Model Questions on Haematology

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SAQ on Haematology

1. Discuss in short the role of essential factors in erythropoiesis.
2. Write short note on haematocrit
3. Define anaemia. Give its morphological types with examples.
4. Give the pathophysiological classification of anaemia.
5. What information you can get from stained peripheral blood film?
6. How will you investigate a case of anaemia?
7. Give the causes and blood picture of iron deficiency anaemia.
8. Give the laboratory diagnosis of iron deficiency anaemia.
9. What are the causes of folic acid and vitamin B12 deficiency? Give the blood picture of megaloblastic anaemia.
10. Give the laboratory diagnosis of megaloblastic anaemia.
11. How will investigate a case of pancytopenia in the laboratory?
12. How will you diagnose haemolytic anemia in the laboratory?
13. Define and classify haemolytic anaemia.
14. Classify thalassaemia. Give the laboratory diagnosis of thalassaemia.
15. Define and classify leukaemia.
16. What are the laboratory investigations of acute leukaemia. How will differentiate lymphoblast and myeloblast?
17. Classify haemorrhagic disorders. How you will proceed to investigate a case of haemorrhagic disorder in the laboratory?
18. A boy of 14 years presenting with haemarthrosis. He has previous history of prolonged bleeding following circumcision. How will you establish the diagnosis of this case?
19. A patient with bleeding disorder is found to have prolonged BT and CT. What further investigation you will do to establish the diagnosis.

SOQ on Haematology

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Recall Type:

1. What are the different sites of haemopoiesis?
2. What do you mean by extramedullary haemopoiesis?
3. What are the stages of granulopoiesis.
4. What are the precursor cells of lymphocyte, granulocytes, platelet, RBC and monocyte?
5. What are the stages of erythropoiesis?
6. What are the indications of bone marrow examination?
7. What are the sites of bone marrow examination?
8. What do you mean by 'dry tap' in bone marrow examination? Enumerate the causes of blood tap and try tap.
9. What is trephine biopsy?
10. What are the components in bone marrow in microscopic examination?
11. What are the types of normal and abnormal haemoglobins?
12. What are the essential factors for erythropoiesis?
13. What are red cell indices? Mention its uses.
14. Define anaemia. Tell its morphological classification.
15. What information you can get from stained peripheral blood film?
16. What are RBC inclusions?
17. What do you mean by poikilocytes?
18. How will investigate a case of anaemia?
19. What are the conditions for microcytic and hypochromic anaemia?
20. What are the causes of iron deficiency anaemia?
21. Who are more susceptible for iron deficiency anaemia and why?
22. What are the causes of macrocytic anaemia?
23. Tell the causes of folic acid and vitamin B12 deficiency?
24. What are the common sources of Vitamin B12 and folic acid? What do you mean by strict vegetarian?
25. Which parasite causes megaloblastic anaemia? What do you mean by dimorphic blood picture?
26. Tell the pathogenesis of pernicious anaemia?

27. What do you mean by megaloblasts? Tell the findings in peripheral blood film in megaloblastic anaemia?
28. What are causes of normochromic and normocytic anaemia?
29. What are the factors responsible for anaemia in non-haematological maligancies?
30. What are the causes of anaemia in patient with chronic liver diseases?
31. Classify severity of anaemia according to haemoglobin levels. What are the normal levels of haemoglobin in adult male and female?
32. What do you mean by pancytopenia? What are the causes of pancytopenia?
33. What are causes of bone marrow infiltration?
34. How will investigate a case of pancytopenia in the laboratory?
35. What do you mean by aplastic anaemia? Mention the causes of aplastic anaemia.
36. Define and classify haemolytic anaemia.
37. How will you diagnose haemolytic anemia in the laboratory?
38. What are evidences of haemolysis in peripheral blood film?
39. What are the basic differences between thalasaemia and haemoglobinopathy?
40. What are the types of thalassaemia? What is the confirmatory diagnosis of thalassaemia/haemoglobinopathy?
41. Classify thalassaemia. Give the laboratory diagnosis of thalassaemia.
42. What do you mean by leucocytosis? What are causes of leucocytosis?
43. What are the causes of leucopenia?
44. Why neutrophilic leucocytosis occurs in acute pyogenic infections and tissue damage?
45. What do you mean by eosinophilia? What are the causes of eosinophilia?
46. What are the causes of lymphocytosis?
47. What do you mean by leucopenia, neutropenia, agranulocytosis?
48. In which condition atypical lymphocytes are found?
49. Define and classify leukaemia.
50. Tell the FAB classification of acute leukaemia.
51. Which conditions are related with DIC?
52. What are the clinical features of acute leukaemia?
53. How the clinical features of acute leukaemia develop?
54. What are the laboratory investigations of acute leukaemia. How will differentiate lymphoblast and myeloblast?
55. Classify chronic leukaemia. Tell the laboratory investigation of CML.

