HEMATOLOGY

INTERNAL MEDICINE

Archive

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ANEMIA

1- which of the following is wrong?
Anemia of chronic disease is macrocytic anemia

2- wrong about pernicious anemia?
Treated by oral vitamin B12

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

4- All are causes of iron deficiency anemia "IDA" except :
a. Blood loss
b. Low iron intake
c. Anemia of chronic disease

Answer : c

5- 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

Answer : d

6- 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.Thalassemia major.

Answer : a

7- 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

Answer : a

8- 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.

answer : a

9- Wrong about iron deficiency anemia:
a. Low TIBC
b. Low retics response

answer : a

10. 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

Answer: d

ANEMIA

11. One of the following is not a complication of celiac disease
a. T-cell lymphoma
b. Osteoporosis
c. Aplastic anemia
d. Ulcerative jejunitis
e. Increased risk of esophageal carcinoma

Answer: e

12. In macrocytic megaloblastic anemia, one of the following is true
a. Hypersegmented neutrophil
b. High reticulocyte count
c. Increased direct bilirubin
d. High WBCs
e. Low LDH

Answer: a

13. 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

Answer: c

14. 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

Answer: d

15. 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

Answer: e

16. 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

Answer: d

17. Alcoholic patient was found to have macrocytic anemia, the most likely cause:
Vitamin B12 deficiency
Answer: Vitamin B12 deficiency

18. Increased reticulocyte 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

Answer: d

ANEMIA

19. Hypochromic microcytic anemia is a feature of one of the following diseases:

a. Thalassemia minor

b. Hereditary spherocytosis

c. Autoimmune hemolytic anemia

d. Pernicious anemia

e. Folic acid deficiency anemia

Answer: a

20. 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

Answer: b

21. 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

Answer: e

22. All true except?

Fe deficiency has low RDW

Answer: Fe deficiency has low RDW

23. A patient with a history of treatment for pneumonia (he took co-trimethaxazole) is complaining of signs and symptoms of anemia with splenomegaly. CBC: Hb: 9, MCV: 90, reticulocyte count: 7%. What is the most likely diagnosis?

Answer: G6PD deficiency

24. PT prolongation doesn't occur at:

Answer: Intrinsic pathway

25. B12 deficiency anemia? Wrong?

Answer: Commonly caused due to diet deficiency

26. Not associated with anemia of chronic disease:

Answer: Essential hypertension

27. Not a cause of macrocytic anemia:

Answer: Thalassemia

28. All true about pernicious anemia except:

Answer: Response to iron treatment

29. Not a cause of thrombocytosis:

Answer: Iron deficiency anemia

30. Another marker that is used to diagnose vitamin B12 deficiency:

Answer: Elevated methylmalonic acid level

ANEMIA

31. A typical cause of anemia with normal RDW:
Thalassemia
Answer: Thalassemia

32. The definitive treatment of B-thalassemia major:
BMT (Bone marrow transplant)
Answer: BMT (Bone marrow transplant)

33. 35-year-old male complaining of fatigue. He denied history of melena, trauma, etc. CBC shows decrease in Hb, MCV, and normal RDW. Next step:
a. Occult stool test
b. Iron measurement
c. Hb electrophoresis
d. Lead level

Answer: a

34. Deferoxamine:
Answer: Iron overdose

35. 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 Hb 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

Answer : d

36. Megaloblastic anemia, except:
A. Dietary deficiency is common

Answer: A

37. All are indications for transfusion therapy in sickle cell anemia, except:
A. Stroke
B. Pain
C. Pain with occlusive crisis
D. Acute chest syndrome

Answer: C

38. 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)

Answer: a

39. All 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

Answer: 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).

ANEMIA

40. 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 Coombs' tests were positive. The patient has:
a. Warm autoimmune hemolytic anemia (AIHA)

Answer: a

41. 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 to have anemia 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:
Answer: B-Thalassemia minor + Sickle cell trait

42. 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

Answer: a

43. 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

Answer: d

44. 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

Answer: e

45. 23-year-old woman presents with lethargy. The following blood results are obtained: Hb 10.4 g/dl, platelet 268x10^9/L, WBC 6.3X10^9/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

Answer: a

46. 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

Answer: a

47. 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)

Answer: a

ANEMIA

48. Teratology of Fallot not present??
Anemia-bleeding tendency-cyanosis-clubbing.
Answer: (This requires clarification, possibly asking about tetralogy-related complications).

