness and hypertension. Laboratory studies show markedly elevated levels of PTH and Ca. A surgical exploration of the patient's neck demonstrates four symmetrically enlarged parathyroid glands. This patient's endocrinopathy is caused by which of the following underlying disorders

- a. Chronic liver disease
- b. **Parathyroid hyperplasia**
- c. Insulin deficiency
- d. Renal insufficiency
- e. Parathyroid adenoma



Question 2 : What do you call the material deposited on the islets of Langerhans in this section from the pancreas?



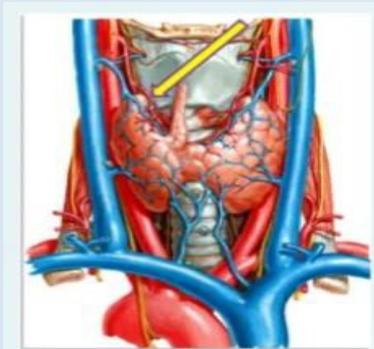
:Select one

- A. Atherosclerosis
- b. Hyaline
- C. Dystrophic calcification
- d. **Amyloid**
- e. Microorganisms

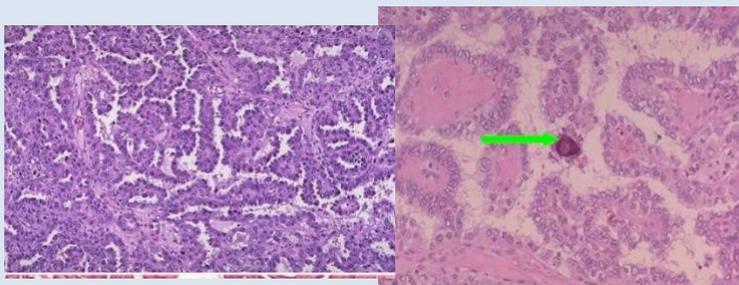
question 3: What is the labelled structure

- a. Left posterior division of superior thyroid artery

- b. Left anterior division of superior thyroid artery
- c. Right posterior division of superior thyroid artery
- d. **Right anterior division of superior thyroid artery**
- e. Thyroid gland

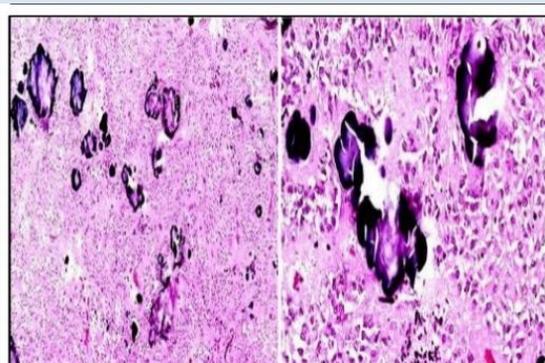


Question 4: A 32-year-old woman presents with a solitary, nontender, firm nodule on the left side of her neck. Thyroid function tests are within normal limits. A fine-needle biopsy reveals malignant cells. The tumor is excised and examined by light microscopy (shown in the image). What is the appropriate management for this lesions



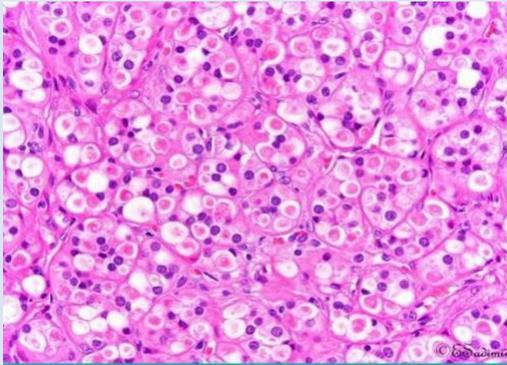
- a. **Total thyroidectomy:**
- b. Radiological investigation for bone and lung metastasis
- c. Lobectomy
- d. Only lymph node dissection
- e. Hemithyroidectomy