56. Tell about Philadelphia chromosome. What is its importance? What do you mean by blast crisis?
57. What is juvenile CML? What are the types of juvenile CML? Define chloroma.
58. Give the laboratory findings in CML? What is the usual age of CML?
59. Define myelodysplastic disorders. Give the laboratory diagnosis of myelodysplastic disorder.
60. What is leukomoid reaction? What are the types of leucomoid reaction?
61. What are the causes of myeloid leucomoid reaction? Give the difference between leucomoid reaction and leukaemia.
62. What do you mean by leuco-erythroblastic blood picture? What are the causes of leuco-erythroblastic blood picture?
63. Name 5 important causes of thrombocytopenia.
64. What will be haematological findings in ITP?
65. Why bleeding time is prolonged in platelet disorders?
66. Name 3 vascular disorders and 2 causes of coagulation disorders causing bleeding diathesis.
67. Name 5 laboratory tests for bleeding disorder.
68. Tell me the ABO blood group with corresponding antibodies.
69. What procedure you will take for transfusion of blood and name 2 important complication of mismatched transfusion?

Incomplete

Understanding Type SOQ on haematology:

1. Why microcytic and hypochromic RBC occurs in iron deficiency anaemia?
2. Explain the megaloblastic haemolysis.
3. Why anaemia occurs in megaloblastic erythropoiesis?
4. Explain the difference between haemoglobinopathy and thalassaemia.
5. Why iron administration is contraindicated in thalassaemia?
6. What is the mechanism of haemolysis in micro-angiopathic haemolytic anaemia?
7. Why jaundice occurs in haemolytic anaemia?
8. Why iron deficiency anaemia is more common in children and child bearing age?
9. Why anaemia occurs in chronic systemic disorders?
10. Why anaemia occurs in acute leukaemia?
11. Why thrombocytopenia occurs in acute leukaemia?

12. Why infection is common in acute leukaemia?
13. Why pancytopenia occurs in acute leukaemia?
14. Why chloroma is so called –explain?
15. Why prognosis of juvenile CGL is worse than classical CGL?
16. Why hypergammaglobinaemia occurs in CGL?
17. Bence Jonce protein may be absent in multiple myeloma –explain.
18. Why bleeding time is prolog in platelet disorders.
19. Why both bleeding time and clotting time is prolog in von-Willebrand disease?
20. Why males are sufferer and females are carriers in case of haemophilia?
21. How platelets are destroyed in peripheral blood in case of ITP?
22. Why DIC is called consumption coagulopathy?
23. Why death of fetus in uterus causes DIC?
24. Why promyelocytic leukaemia causes DIC?
25. Why pancytopenia occurs in some cases of splenomegaly?
26. Why hypergammaglobinaemia causes increased ESR?

Problem Based SOQ on Haematology:

1. A 25 years old female with 7 months pregnancy presented with anaemia. What are the probable causes?

2. A 5 years old boy presented with severe anaemia associated with generalized lymphadenopathy. What is the most important diagnosis in this case?

3. A 40 years old male presented with massive splenomegaly. Blood examination revealed leucocytosis more than 50,000/cmm. What are the important causes on these findings?

4. A patient presented with anaemia and bleeding manifestation. Blood examination revealed pancytopenia. Mention the probable causes.

5. A 14 years male boy presented with purpuric spots throughout. Blood examination revealed thrombocytopenia. Mention the tests you will do to reach the conclusive diagnosis in this case.