

## Haematology, Oncology, Rheumatology MCQs

20. Which of these is not a cause of a macrocytosis?

- a) hypothyroidism
- b) chronic alcohol intake
- c) phenytoin
- d) reticulocytosis
- e) B12 and folate deficiency

21. Which is not a cause of a microcytic anaemia?

- a) anemia of chronic disease
- b) thalassemia
- c) sideroblastic anaemia
- d) iron deficiency
- e) chemotherapeutic drugs

22. Which is a neurological sequelae of prolonged B12 deficiency?

- a) subacute degeneration of the spinal cord
- b) peripheral neuropathy
- c) higher center dysfunction
- d) all of the above
- e) none of the above

23. Which of these below is not a microangiopathic hemolytic anaemia?

- a) TTP
- b) Hemolytic uremic syndrome
- c) HELLP
- d) ITP
- e) DIC

24. Regarding TTP and HUS, which statement below is false?

- a) they are probably of the same pathological entity
- b) they both usually present with neurological abnormalities
- c) they both cause a hemolytic anaemia
- d) they both cause a thrombocytopenia
- e) they both have normal coagulation

25. Which statement is false?

- a) In both hemophilia A and B the INR will be normal
- b) In both hemophilia A and B the APTT will be abnormal
- c) Hemophilia A is more common than B
- d) The desired treatment of Hemophilia B is administration of Factor IX
- e) The desired treatment of Hemophilia A is the administration of cryoprecipitate

26. Which agent/s can be used to treat bleeding with von Willebrand's disease?

- a) desmopressin
- b) factor VIII concentrate
- c) factor IX concentrate
- d) platelet transfusion
- e) A and B

27. Which is not a common precipitant of sickle cell crises?

- a) hot weather
- b) dehydration
- c) infection
- d) high altitude
- e) all of the above are precipitants

28. Which statement is false regarding Disseminated Intravascular coagulation?
- a) pts usually present with hemorrhage
  - b) microthrombi/emboli are seen in some patients
  - c) replacement of clotting factors if the patient is bleeding has been shown to improve outcome
  - d) treatment of microthrombi with systemic heparin has been shown to improve outcome
  - e) all of the above are true statements
29. Which laboratory abnormality would you not expect to see in DIC?
- a) decreased platelet count
  - b) high fibrinogen level
  - c) prolonged INR
  - d) elevated FDP
  - e) elevated D dimer
30. Which of these commonly used drugs does NOT cause platelet dysfunction?
- a) aspirin
  - b) penicillins
  - c) phenytoin
  - d) verapamil
  - e) tricyclic antidepressants
31. Which agent is not in cryoprecipitate?
- a) factor VIII
  - b) factor IX
  - c) fibronectin
  - d) von willebrand factor
  - e) fibrinogen
32. In which disease is there a high incidence of Philadelphia chromosome?
- a) CLL
  - b) CML
  - c) Polycythemia rubra vera
  - d) AML
  - e) ALL
33. Which statement is true regarding secondary polycythemia?
- a) the erythropoietin level is elevated
  - b) there is hepatosplenomegaly
  - c) pruritus is not a feature
  - d) it is usually secondary to states of low oxygen tension
  - e) the WBC and platelet counts are normal
34. Which is not a feature of tumour lysis syndrome?
- a) hypercalcemia
  - b) hyperkalemia
  - c) hyperuricemia
  - d) hyper phosphatemia
  - e) lactic acidosis
35. What number of WBC would you expect to see in a tap of a septic joint?
- a) <200
  - b) 200-4000
  - c) 2000-50000
  - d) 5000 – 150000
  - e) nil

36. What number of WBC would you usually expect to see in a tap of an inflamed joint with gout?

- a) <200
- b) 200-4000
- c) 2000-50000
- d) 50000-150000
- e) nil

37. Which organism is not thought to be associated with Reiter's syndrome?

- a) yersinia
- b) campylobacter
- c) salmonella
- d) e coli
- e) chlamydia

38. Which is TRUE of Reiter's syndrome?

- a) the arthropathy usually occurs at the time of the acute infectious process
- b) the arthropathy usually involves 2-3 joints
- c) there is usually associated uveitis
- d) antibiotics are usually part of the treatment regimen
- e) all of the above are true