49. All the following are causes of warm autoimmune hemolytic anemia except:
a. SLE
b. Chronic lymphocytic leukemia
c. Methyldopa
d. Infectious mononucleosis
e. Non-Hodgkin's lymphoma

Answer: d

50. Splenectomy may be an option in treatment of all the following except:
a. Hereditary spherocytosis
b. Idiopathic thrombocytopenic purpura
c. Warm autoimmune hemolytic anemia
d. Hypersplenism
e. G6PD deficiency

Answer: e

51. 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

Answer: e

52. 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

Answer: c

53. 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)

Answer: a

54. All the following are true about pernicious anemia 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.

Answer: d

55. Peripheral neuropathy ...
Answer: Vitamin B12 deficiency
56. Electrophoresis ...
Answer: Thalassemia
57. X-linked ...
Answer: G6PD
58. B12 deficiency anemia? Wrong?
Commonly caused due to diet deficiency
59. Triad of portal vein thrombosis + pancytopenia + hemolysis?
Answer: PNH

ANEMIA

60. After undergoing surgical resection for carcinoma of the stomach, a 60-year-old male develops numbness in the lower limb. Blood film shows macrocytosis and MCV = 120 fl. The abnormality is most likely due to ONE of the following:
a. Folic acid
b. Vit. B12 (IF)
c. Thiamine
d. Vit. K
e. Riboflavin

Answer: b

61. Schistocytes on blood film examination are unlikely to be seen in which of the following?
a. Thrombotic thrombocytopenic purpura (TTP)
b. Thalassemia
c. Vasculitis
d. Glomerulonephritis
e. Hemolytic uremic syndrome

Answer: b

62. Splenomegaly may be found in all the following Except:
a. Polycythemia rubra vera
b. Essential thrombocythemia
c. Portal hypertension
d. Thalassemia minor
e. Myelofibrosis

Answer: d

63. True regarding sickle cell disease:
Hand-foot syndrome is associated with swelling and pain at fingers and toes for children and cause disability
Answer: True

64. 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

Answer: a

65. 35-year-old male complaining of fatigue. He denied history of melena, trauma, etc. CBC shows decrease in Hb, MCV, and normal RDW. Next step:
a. Occult stool test
b. Iron measurement
c. Hb electrophoresis
d. Lead level

Answer: a

66. Deferoxamine:
Answer: Iron overdose

67. Patient with sickle his Hb is 5 and retic is 0.5% what is the most likely diagnosis?
A) Hemolytic crisis
B) Splenic sequestration
C) Viral infection

Answer : C

(Parvovirus B19 —> aplastic crisis —> low retic count)
(Splenic sequestration—> high retic count)

68. Screening for Celiac should be done in which one of the following scenarios?
A) 60-year-old male with erythema nodosum
B) 20-year-old male with anemia and fatigued all the time

Answer : B

ANEMIA

69- One of the following is not a cause of iron deficiency anemia?

A) Decreased oral intake of iron

B) Increased oral intake of iron absorption inhibitors

C) Anemia of chronic disease

D) Hookworm infestation

Answer : C

70- One of the following is associated with anemia of chronic disease?

A) Low ferritin

B) High hepcidin

C) High TIBC

Answer : B

BLEEDING DISORDER & PLATELET

1. Inheritance bleeding??
VWF (answer: VWF)

2. Most common bleeding disorder...
VWF (answer: VWF)

3. 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
   answer: a

4. Elevated bleeding time and PTT — von Willebrand disease
(answer: von Willebrand disease)

5. 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

answer: c

6. 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

answer: a

7. Disease with decreased clotting factor: Christmas disease (Hemophilia B) (answer: Hemophilia B)
8. One is coagulation disease: Hemophilia B (answer: Hemophilia B)
9. All are acquired causes of platelet disorders except?
   A. Bernard-Soulier syndrome (Autosomal recessive)
   B. ITP
   C. TTP
   D. Thrombocytosis
   E. Uremic thrombocytopenia

answer: a

10. Wrong about ITP? Prolonged PT, PTT (answer: Prolonged PT, PTT)
11. Not a treatment for ITP? Azathioprine (answer: Azathioprine)
12. Not a treatment of ITP: IVIG, Splenectomy (answer: IVIG and Splenectomy are both treatments — question unclear)
13. All the following are causes for immune thrombocytopenia (ITP) except:
   a. B-cell lymphocyte malignancies
   b. HIV
   c. Heparin
   d. Systemic lupus erythematosus
   e. Folic acid deficiency anemia

