

## APLASTIC ANEMIA IN CHILDREN

### *Single choice tests (Cs)*

**Cs**

1. Choose the manifestation that is not characteristic for aplastic anemia in children:

- A. Stem cells hypoplasia
- B. Replacement of bone marrow with adipose tissue
- C. Peripheral pancytopenia
- D. Lymphadenopathy
- E. Hypocellular bone marrow

**Cs**

2. Choose the manifestation that is characteristic for aplastic anemia in children:

- A. Hepatomegaly
- B. Splenomegaly
- C. Hypocellular bone marrow
- D. Lymphadenopathy
- E. Obesity

**Cs**

3. Choose the morphological manifestation that is characteristic for aplastic anemia in children:

- A. Myelodysplastic syndrome
- B. Neoplasm
- C. Acquired disorder
- D. Lymphoproliferative disorder
- E. Myeloproliferative disease

**Cs**

4. Choose the manifestation that is not characteristic for aplastic anemia Fanconi:

- A. Acquired disorder
- B. Progressive peripheral pancytopenia
- C. Chromosomal instability
- D. Susceptibility to cancer development
- E. Defect of precursor cells

**Cs**

5. Choose the manifestation that is not characteristic for aplastic anemia Fanconi:

- A. Peripheral pancytopenia
- B. Hypocellular bone marrow
- C. Normal cellular and humoral immune reactivity
- D. Cellular and humoral immunodeficiency
- E. Thrombocytopenia

**Cs**

6. Choose the factor that does not participate in pathogenesis of aplastic anemia in children:

- A. Activated T lymphocytes
- B. Granulocytes
- C. Interleukin - 2
- D.  $\gamma$  - interferon
- E. Tumor necrosis factor alfa

**Cs**

7. Choose the risk factor for death for patients with aplastic anemia:

- A. Lymphopenia
- B. Lymphocytosis
- C. Neutropenia
- D. Erythropenia
- E. Monocytopenia

**Cs**

8. Choose the manifestation that is characteristic for hemorrhagic syndrome in children with aplastic anemia:

- A. Angiomatous type of bleeding
- B. Vascular – purpural rash
- C. Petechial- macular purpura
- D. Mixt type of skin bleeding
- E. Hematomas

**Cs**

9. Choose one of definitive diagnostic criteria for aplastic anemia in children:

- A. Morphologic examination of sequential bone marrow biopsies
- B. Immunophenotyping of peripheral blood cells
- C. Evaluation of red blood cell size
- D. Cytochemical tests of blood cells
- E. Cellular morphometry

**Cs**

10. Choose one of definitive diagnostic criteria for aplastic anemia in children:

- A. White cell count in peripheral blood
- B. Assessment of lymphocyte antigen receptors
- C. Qualitative and quantitative assessment of reticulocytes
- D. Eosinophil count
- E. Granulocyte count

**Cs**

11. Choose the pathogenetic treatment for aplastic anemia in children:

- A. Red blood cell transfusion
- B. Platelet transfusion
- C. Androgens
- D. Corticosteroids
- E. Anti-lymphocyte agents

**Cs**

12. Choose the statement that characterizes the disorder named Erythrogenesis Imperfecta:

- A. Global disorder of hematopoiesis
- B. Disease of the red blood cells
- C. Congenital disease
- D. Acquired disease
- E. Amegakaryocytic thrombocytopenia

**Cs**

13. Choose the indication for red blood cell transfusion in children:

- A. Hemoglobin level below 112 g/l
- B. Hemoglobin level below 105 g/l
- C. Hemoglobin level below 90 g/l
- D. Hemoglobin level below 60 g/l
- E. Hemoglobin level below 30 g/l

**Cs**

14. Choose the therapeutic indication for children with aplastic anemia and hemorrhagic syndrome:

- A. Red blood cell transfusion
- B. Direct whole-blood transfusion
- C. Platelet transfusion
- D. Plasma transfusion
- E. Cryoprecipitate transfusion

**Cs**

15. Choose the risk factor for death in early stage aplastic anemia in childhood:

- A. Infectious syndrome

- B. Anemia syndrome
- C. Bleedings
- D. Hepatosplenomegaly
- E. Lymphadenopathy

**Multiple choice tests (Cm)**

**Cm**

1. Enumerate statements correct for aplastic anemia in children:
  - A. Peripheral pancytopenia
  - B. Functional deficiency of the bone marrow
  - C. Lymphadenopathy
  - D. Proliferation and replacement of red marrow with adipose tissue
  - E. Splenomegaly

**Cm**

2. Enumerate statements that are not characteristic for aplastic anemia in children:
  - A. Anemia
  - B. Hepatosplenomegaly
  - C. Thrombocytopenia
  - D. Granulocytopenia
  - E. Lymphadenopathy