Question 5: The pointed structure present in



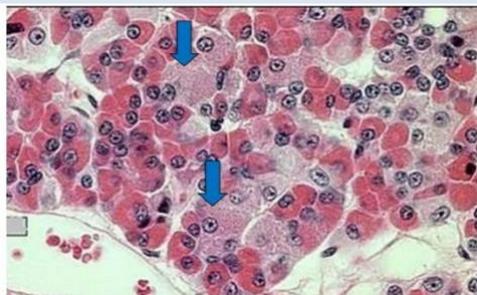
- a. Pituitary gland
- b. Suprarenal gland
- c. Parathyroid gland
- d. Pineal body
- e. cerebral cortex

Question 6: what is the medication responsible for these spherical eosinophilic cytoplasmic inclusions seen commonly in this tumor غير مطلوب



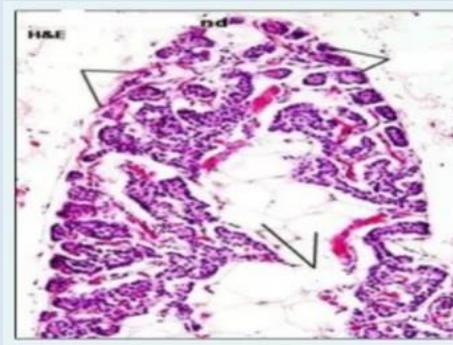
- a. Spironolactone
- b. Propranolol
- c. Furosemide
- d. Dexamethasone
- e. Aspirin

Question 7: The TRUE statement for the pointed cell is



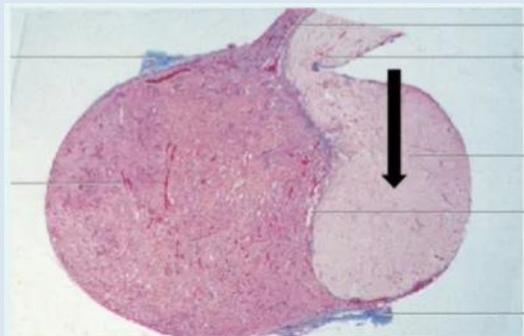
- a. Constitute 37%
- b. Secrete ACTH
- c. Secrete prolactin
- d. Secrete growth hormone
- e. Small in size

Question8: identify the tissue?



- a. Yellow bone marrow
- b. Pineal gland in old age
- c. Parathyroid in young
- d. Parathyroid in old age
- e. Thymus in old age

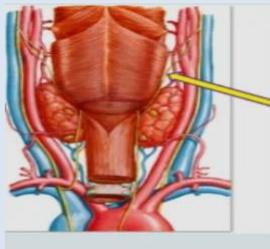
Question9: The TRUE statement for the cell present in the pointed area



- a. small glial cells of posterior pituitary
- b. Secretory cells present in pars nervosa
- c. Called astrocytes
- d. Multipolar nerve cells
- e. Modified neurons

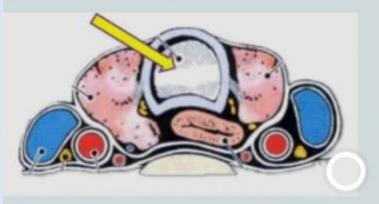
.a

Question 10 What is the labelled structure



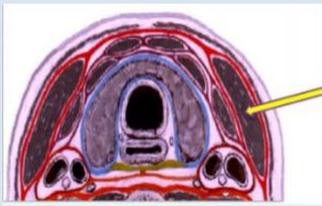
- a. Inferior constrictor muscles of pharynx
- b. Superior laryngeal nerve
- c. Internal laryngeal nerve
- d. External laryngeal nerve
- e. Superior thyroid artery

?question 11 :What is the labelled structure?