answer: e

14. First-line drug in treatment of ITP includes one of the following:
   a. Splenectomy
   b. Prednisolone
   c. Thrombopoietin
   d. Azathioprine
   e. Rituximab

answer: b

15. ITP does not affect:
   A. PT/PTT
   B. Platelet count
   C. Bleeding time

answer: A

BLEEDING DISORDER & PLATELET

16. First choice treatment for ITP? Prednisone (steroids) (answer: Prednisone)
17. Petechiae with no other complaint — ITP (answer: ITP)
18. A 26-year-old female presented to ER with petechiae, everything else is normal:
   A. ITP
   B. Septic meningitis

answer: a

19. ITP, one is correct:
   a. Often follows a viral infection
   b. Typically has chronic course
   c. Associated with moderate splenomegaly
   d. Requires splenectomy in more than 20% of cases
   e. Associated with decreased megakaryocytes on bone marrow exam

answer: a

20. 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

answer: e

21. Wrong about side effects of these drugs: thiazide/thrombocytosis (answer: Thrombocytosis is not a side effect of thiazides)

22. 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 should be given
   e. Howell-Jolly bodies are seen on blood film

answer: a

23. All the following may be used in treatment of ITP Except:
   a. Oral prednisolone
   b. Fresh frozen plasma
   c. Splenectomy
   d. IV immunoglobulin
   e. Cyclophosphamide

answer: b

24. Splenectomy may be an option in treatment of all the following Except:
   a. Hereditary spherocytosis
   b. ITP
   c. Warm autoimmune hemolytic anemia
   d. Hypersplenism
   e. G6PD deficiency

answer: e

25. A 20-year-old woman presents with fever, abdominal pain, purpura, and focal neurological signs. Most likely diagnosis:
   a. ITP
   b. Thrombotic thrombocytopenic purpura
   c. DIC
   d. Henoch-Schönlein purpura
   e. Von Willebrand's disease

answer: b

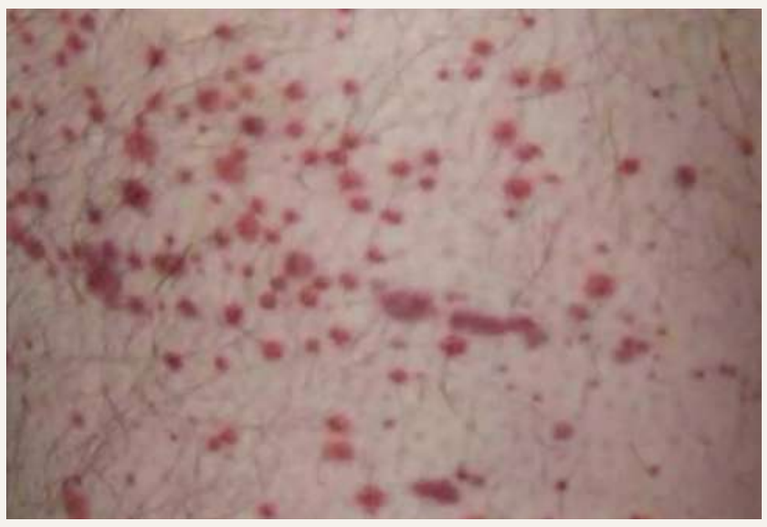
26. Patient presents with confusion, high creatinine and urea, fever — HUS or TTP (answer: TTP or HUS)
27. Mechanism of action of aspirin? Inhibits thromboxane A2 (answer: Inhibits thromboxane A2)
28. A 72-year-old woman with STEMI treated with fibrinolysis, now hypotensive with persistent chest pain. Most appropriate management:
   a. Continued medical therapy
   b. Glycoprotein IIb/IIIa inhibitor
   c. Repeat tenecteplase
   d. Transfer for emergency PCI
   e. Urgent CABG

answer: d

BLEEDING DISORDER & PLATELET

29- A 19 year old male patient, previously healthy presented with mild gum bleeding and skin rash on his trunk and extremities for the past 2 days .
No history of drug abuse. Otherwise, he is doing fine without complaints.
The most likely diagnosis is ?