39. Which arthropathy is not typically migratory?

- a) viral
- b) acute rheumatic fever
- c) pseudogout
- d) SLE
- e) Gonococcal

40. What proportion of joint aspirates culture positive for gonococcal arthritis?

- a) 90-100%
- b) 75-90%
- c) 50-75%
- d) 25-50%
- e) <25%

41. How should flexor tenosynovitis be managed?

- a) immobilize, NSAIDS
- b) immobilize, oral antibiotics, NSAIDS
- c) regular hand exercises, ice, elevation
- d) steroid injections
- e) admit, IV antibiotics, consider surgical intervention

42. Which of these is not a risk factor for gout?

- a) alkalosis
- b) low dose aspirin
- c) diuretics
- d) psoriasis
- e) haemolysis

43. Which joint/s are typically spared in rheumatoid arthritis?
- DIP
  - PIP
  - MCP
  - Wrists
  - C spine
44. Which is not classically a monoarthritis?
- gout
  - pseudogout
  - sepsis
  - reiters
  - all of the above are usually a monoarthritis
45. Which of these is usually an oligoarthritis (2-3 joints), not a polyarthritis?
- reiters
  - gonococcal
  - RA
  - Rheumatic fever
  - Ankylosing spondylitis
46. Which is not true of pseudogout?
- joint aspirate show crystals that are positive birefringent
  - it is caused by calcium pyrophosphate crystals
  - the knee is the most common joint involved
  - treatment involves NSAIDS or colchicine
  - it is more common in the older age spectrum
47. Which is false with regards to olecranon and pre patellar bursitis?
- usually these are simply inflammatory
  - it is very uncommon for these to become septic
  - bursa aspiration is a safe and accurate way of differentiating them from a septic process
  - gm stain and culture is usually positive in a septic process
  - these bursitis's should be given prophylactic antibiotics
48. The usual organisms in septic arthritis in a healthy adult are?
- staph aureus, gonococcus
  - pseudomonas
  - salmonella
  - hemophilus influenzae
  - anaerobes

#### ANSWERS

- 20)C 21)E 22)D 23)D 24)B  
 25)E 26)E 27)A 28)D 29)B 30)C 31)B 32)B 33)B 34)A 35)D 36)C  
 37)D 38)B 39)C 40)D 41)E 42)A 43)A 44)D 45)C 46)D 47)E 48)A

1. All of the following statements are true EXCEPT
    - a) One bag of cryoprecipitate contains more fibrinogen than one bag of FFP
    - b) Heparin is a recognised treatment for certain types of DIC
    - c) Cefamandol may cause hypovitaminosis K
    - d) Desmopressin 0.3mcg/kg, subcutaneous bd is a recognised treatment for bleeding in uremic patients
    - e) The prothrombin time classically measures the extrinsic and common pathways of coagulation
  
  2. A blond Norwegian backpacker presents with shortness of breath. You note jaundice on clinical examination and FBC shows Hb 80, plt 250 and wcc 8. Reticulocytes 10%. The urine is negative for urobilinogen. The investigation most likely to elicit the cause for this presentation is
    - a) Direct Coombs test
    - b) Osmotic fragility test
    - c) Haptoglobin
    - d) Serum protein electrophoresis
    - e) Glucose-6-Phosphate dehydrogenase level
  
  3. All of the following statements regarding the properties of stroma-free Hemoglobins are true EXCEPT
    - a) The main side effect is hypertension, mediated through NO, endothelin and  $\alpha_2$  effects
    - b) They are significantly antigenic, and required ABO compatibility to be used safely
    - c) There is a tendency toward formation of Met-Hb due to the lack of Met-Hb reductase
    - d) A recent phase III trial was stopped early due to excess mortality in the treatment group
    - e) They have a markedly increased affinity for O<sub>2</sub> than cellular Hb
  
  4. The commonest presentation of childhood Non-Hodgkins lymphoma is
    - a) Fever
    - b) Night Sweats
    - c) Fatigue
    - d) Painless lymphadenopathy
    - e) Abdominal pain
  
  5. The proportion of febrile neutropenic patients with active infection is
    - a) 30%
    - b) 40%
    - c) 60%
    - d) 80%
    - e) 90%
  
  6. All of the following are preferred treatments in tumour lysis syndrome EXCEPT
    - a) 0.9% saline to maintain urine specific gravity around 1.010
    - b) Alkalinisation of the urine, HCO<sub>3</sub> 1mL/kg over 1 hour
    - c) IV calcium gluconate 10mL in 100mL D5W over 1 hour + resonium K 20gm pr
    - d) Dialysis
    - e) Insulin 0.1u/kg/hr + D10W 5mL/kg/hr
1. A
  2. B
  3. B
  4. D
  5. D
  6. C