- a. Isthmus of thyroid gland
- b. Esophagus
- c. Lobe of thyroid gland
- d. Larynx
- e. Trachea

question 12 What is the labelled muscle



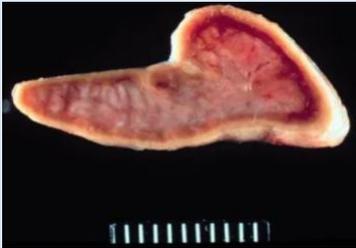
- a. Omohyoid
- b. Sternohyoid
- c. Sternomastoid
- d. Platysma
- e. Sternothyroid

:What is the material responsible for the usual yellowish color of these tumor غير مطلوب



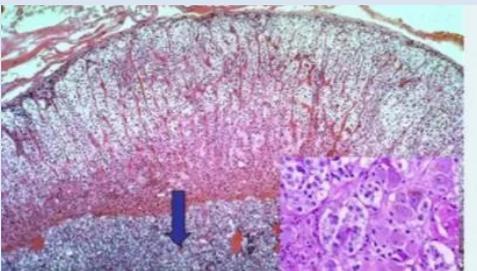
- a. Uric acid
- b. Bilirubin
- c. Lipid
- d. Dystrophic calcification
- e. Protein

question 14:One of the following is not usually associated with this morphologic change in the adrenal gland? غير مطلوب



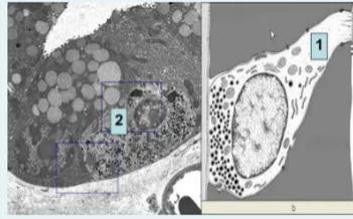
- a. Cushing disease
- b. Contralateral adrenal carcinoma
- c. Iatrogenic administration of high dose corticosteroids
- d. Contralateral adrenal carcinoma
- e. Contralateral adrenal hyperplasia

Question 15: the pointed area secrete?



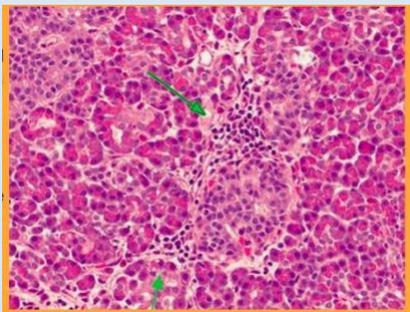
- a. Adrenaline and noradrenaline
- b. Melatonin
- c. Parathyroid hormone
- d. Melanocyte stimulating hormone
- e. Glucagon

Question 16 : the FALSE statement concerning the cell number (1) is



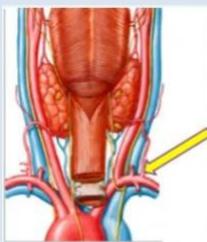
- a. They might show apical microvilli
- b. They have paracrine or endocrine action
- c. They have basal secretory granules
- d. Their apices do not reach the lumen of viscera
- e. They commonly present in the GIT

Question 17: what is the main inflammatory cell type mainly involved in the insult you see in this photo



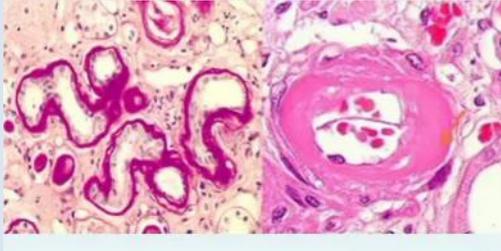
- a. Neutrophils
- b. Eosinophils
- c. Macrophages
- d. B-Lymphocytes
- e. T-Lymphocyte

Question 18: what is the labelled structure?



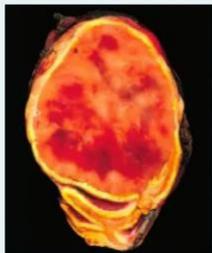
- a. Thyrocervical trunk
- b. Subclavian artery
- c. Recurrent laryngeal nerve
- d. Inferior thyroid artery
- e. Inferior thyroid vein

:?Question 19:One of the following is incorrect about these lesions



- a. These lesions are characteristic and specific for long standing diabetes mellitus
- b. Diffuse thickening of basement membranes also involves renal tubules and nerves
- c. Plasma proteins are deposited in the walls of injured arterioles thickening them
- d. Microangiopathy is diffuse thickening of basement membranes of capillaries
- e. Microangiopathy underlies the development of diabetic nephropathy and retinopathy