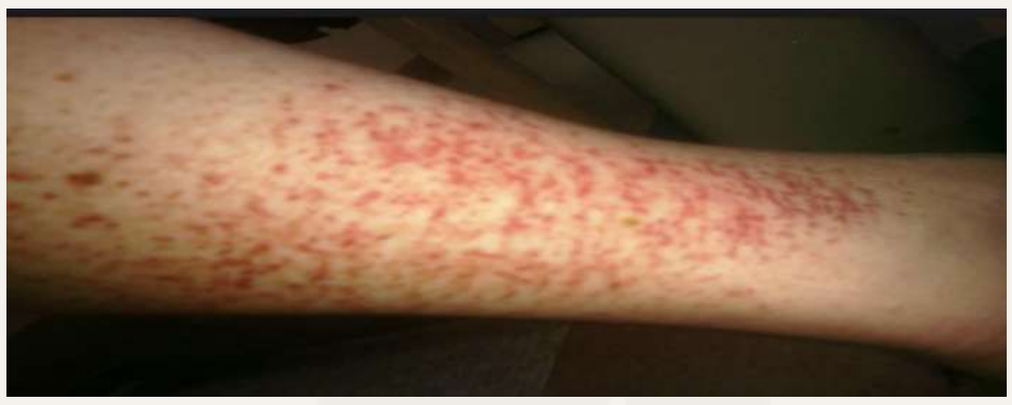
a. Thrombotic thrombocytopenic purpura (TTP)
b. Immune thrombocytopenic purpura (ITP)
c. Disseminated intravascular coagulopathy (DIC)
d. Henoch schonlein purpura(HSP)
e. Polyarteritis nodosa (PAN)



answer : b

30- Mention two causes of this Non-blanching Rash ?

1. **Thrombocytopenia (ITP . Aplastic anemia .)**
2. **Vasculitis**
3. **Meningiococcemia? (not sure)**



DIC

• Wrong about DIC :
A. thrombocytosis*
B. Decrease fibrinogen
C. Burn can cause it

• All in DIC except :increase fibrongen level

• not cause of DIC: essential thrombocytosis

• Which leukemia typically is associated with DIC:
a. M1
b. M2
c. M3*
d. M4
e. M5

ANTICOAGULANT

1. 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

Answer: c

2. 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 ll inhibitor
c. Anticoagulant which inhibits the activated factor X
d. Antiplatelet which acts as an ADP receptor inhibitor
e. Antiplatelet which inhibit GPIIbIIIa

Answer: a

3. 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?
a. Anticoagulant
b. Carotid endarterectomy
c. Clopidogrel
d. Corticosteroid
e. No action

Answer: a

4. 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

Answer: d

5. 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

Answer: c

6. 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

Answer: e

7. 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 admitted to hospital and if there is no contraindicationto 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

Answer: a

8. Warfarin

Answer: INR

9. heparin antidote is:

Answer: Protamine sulfate

ANTICOAGULANT

10. 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,02 saturation is95% 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.

Answer: c

11. 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

Answer: c

12. 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

Answer: b

13. Pateint taking antiTB and warfarin started feeling (arrythmia) ?

Answer: Increase warfarin dose

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

14. Mechanism of action for warfarin

Answer: Vit K ..etc.

15. Wrong about a patient with liver cirrhosis:
a. Lactulose
b. Warfarin
c. Restrict proteins
d. Restrict diet
e. Restrict salt

Answer: b

16. A 70 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. permenant pace maker
c. aspirin
d. warfarin
e I.V heparin

Answer: d

17. best drug for DVT?

Answer: Low molecular weight heparin

18. 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

Answero: c

19. 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.

Answer: b

ANTICOAGULANT

20. 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

Answser: c

21. 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

Answer: e

22. Drugs that affect platelets include all except?
a. Low molecular weight heparin
b. Aspirin
c. Isoniazid
d. penicillamine
e. Bendrofluazide

Answser:

23. Wrong about heparin:
a. Half life 90 minutes
b. Skin necrosis
c. Thromobcytopenia
d. Only administered SC and IV

Answer: b

24. All about heparin true except??

Answer: cause skin necrosis

25. Venous thromboembolism prophylaxis with subcutaneous heparin should be given to all of the following patients, EXCEPT :
a. A 60-year old woman undergoing total hip arthroplasty
b. A 45-year old man undergoing hemi-colectomy for colon cancer
c. A 35-year old man mechanically ventilated for severe pneumonia
d. A 70-year old man admitted with thrombotic stroke in the ICU
e. A 21-year woman who had normal vaginal delivery

Answer: e

26. patient with stable angina on asprin, 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 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

Answer: b

27. 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
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 :

ANTICOAGULANT

glucose 225mg/dl, Na 135 meq/L, k 7 meq/L, HCO3 21 meq/L, Cr 2.4 mg/di, 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

Answer: e

28. A 50 year old man with no past medical history is found to be in atrialfibrillation 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. Asprin.
b. warfarin, target INR 2-3
c. no anticoagulation.
d. warfarin, target INR3-4.
e. warfarin, target INR2-3, for 6 months then Asprin.

