**Questions on the topic: "Disseminated intravascular coagulation syndrome, diagnosis, differential diagnosis"**

1. Components of the hemostatic system. Types of bleeding.
2. Hemorrhagic diathesis, definition, classification.
3. Give a definition and classification of disseminated intravascular coagulation syndrome.
4. Etiology of disseminated intravascular coagulation syndrome.
5. The pathogenesis of disseminated intravascular coagulation syndrome.
6. The clinical picture of disseminated intravascular coagulation syndrome depending on the stage.
7. Diagnosis of disseminated intravascular coagulation syndrome.
8. Laboratory indicators characterizing the phases of the DIC syndrome.
9. Diagnostic scales for disseminated intravascular coagulation syndrome.
10. Differential diagnosis of disseminated intravascular coagulation syndrome depending on the stage.
11. Emergency care and treatment of disseminated intravascular coagulation syndrome depending on the stage of the disease.
12. Prevention and prognosis of disseminated intravascular coagulation syndrome depending on the stage.

SITUATIONAL TASKS

TASK 1
Victim A., aged 16, was taken to a surgical clinic from a car accident with multiple injuries of the chest, abdomen, and legs due to the loss of a large amount of blood.
Objectively: consciousness is preserved, but the victim is not oriented in time and situation; the skin is pale, tachycardia, filiform pulse, blood pressure 65/15 mm RT. Art.
An operation was performed to ligate bleeding blood vessels, 1200 ml of donated blood were transfused (shelf life from 2 to 17 days) and 2000 ml of blood substitutes. In the intensive care unit: a serious condition; tachycardia, arterial hypotension, shortness of breath persist; daily diuresis is much less than normal; bleeding from small vessels of damaged tissues occurred. Laboratory data indicate a decrease in blood coagulability, hypoprothrombinemia, hypofibrinogenemia, and thrombocytopenia.
On the 2nd day, the phenomena of acute renal failure developed. A.'s death came from progressive renal and cardiovascular failure. An autopsy revealed signs of multiple thrombosis of small vessels of internal organs.

QUESTIONS
1. What pathological process developed in A .:
a) shortly after an injury;
b) in the intensive care unit?

2. What is the pathogenesis of the pathological process, which
developed in a patient in the intensive care unit?

3. What are the development mechanisms:
a) renal failure;
b) cardiovascular failure in a patient?

4. Transfusion therapy was ineffective.
Suggest why.

TASK 2
In boys A. and M., aged 7 and 9 years, respectively, large ecchymoses were found after minor injuries and prolonged bleeding from wounds after the loss of primary teeth.
Child A., unlike M., complains of periodic bleeding from the gums, especially after brushing your teeth. Mother A. has the same symptoms. M.'s relatives, in their words, lack a tendency to bleed. Examination of A. revealed an increase in capillary bleeding time. In M., this indicator is within normal limits. Both A. and M. established a decrease in partial thromboplastin time. Prothrombin time, platelet count, prothrombin and fibrinogen content in patients A. and M. are within normal limits.

QUESTIONS
1. What disorders of the components of the hemostatic system (vessels, platelets, coagulation and anticoagulation of the blood system) are present in children?
Justify the answer taking into account the described symptoms and the results of laboratory tests.

2. What is your supposed conclusion?
Are these forms of pathology inherited and, if so, what are the types of inheritance? What additional laboratory tests are needed to clarify the conclusion? What coagulation factors can be deficient in A. and M. during additional studies?

3. Why do patients have differences in symptoms?
What are the mechanisms of their development?