:Question 20:what is the main cell component of this tumor



- a. Sustentacular cells
- b. Glomerulosa cells
- c. Fasciculata cells
- d. Reticularis cells
- e. Chromaffin cells

:Question 21: The vein of the labelled structure drains into



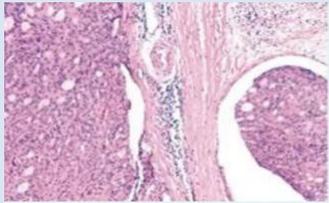
- a. Splenic vein
- b. Inferior vena cava
- c. Portal vein
- d. Left renal vein
- e. Right renal vein

Question 22: A 9-month-old female shown in this picture, born with severe mental impairment along with umbilical hernia. What is most likely to produce these findings



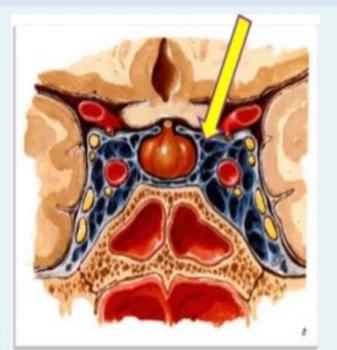
- a. Mutation in the RET proto-oncogene
- b. Dietary deficiency of iodine
- c. Antibodies against TSH receptor
- d. Maternal deficiency in T4 in early pregnancy
- e. Irradiation of the neck

Question 23: A 45-year-old man presents with swelling in the anterior portion of his neck. Physical examination reveals an enlarged nodular thyroid. Thyroid function tests are within normal limits. A biopsy of this nodule shown in this image. X-rays demonstrate distant bony metastases. What is the most likely diagnosis



- a. Metastatic carcinoma
- b. Anaplastic carcinoma
- c. Follicular carcinoma
- d. Medullary carcinoma
- e. B-cell lymphoma

Question 24: what is the labelled structure?



- a. Diaphragma sellae

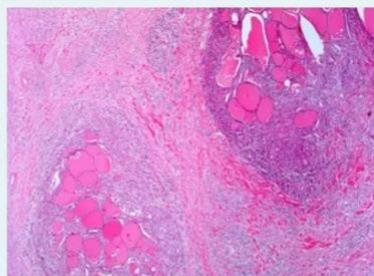
- b. Base of the skull
- c. Hypothalamus
- d. Sella turcica
- e. Pituitary

Question 25: Which of the following diseases commonly present with this finding?



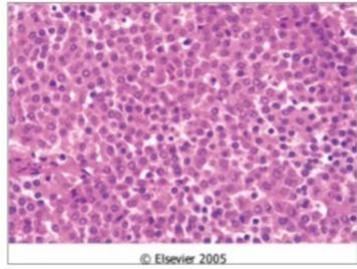
- a. Waterhouse Friderichsen syndrome
- b. Addison disease
- c. Cushing disease
- d. Diabetes mellitus
- e. Adrenal crisis

Question 26: A 33-year-old woman complains of swelling in the anterior portion of her neck. Physical examination reveals a stony, hard thyroid gland that is adherent to other neck structures. A thyroid biopsy is shown in the image. What is the appropriate diagnosis?



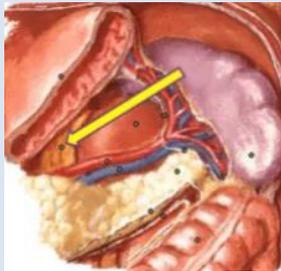
- a. Riedel thyroiditis
- b. Papillary thyroid carcinoma
- c. Multinodular goiter
- d. Graves hyperthyroidism
- e. Follicular adenoma

Question 27: A 35-year-old woman with a history of schizophrenia complains of headaches, visual disturbances, and irregular menses for 9 months. On physical examination the breasts are firm and tender. MRI shows enlargement of the anterior pituitary. A pituitary biopsy is shown in this picture. Which of the following is true regarding the pituitary enlargement in this patient?



