Multiple myeloma

MCQs

- only one of the following is true , the mst common increased IG in MM is:

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

- 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

- Causes of renal impairment in multiple myeloma include all the following except:

a. Renal Amyeloidosis.
b. Urinary tract infection.
c. Precipitation of light chain protein in renal tubules.
d. Hypercalcemia.
e. Hyperkalemia.

- A65 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

- **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.

- **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.

- **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

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Mini-OSCE

Q6

This X-ray was done for a 60-year old male who was C/O hypercalcemia. What is your diagnosis?

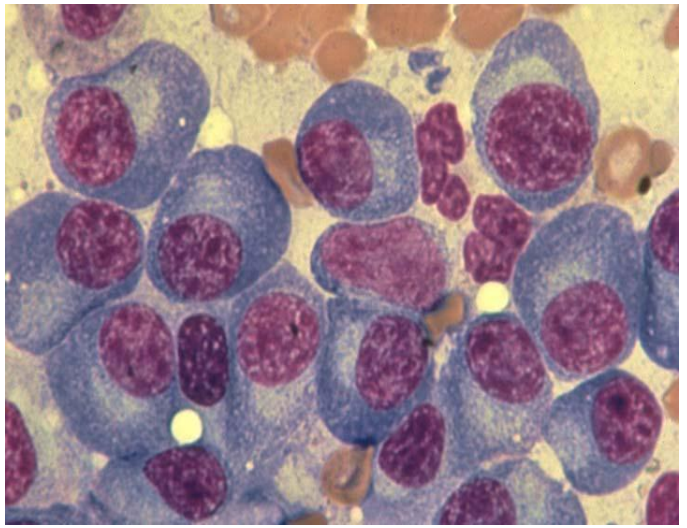
- Multiple myeloma

Station 1

Pt . Presented with bone pain and recurrent infections and fatigue >> history suggestive for multiple myeloma

Q1 : type of cells in photo A (bone marrow aspiration)?

plasma cell



Q2 : type 4 clinical presentations for this disease

- **anemia**
- **bone lesion**
- **renal failure**
- **frequent infection**

Station 18

History of bone pain and low eGFR

-Diagnosis :

multiple myeloma

-What are causes of low eGFR?

Bence jonsen protein

Hypercalcemia

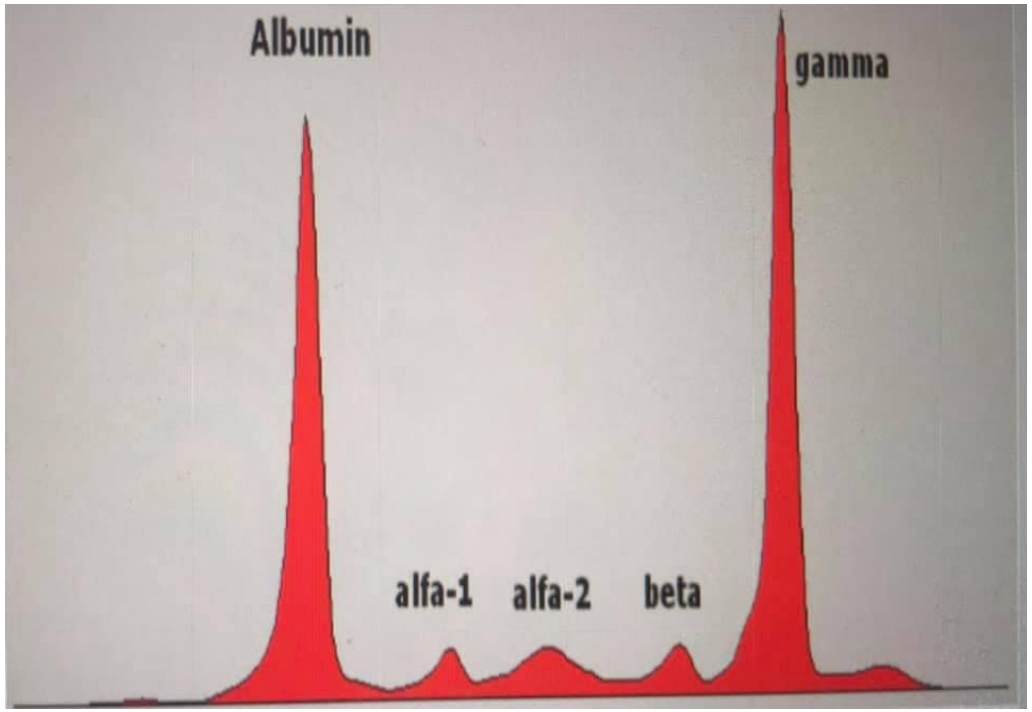
Hematology Sections

Q1 : what is the initial investigation ?

Doppler US

Q2: Patient came with hypercalcaemia , Bone Pain , the electrophoresis shows this peak , What is your diagnosis ?

Multiple Myeloma



A 50 years old patient came with back pain and renal colic

Q1 \ what is the diagnosis?

Multiple myeloma

Q2 \ mention 2 investigations you should order to diagnose?

1-serum protein electrophoresis

2-bone marrow biopsy and cytology

3-24 h urine collection, determination of free light chains

Q3 \ mention 2 line of management?

1-bone marrow transplant

2-chemotherapy

Q3 : the false answer below regarding the electrophoresis ?

- Hypercalcemia
- The main antibody type is IGM
- Increase ESR
- Cause pathological fracture

- **NOTE** :
  (dignosis is MM) , and The main type of Ig mostly (IgG) .