Answer: a / b

29. 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. Reccurent 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

Answer: a

30. 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 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

Answer: a

31. Patient with chest pain and nonspecific anterolateral changes on ECG, what is the indication for giving clopidogrel?
a. If contraindicated to give aspirin
b. For 6 months when the mortality is 5%
c. For 12 months when the mortality is 5%

Answer: a

32. Patient on warfarin because he had DVT, his INR is 5.3, he is asymptomatic with no signs of bleeding, what is the next step?
a. Give IV vitamin K
b. Give FFP and vitamin K
c. Stop treatment
d. Skip the next dose, then decreasing the following doses

Answer: d

33. After seven days of hospitalization for a patient who had a major surgery and taking heparin as prophylaxis, CBC is done for him shows low platelets 30,000 (baseline was 250,000), what is the best next step?
a. Stop heparin and initiate LMWH
b. Stop heparin and initiate warfarin
c. Stop heparin with no other treatment
d. Stop heparin and initiate fondaparinux

Answer: d

34. Female patient presents with SOB, hemoptysis, pleuritic chest pain, she is unstable with systolic BP of 80 mmHg, what is the best next step in management?
a. LMWH
b. Thrombolysis
c. Warfarin

Answer: b

LEUKAEMIA

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 micro mol/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

Answer: A

tumor lysis syndrome = destruction in the cell, mainly occurs after chemotherapy, it causes increase of uric acid, potassium, phosphate, and lowering of calcium becuase if high phosphate levels.

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

Answer: E

Philadelphia chromosome is a charactrestic 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.

Answer: B

philadelphia chromosome related mainly to CML and worse cases of ALL

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 transloation between chromsomes 9, 22 (Philadelphia chromosome)
d. Possible treatment for CML include; imtinib and allogenic BMT
e. CML could transfer to AML or ALL

Answer: B

Low Luecocyte alkaline phosphatase

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d. Possible treatment for CML include; imtinib and allogenic BMT
e. CML could transfer to AML or ALL

Answer: B

CML shows low luecocyte alkaline phosphatase

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

Answer: D

Aplastic anemia doesn't cause spleenomegaly, megaloblastic anemia shows hypercellular marrow with megaloblastic changes, hairy cell leukemia causes all findings shown in case.

LEUKAEMIA

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

Answer: B

A 71-year-old woman with no significant past medical history is investigatedfor generalized tiredness. She has recently lost 7 Kg in weight.
The following blood results are obtained. Hb: 9.8 g/ dl, platelates: 104 x 10 9/ L, WBC: 70 X 10 9/L Blood film: small mature lymphoctosis, 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

Answer: B

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

Answer: B

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 beat 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

Answer: E

tumor lysis syndrome = destruction in the cell, mainly occurs after chemotherapy, it causes increase of uric acid, potassium, phosphate, and lowering of calcium becuase if high phosphate levels.

Cml incorrct :
a.Smudge cells
b.Philadelpia chromosome
c.Tyrisine kinase inhibitors
d.Incresed wbc with shift to the left
e.Massive splenomegaly

Answer: A

smuged cells seen with CLL not CML.

Which finding is not frequently found in Chronic MyelogenousLeukemia (CML)?
a. Elevated WBCs
b. Elevated vitamin B12 level
c. Elevated LDH
d. Translocation between chromosomes 9 and 14
e. Increased uric acid level

Answer: D

CmL characterized by Philadelphia chirmosome, which is 9:22 chromosome translocation.

LEUKAEMIA

Wrong about CML :
a-Philadelphia chromosome translocation
b-Smudge cell

Answer: B

CASE : low platelet count , WBC count 30000 , 50% blast ?
AML , M3 type

Auer rods are found in which one of the following?
a- AML
b- ALL
c- CLL
d- CML
e- Sickle cell anaemia

Answer: a

Auer rods are characteristic finding in AML, mainly M3 = APL

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: b

Extremities of age\ Philadelphia chromosome\ WBC >30,000 , all has poor prognosis in ALL

Cml incorrct :
a.Smudge cells
b.Philadelpia chromosome
c.Tyrisine kinase inhibitors
d.Incresed wbc with shift to the left
e.Massive splenomegaly

Answer: A

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e. Increased uric acid level

Answer: D

CmL characterized by Philadelphia chirmosome, which is 9:22 chromosome translocation.