- a. The cut point between microadenoma and adenoma in size is metastases
- b. the least common type is lactotroph adenoma
- c. The cut point between microadenoma and adenoma in size is 1 cm
- d. The most common type is somatotroph adenoma
- e. The cut point between microadenoma and adenoma in size is 1 mm

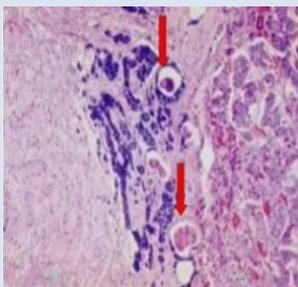
Question 28: The anterior relation of the labelled structure is



- a. Pyloric part of stomach
- b. Fundus of the stomach
- c. Body of stomach
- d. Left crus of diaphragm
- e. Head of pancreas

Answer: C

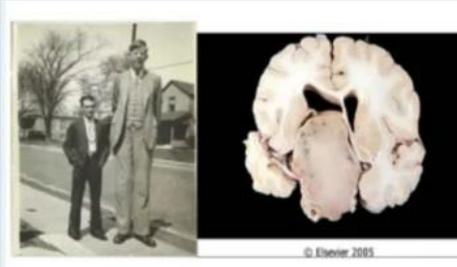
Question 29: the pointed structure secrete



- a. Calcitonin hormone

- b. Melatonin hormone
- c. **Melanocyte stimulating hormone**
- d. T3 and T4
- e. Thyroid stimulating hormone

Question 30: Which of the following are correct regarding the effects of increased levels of hormone regarding this macroscopic and clinical diagnosis



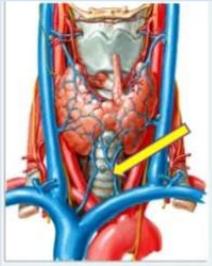
- a. **Increased levels of growth hormone stimulate increased production of insulin like growth factor one (IGF1) from the liver**
- b. Increased levels of growth hormone stimulate increased production of vasopressin from the adrenal glands
- c. A. Increased levels of growth hormone stimulate increased production of insulin like growth factor one (IGF1) from the pancreas
- d. Increased levels of growth hormone stimulate increased production of insulin like growth factor one (IGF1) from the adrenal glands
- e. Increased levels of growth hormone stimulate increased production of vasopressin from the liver

Question 31: One of the following is correct about the attached photo and this patient disease?



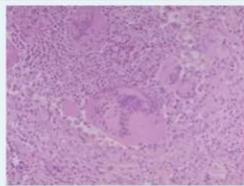
- a. Patients usually present with distal muscle weakness
- b. **Moon facies is part of the characteristic centripetal redistribution of adipose tissue**
- c. Collagen is a major component of the skin and responsible for its immunity
- d. Striae are formed because the skin is thick and hypertrophied due to scarring
- e. Anabolic effect effects of insulin resistance leads to loss of collagen

Question32:What is the labelled structure?



- a. Right superior thyroid vein
- b. Middle thyroid vein
- c. Left superior thyroid vein
- d. Right inferior thyroid vein
- e. Left inferior thyroid vein

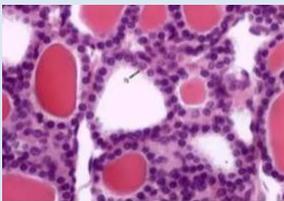
Question 33:A 43-year-old woman complains of low-grade fever and has a 3-day history of pain in her neck. Physical examination reveals slightly enlarged thyroid. A biopsy of the thyroid reveals the



following microscopic picture (shown in the image). What is the causative agent for this diagnosis?

