

Министерство здравоохранения республики Беларусь
Учреждение образования
«Гомельский государственный медицинский университет»

Кафедра патологической физиологии
Обсуждено на заседании кафедры
Протокол №7 от 30.08.2017

МЕТОДИЧЕСКАЯ РАЗРАБОТКА
Для проведения занятия со студентами
3 курса ФПСЗС, обучающихся на английском языке
по патологической физиологии

Тема: Семинар по гематологии

Theme: Seminar on hematology

Время 4 ак. часа

SEMINAR QUESTIONS ON HEMATOLOGY ON PATHOPHYSIOLOGY FOR MEDICAL STUDENTS OF III YEAR:

1. Changes in total blood volume: hypo-and hypervolemia, their types, causes and mechanisms of development, Value for the body.
2. Acute blood loss: etiology, pathogenesis, reversible and irreversible dysfunction of organs and systems, changes in bone marrow and peripheral blood at different times after blood loss.
3. Immediate and long-term protective-adaptive reactions of the organism in blood loss: adjustment of blood volume, number of plasma proteins and formed elements.
4. The causes and mechanisms of changes of physico-chemical properties of blood (osmotic and oncotic pressure, viscosity, erythrocyte sedimentation rate, qualitative protein composition) in various diseases.
5. Anemia: definition, classification. Abnormal form of red blood cells, abnormal inclusion in the red blood cells. Characterization of erythrocytic indices.
6. Vitamin B12 deficiency anemia, pernicious anemia (Addison-Biermer's disease). Etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
7. Anemia with a deficiency of folic acid. Etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
8. Achrestic anemia. Etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
9. Iron deficiency anemia. Etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
10. Aplastic anemia. Etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
11. Anemias of chronic disease. Etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
12. Anemia in leukemia and other tumor lesions of bone marrow, mechanisms of development, clinical manifestations, changes in bone marrow and peripheral blood.
13. Hereditary hemolytic anemia, classification. Enzymopathy: classification. Gl-6-PDG deficiency: etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
14. Membranopathy: classification. Hereditary microspherocytosis (disease Minkowski-Chauffard): etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
15. Hemoglobinopathy: a classification. Thalassemia: etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
16. Sick cell anemia: etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood.
17. Acquired hemolytic anemia: classification, manifestations in organs and blood in the peripheral blood. Hemolytic disease of newborn: etiology, pathogenesis, clinical characteristics of form, changes in bone marrow and peripheral blood, principles of therapy and prevention.
18. Autoimmune hemolytic anemia (AIHA): classification, etiology, pathogenesis, spectrum autoAb in AIHA. Characterization of paroxysmal cold hemoglobinuria.
19. Primary and secondary erythrocytosis: etiology, pathogenesis, manifestations in organs and blood in the peripheral blood. Violations and compensatory-adaptive processes in the body with anemia and erythrocytosis.
20. Causes of the structure and function disorders of certain types white blood cells, their role in pathological processes. Leukogram and its analysis. Nuclear shift index.
21. Leucocytosis: etiology, pathogenesis, manifestations. Value of leukocytosis.
22. Changes in leukogram in leukocytosis, pathogenetic assessment of the violations.
23. Leukopenia: etiology, pathogenesis, manifestations. Value of leukopenia.
24. Changes in leukogram in leukopenia, pathogenetic assessment of the violations.
25. Leukemoid reactions: classification, etiology, pathogenesis, changes in organs and peripheral blood. Differences from leukemia, value for the body.
26. Infectious mononucleosis (Filatov-Pfeiffer's disease): etiology, pathogenesis, clinical manifestations, changes in bone marrow and peripheral blood. Methods of diagnosis.

27. Agranulocytosis: classification, types, causes, pathogenesis, clinical manifestations. Peripheral blood picture in agranulocytosis. Panmyelophthisis.
28. Leukemia: definition, general characteristics, principles of classification.
29. Characterization of main clinical syndromes of leukemia.
30. Characteristics of main theories of leukemia etiology. The main stages of leukemia pathogenesis.
31. Features of leukemic cells: their morphological, cytochemical, cytogenetic, and immunological characteristics.
32. Acute leukemia: definition, principles of classification. Features of hemopoiesis and peripheral blood.
33. Acute lymphoblastic leukemia: classification, manifestations, changes in bone marrow and peripheral blood.
34. Acute myeloid leukemia: classification, manifestations, changes in bone marrow and peripheral blood.
35. Stages of development of acute leukemia. Characteristics of concepts of "remission", "relapse", "leukemic hiatus."
36. Chronic leukemias: classification. Changes in bone marrow and peripheral blood. Blast crisis.
37. Chronic myeloid leukemia: stages, main clinical manifestations and changes in bone marrow and peripheral blood.
38. Chronic lymphocytic leukemia: the stage, the main clinical manifestations, changes in bone marrow and peripheral blood.
39. Paraproteinemic hemoblastosis (multiple myeloma, primary macroglobulinaemia, heavy chain disease). Classification, etiology, pathogenesis, manifestations.
40. Main disturbances in a body during leukemia, and their mechanisms. Principles of diagnosis and therapy of leukemia. Outcomes of leukemia.
41. Violation of hemostatic system. The mechanisms of hemostasis.
42. Types of bleeding, characteristics.
43. Violations of platelet-vascular hemostasis in thrombocytopenia: types, causes, mechanisms of development and manifestations.
44. Thrombocytosis: types, causes, pathogenesis, manifestations.
45. Thrombocytopathies: types, causes, mechanisms of development and manifestations.
46. Inherited disorders of coagulation hemostasis: etiology, pathogenesis, manifestations.
47. Acquired coagulation disorders of hemostasis: etiology, pathogenesis, manifestations.
48. Disseminated intravascular coagulation (DIC): definition, principles of classification.
49. Disseminated intravascular coagulation (DIC): stages and mechanisms of development.

Basis literature:

1. Литвицкий, П. Ф. Патофизиология = Pathophysiology : лекции, тесты, задачи : учеб. Пособие / П. Ф. Литвицкий, С. В. Пирожков, Е. Б. Тезиков. – М. : ГЭОТАР-Медиа, 2016. – 432 с.

Additional literature:

2. Kumar, V. Robbins and Cotran Pathologic basis of disease, 7th Edition / V.Kumar, A.K. Abbas, N. Fausto. — Philadelphia: Elsevier Inc., 2005. — 1629 p. Режим доступа: <http://www.rkmyat.in/up1/34/1629.pdf>. – Дата доступа: 30.08.2016.
3. Кидун, К. А. Патофизиология крови = Pathophysiology of blood : учеб.-метод. пособие для самостоятельной работы студ. 3 курса фак. по подг. спец. для зарубеж. стран, обучающихся на англ. яз. по спец. «Лечебное дело», мед. вузов / К.А. Кидун. – Гомель : ГомГМУ, 2015. – 103 с.
4. Кидун, К. А. Тестовые задания по патологической физиологии = Test tasks on pathological physiology : в 3-х ч. Ч. 3, Частная патофизиология : учеб.-метод. пособие для студ. 3 курса фак. по подг. спец. для зарубеж. стран, обуч. на англ. яз. по спец. «Лечебное дело», мед. вузов / А. К. Кидун. – Гомель : ГомГМУ, 2015. – 113 с.
5. Научная электронная библиотека eLIBRARY.RU [Электронный ресурс] / Научная электронная библиотека. – М., 2005. – Режим доступа: <http://www.elibrary.ru>. – Дата доступа: 26.08.2017.