

Quiz Questions on Anemia

Anemia, the commonest blood disorder still poorly understood, is prevalent from newborn, to adolescents, in pregnancy, and till menopause! A small quiz may give some answers.

- Q1. Which of the following is NOT a cause of microcytic anemia?
- Thalassemia
 - Anemia of chronic disease
 - Iron deficiency anemia
 - Pancytopenia
 - Lead poisoning
- Q2. The lab reports for a patient with low mean cell volume show high serum ferritin and low total iron binding capacity. What is the most likely cause for this patient's anemia?
- Fe deficiency
 - Anemia secondary to inflammation
 - Thalassemia
 - Hemoglobinopathy
- Q3. Fe is absorbed in the
- Stomach
 - Duodenum
 - Jejunum
 - Ileum
- Q4. Where is most nonheme iron found in the body?
- Bound to IF
 - Bound to transferrin
 - Free in plasma
 - Stored in liver
- Q5. Select the following that enhance Fe absorption (select all that apply)
- Citric acid
 - Polyphenols (tea)
 - Phytate (bran)
 - Calcium
 - Ascorbic acid
- Q6. What is the most important test for Fe stores?
- Serum iron
 - TIBC
 - Serum ferritin
- Q7. Which of the following is not an etiology of Fe deficiency anemia?
- Chronic blood loss
 - Increased requirement
 - Infection
 - Malabsorption
 - Decreased intake
- Q8. TIBC increases in iron deficiency anemia because
- Inflammatory response to deficiency
 - Compensation by other factors
 - Ability to absorb increases
- Q9. Pica, a clinical presentation for Fe deficiency anemia, is
- Itchiness
 - ED
 - Desire to eat weird things
 - A small woodland creature
- Q10. Which lab investigations would you order if you suspect Fe deficiency anemia? (check all that apply)
- CBC
 - Blood smear
 - Serum iron
 - Serum ferritin
 - TIBC
 - All of the above
- Q11. Where is beta-thalassemia most common? (check all that apply)
- West Africa
 - Mediterranean
 - Arabian Peninsula
 - South East Asia
 - Canada
- Q12. What is the difference between beta-thalassemia major and beta-thalassemia minor?
- Homozygous vs heterozygous
 - Acute vs chronic
 - Legal drinking age
- Q13. Heinz bodies are made of:
- Excess gamma chains
 - Excess alpha chains
 - Excess beta chains
 - Excess ketchup

- Q14. Beta-thalassemia, unlike alpha-thalassemia, presents at approximately 6 months of age.
- True
 - False
- Q15. Which would you expect to see on a blood smear for beta-thalassemia? (select all that apply)
- Heinz bodies
 - Multinucleated neutrophils
 - Target cells
 - Hypochromic microcytic cells
 - Hyperchromic microcytic cells
- Q16. What is the treatment for beta-thalassemia minor?
- Blood transfusions
 - Iron chelation
 - Bone marrow transplant
 - None of the above
- Q17. Decreased or stopped production of alpha-globin chains results in HbH (4 gamma chains together) and Hb Barts (4 beta chains together)
- True
 - False
- Q18. On a CBC for alpha-thalassemia, you would see anemia and reticulocytosis. On the blood smear, you would see Heinz bodies, hypochromic microcytic cells, and occasional target cells. Select the others that you would see increase:
- LDH
 - Unconjugated bilirubin
 - Conjugated bilirubin
 - Urine urobilinogen
 - Urine hemosiderin
- Q19. Aplastic anemia can be acquired (more common) and inherited. What are some of the ways it can be acquired?
- Postviral infection
 - Pregnancy
 - Ionizing radiation
 - Drugs and chemicals
 - Idiopathic
 - All of above
- Q20. Aside from the gradual onset signs of anemia, what other clinical presentations would you see with aplastic anemia?
- Koilonychias, "spoon nails"
 - Associated thrombocytopenia, e.g., history of bleeding from the gums
 - Neutropenia, e.g., repeated bacterial infections
 - Purpura
 - Pica
- Q21. How would you diagnose aplastic anemia?
- Blood smear
 - Bone marrow biopsy
 - Spleen biopsy
 - CBC
 - Liver biopsy
- Q22. Select treatment options for aplastic anemia
- IV equine ATG
 - Bone marrow transplant
 - Splenectomy
 - Immune suppression



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Answers: 1(d), 2(b), 3(b), 4(b), 5(a, e), 6(c), 7(c), 8(c), 9(c), 10(f), 11(b, c, d), 12(a), 13(b), 14(a), 15(a, c, d), 16(d), 17(b), 18(a, b, d, e), 19(f), 20(b, c, d), 21(b), 22(a, b, d)