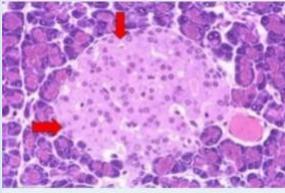
- a. Mutation in the RET proto-oncogene
- b. Maternal deficiency in T4
- c. Preceded by viral infection
- d. Dietary deficiency of iodine
- e. Irradiation of the neck

?Question 34:The least numerous cell type in this organ



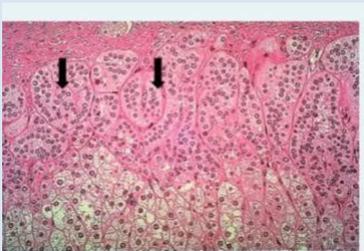
- a. Parathyroid cells
- b. Follicular cells
- c. Oxyphil cells
- d. Interfollicular cells
- e. Called clear cell

:Question 35: The cell in the pointed area which secretes insulin is



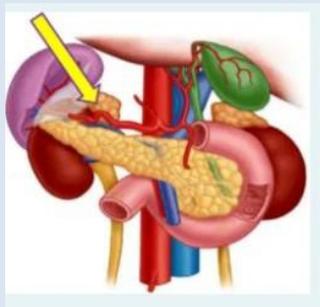
- a. Gamma cell
- b. Delta cell
- c. Parathyroid chief cells
- d. **Beta cell**
- e. Alpha cell

Question 36: The FALSE statement concerning the pointed zone?



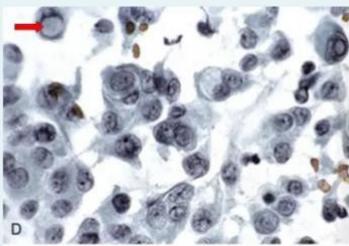
- a. The cells are columnar in shape
- b. The cells are steroid secreting cells
- c. Secrete aldosterone hormone
- d. Constitute 15%
- e. **Also called spongiocytes**

Question 37: What is the labelled structure?



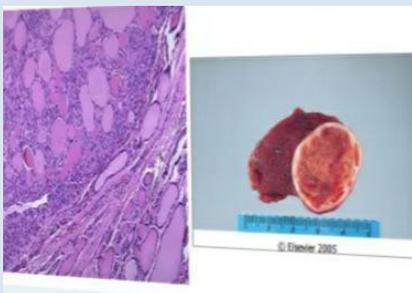
- a. Duodenum
- b. Right suprarenal gland
- c. Tail of pancreas
- d. **Left suprarenal gland**
- e. Lienorenal ligament

Question 38: A 32-year-old woman presents with a solitary, nontender, firm nodule on the left side of her neck. Thyroid function tests are within normal limits. A fine-needle biopsy reveals malignant cells as shown in this picture. Which of the following cytological features is highlighted by the arrow and confirmed the diagnosis of this thyroid malignancy?



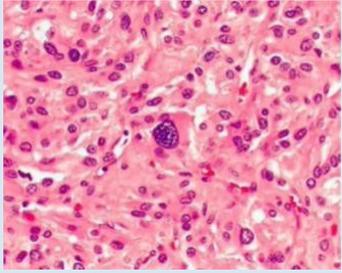
- a. Papillary thyroid carcinoma
- b. Nuclear clearing
- c. Nuclear grooving
- d. Nuclear inclusion
- e. Medullary carcinoma

Question 39: A 33-year-old woman presents with a swelling in her neck. Physical examination reveals a solitary, nontender nodule of the thyroid gland measuring 2 cm in diameter. Thyroid function tests are within normal limits. The nodule does not accumulate iodine on thyroid scintiscan. A biopsy of the nodule is shown in the image. Which of the following is true regarding this lesion?



- a. Intact capsule
- b. Nuclear changes on FNA cytology
- c. Capsular or vascular invasion
- d. Evidence of lung metastases
- e. Capsular invasion

Qoastion40:One of the following is incorrect about the tumor seen in this photo ? غير مطلوب



- a. 50% of them are paragangliomas
- b. Ventricular arrhythmias are one of the cardiac complications
- c. Multifocal lesions require long-term medical treatment for hypertension
- d. Tumor cells are compartmentalized into small nests by a rich vascular network
- e. 90% of patients present with hypertension

THE END