**Cm**

3. Enumerate statements that are characteristic for aplastic anemia in children:
  - A. Congenital disorder
  - B. Genetic disorder
  - C. Acquired disorder
  - D. Neoplastic disease
  - E. Lymphoproliferative disorder

**Cm**

4. Enumerate statements that are characteristic for aplastic anemia Fanconi in children:
  - A. Congenital disorder
  - B. Genetic disorder
  - C. Acquired disorder
  - D. Immunopathological disorder
  - E. Chromosomal disorder

**Cm**

5. Enumerate pathogenetic mechanisms of acquired aplastic anemia development:
  - A. Immunopathological mechanism
  - B. Immune-mediated mechanism
  - C. Cytokine-mediated mechanism
  - D. Allergic mechanism
  - E. Atypical mechanism

**Cm**

6. Enumerate laboratory manifestation characteristic for aplastic anemia in children:
  - A. Granulocytopenia
  - B. Thrombocytopenia
  - C. Erythropenia
  - D. Reticulocytosis
  - E. Thrombocytosis

**Cm**

7. Enumerate clinical signs characteristic for aplastic anemia in children:
  - A. Anemic syndrome

- B. Hemorrhagic syndrome
- C. Heart rhythm disorders
- D. Decreased respiratory function
- E. Severe recurrent bacterial infections

**Cm**

8. Enumerate morphological manifestations characteristic for aplastic anemia in children:
- A. Increase of stem cells proliferation potential
  - B. Functional defects of stromal elements in the bone marrow
  - C. Decrease of stem cells proliferation potential
  - D. Normal concentration of hematopoietic elements of the bone marrow
  - E. Reduced quantity of hematopoietic elements of the bone marrow

**Cm**

9. Enumerate risk factors of granulocytopenia for children with aplastic anemia:
- A. Myelofibrosis
  - B. Bacterial infections
  - C. Fungal infections
  - D. Myelodysplastic syndrome
  - E. Neoplastic disorder

**Cm**

10. Enumerate criteria that differentiate aplastic anemia Fanconi from acquired aplastic anemia:
- A. Genetic etiology
  - B. Acquired etiology
  - C. Chromosomal disorder
  - D. Erythrocyte membrane disorder
  - E. Global disorder of hematopoiesis

**Cm**

11. Enumerate statements that are correct for acquired aplastic anemia in children:
- A. Idiopathic disorder
  - B. Genetic disorder
  - C. Post-infectious disorder
  - D. Congenital disease
  - E. Toxic diseases

**Cm**

12. Enumerate diagnostic criteria for aplastic anemia in children:
- A. Ring sideroblasts count
  - B. Platelet count
  - C. Hemoglobin level
  - D. Granulocyte count
  - E. Reticulocyte count

**Cm**

13. Enumerate the most important diagnostic criteria for aplastic anemia in children:
- A. Absolute lymphocyte count
  - B. Relative lymphocyte count
  - C. Bone marrow cellularity
  - D. Ratio between hematopoietic and adipose tissues
  - E. Peripheral pancytopenia

**Cm**

14. Enumerate severity criteria of aplastic anemia in children:
- A. Degree of hematopoiesis disorder
  - B. Presence of the hemorrhagic syndrome
  - C. Presence of the anemic syndrome
  - D. Degree of granulocytopenia

E. Infectious complications severity

**Cm**

15. Enumerate therapeutic indications for children with aplastic anemia Fanconi:

- A. Bone marrow transplantation
- B. Antisecretory treatment
- C. Substitution treatment
- D. Vitamin supplements
- E. Antihistaminic agents use

**Cm**

16. Enumerate drugs that have confirmed myelotoxic effect:

- A. Sulfonamides with extended-release
- B. Chloramphenicol
- C. Retinyl acetate (retinol acetate, vitamin A acetate)
- D. Alpha-tocopherol
- E. Sulfasalazine

**Cm**

17. Enumerate risk factors for aplastic anemia in children:

- A. Nitrates and nitrites
- B. Viral hepatitis B, C
- C. Parvovirus B19
- D. Benzene, toluene
- E. Taste-modifying compounds

## APLASTIC ANEMIA IN CHILDREN

### *Single choice tests*

1. D
2. C
3. C
4. A
5. C
6. B
7. C
8. C
9. A
10. E
11. E
12. B
13. D
14. C
15. A

### *Multiple choice tests*

1. A,B,D
2. B,E
3. B,C
4. B,E
5. A,B,C
6. A,B,C
7. A,B,E
8. B,C,E
9. B,C
10. A,C
11. A,C,E
12. B,C,D,E
13. C,D,E
14. A,D
15. A,C
16. A,B,E
17. B,C,D