

CONTROL QUESTIONS ON PATHOPHYSIOLOGY OF BLOOD:

1. Blood, its composition and functions. Hematocrit.
2. Categorization of disorders of circulative blood volume (hypervolemia, hypovolemia).
3. Hypervolemia. Types (simple, polycythemic, oligocythemic). Causes and outcomes.
4. Hypovolemia. Types (simple, polycythemic, oligocythemic). Causes and outcomes.
5. Bleeding. Types and causes. Pathogenesis and main clinical symptoms of acute bleeding.
6. Compensatory-adaptative reactions after acute bleeding. Stages of compensation (reflect, hydremic, bone-marrow).
7. Parameters of severity of bleeding. Therapy of bleeding.
8. Anemias. Clinical symptoms of anemia and mechanisms of their development.
9. Categorization of anemias by: etiopathogenesis, color parameter, severity of anemia, regenerative possibility, type of hematopoiesis, erythrocyte's size.
10. Post-hemorrhagic anemia. Description, the picture of the blood under acute and chronic post-hemorrhagic anemia.
11. Iron deficiency anemia. Etiology, pathogenesis. Sideropenic syndrome. The picture of the blood.
12. Vitamin B₁₂, folic acid deficiency anemia. Etiology, pathogenesis. The picture of the blood. Addison-Biermer disease.
13. Hemolytic anemias. Types (congenital, autoimmune e.g.). The picture of the blood. Clinical symptoms.
14. Newborn hemolytic anemia.
15. Leukocytes. Stages of leucopoiesis. Leukocyte's description on different stages of maturation.
16. Leukocyte's functions (neutrophils, eosinophils, basophils, monocytes, lymphocytes).
17. Leukocytosis. Categorization. Causes of leukocytosis (neutrophilic, eosinophilic, basophilic, monocytic, lymphocytic).

18. Nuclear shift of leukocyte's formula to the left, to the right.
19. Leucopenia. Categorization. Causes and outcomes of neutropenia, lymphopenia. Agranulocytosis.
20. Leukocyte's formula. Leukocyte's formula in children.
21. Leukemia. The particularities of leukemic cells.
22. Characteristic of morphological picture of blood at acute and chronic myeloid and lymphoid leukemia.
23. Leukemia clinical syndromes.
24. Hemostasis, its components (blood vessel, platelets, plasma coagulation factors) and disorders of hemostasis (thrombophylic, hemorrhagic, thrombohemorrhagic hemostasiopathias).
25. Thrombosis. Outcomes and consequences. Mechanism of white and red thrombosis development.
26. Causes and conditions of thrombosis development. Virchow's triad (vascular injury, blood coagulant system activation, blood flow decrease).
27. Hemorrhagic disorders of primary hemostasis.
28. Disorders of blood vessels. Vasopathy. Hereditary hemorrhagic telangiectasia (Rendu-Osler-Weber Syndrome). Scurvy. Henoch-Schonlein disease or anaphylactoid purpura.
29. Thrombocytopenia. Causes. Autoimmune thrombocytopenic purpura.
30. Congenital disorders of platelet function. Clanzmann thrombasthenia.
31. Von Willibrand's disease.
32. Disorders of blood coagulation. Coagulopathies, classification. Causes. Hemophilias (A, B).
33. Disseminated intravascular coagulation (DIC). Causes. Stages.
34. Thromboelastogram at hypo- and hypercoagulation.