Q) Wrong about CLL :
Disease of children

Q) wrong regarding CLL :
It is disease of adults
CLL occurs mainly with older age > 60

Q) tumor lysis syndrome causes all but which of the following :
hypercalcemia

Q) Wrong about diagnosis of ALL:
A. Lumbar puncture

هيك السؤال في الأرشيف، بس ال ALL بيكون فيه CNS involvement وال lumber puncture مفيد فيه برضو وبيتمراستخدامه في التشخيص، لذلك السؤال ناقص وما اله جواب واضح هون.

Q) A patient with chronic myeloid leukemia, one of the following is associated with the disease?
A) Philadelphia chromosome
B) TEL-AML translocation

Answer: A

Q) Doesn't cause lymphadenopathy ;
CML , brucellosis

السؤال غير واضح، والجواب غير معروف، هيك كان بالأرشيف

LYMPHOMA

1)Hodgkin lymphoma emergency:
SVC obstruction
2)Wroung about lymphoma :
Large tender-painful- lymph node
3)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.

Answer: a

4)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.

Answer: d

5)All of the following "B" symptom of non-Hodgkin lymphoma except :
a.drenching sweat
b.Fever
c.Weight loss
d. itching.

Answer: d

6)Young male, 20 years, fever, weight loss 10 kg, x-ray show anterior mediastinal mass, diagnosis is:
a. Lymphoma
b.Stages of Non-Hodgkin's Lymphoma
c.Coccidiomycoma
d.Histoplasmosis.

Answer:

7)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
d.stage III
e.stage IV

Answer: c

8)Patient 3endo non hodgkin lymphoma ...shu el renal manifestation elo?

9)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).

Answer: d

10)All the following are causes of eosinophilia Except.
a.ascaris infestation g-malaria.
b.bronchial asthma.
c.Hodgkin's lymphom.
d.Drug hypersensitivity.

Answer: a

11)Incorrect in non Hodgkin :
Reed stenburg cells
12)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.

Answer: d

12)Hodgkin 1a? Which is wrong;

involves 2 nodes

13)Indications to use cytoreductive drug(thydroxyurea) in patient with essential thrombocytosis 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

Answer: a

14)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.

Answer: c

In PV, erythropoietin levels are usually low or normal. The increase in red blood cell production is due to a primary problem in the bone marrow, not an increase in erythropoietin.

15)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.

Answer: d

16)JAK2 mutation is found in?

a.CML.

b.Polycythemia rubra vera ??

c.Essential thombocythemia.

Answer: c

17)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.

Answer: a

17)pruritus is a clinical manifestation to only one of the following disease ?

a.Polycythemia vera.

b.Iron deficiency anemia.

c.Folic acid deficiency anemia.

d.AML.

e.CML.

Answer: a

18)In polycythemia rubra vera, one of the following is true?

a.Low erythropoietin and low red cell mass.

b.Normal erythropoietin and normal red cell mass.

c.Raised erythropoietin and low red cell mass.

d.Raised erythropoietin and raised red cell mass.

e.Low erythropoietin and raised red cell mass.

19)Polycythemia RV what is wrong : **Answer: e**

It is myelodysplastic.

20)Patient present with Hb of 8... Blood film shows polychromasia. Best next step in management. patient is on hydoxychloroquine therapy for SLE :

a.IV corticosteroids.

b.Plasmapharesis.

Ans: A (She has Evan's syndrome).

21)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.

22)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 biospy usually show hypercellular marrow with increased megakaryocytes Massive splenomegaly in CML and myelofibrosis.

Answer: a

23)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.

Answer: e

24)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.

Answer: d

25)Blood film shows target cells, Howell Jolly boies, and sideroblasts:
a.Hyposplenism.
b.Myelofibrosi

Answer:

MULTIPLE MYELOMA

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

Answer: a

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

Answer: b

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

Answer: c

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

Answer: c

MULTIPLE MYELOMA

Elderly man came with bone pain, multiple lytic lesions and elevated plasma cells on bone marrow, which of the following not associated with this case?
A) Elevated total protein with normal to low albumin
B) Hypercalcemia
C) Hyperkalemia*
D) Renal failure

«ولم أجِدِ الإنسَانَ إلا ابنَ سَعْيِهِ
وبالهِمَّةِ العَلياءِ يَرْقَى إلىٰ العُلا

فمَن كانَ أسعَىٰ كانَ بالمَجْدِ أجدَرا.
فمن كانَ أرقَىٰ هِمَّةً كانَ أظهَرا».