

## Chronic hepatitis in children

### *Simple complement*

1. The treatment of autoimmune hepatitis in children includes the following remedies:
  - A. ribavirin;
  - B. interferon alpha 2 beta associated with ribavirin;
  - C. interferon alpha 2 beta associated with lamivudine;
  - D. glucocorticoids;
  - E. lamivudine associated with ribavirin.
2. Indicates what signifies histologically the chain necrosis of hepatocytes in hepatic lobule:
  - A. presence of fibrosis in portal space;
  - B. bridges of necrosis between portal space and central lobular vein;
  - C. intralobular necroses;
  - D. focal necroses;
  - E. portal inflammation.
3. Indicate the extrahepatic complication in viral chronic hepatitis C:
  - A. polyarteriitis nodosa;
  - B. cryoglobulinemia;
  - C. leucocytoclastic vasculitis;
  - D. autoimmune thyroiditis;
  - E. hemolytic autoimmune anemia.
4. Indicate what from the following extrahepatic manifestations in viral chronic hepatitis C is mediated immunologically indirectly:
  - A. Sjogren syndrome;
  - B. flat lichen;
  - C. tardy cutaneous porphiria;
  - D. cryoglobulinemia;
  - E. dermatomyositis.
5. The non-replicative phase (integration in host genome) of chronic viral hepatitis B is characterizing through the presence of following marker of VHB:
  - A. presence of HBe Ag in serum;
  - B. presence of DNA-VHB in serum;
  - C. presence of intrahepatocytary HBc AG;
  - D. positive anti-HBe AG;
  - E. DNA-VHB negative.

6. Indicate what from enumerated signs is characteristic for mutant form of chronic viral hepatitis B in children:
- A. membranous glomerulonephritis;
  - B. positive HBsAg and HBeAg;
  - C. negative HBeAg and positive HBsAg;
  - D. positive antiHBeAg and HBsAg;
  - E. positive DNA VHB and HBsAg.
7. Select the paraclinical index obligatory for the initiation of antiviral therapy with interferons in chronic viral hepatitis B in children:
- A. increased values of serum transaminases;
  - B. positive DNA VHB;
  - C. negative DNA VHB;
  - D. positive HBeAg;
  - E. positive antiHBs.
8. Precise the paraclinical determining index of replicative phase of chronic infection with hepatitis B virus in children:
- A. presence in serum of HBeAg and DNA VHB;
  - B. alaninaminotransferase increased by 5 values comparatively to norm;
  - C. presence in serum of HBcAg;
  - D. minimal histologically determined hepatic lesion;
  - E. absence of intrahepatocytary HBcAg.
9. The optimal treatment of chronic viral hepatitis B in children with HBeAg negative is performed with:
- A. ursodeoxycholic acid;
  - B. interferon alpha 2 beta pegylated in monotherapy;
  - C. interferon alpha 2 beta pegylated with lamivudin;
  - D. endovenous perfusions of 5% glucose solutions;
  - E. ribavirin.
10. The III degree of hepatic fibrosis (conformable to Knodell-Ishak score) corresponds to one of below-listed affirmations:
- A. minimal fibrosis;
  - B. soft fibrosis;
  - C. moderated fibrosis;
  - D. fibrosis in bridges;
  - E. hepatic pseudolobules.

11. Precise what from following criteria determines the degree of chronic hepatitis histologic activity:
  - A. ALAT and ASAT increased by 10 values comparatively to norm;
  - B. the degree of necro-inflammatory process determined histologically;
  - C. hyperbilirubinemia more than 150  $\mu\text{mol/l}$ ;
  - D. presence of hepatic encephalopathy;
  - E. hepatomegaly with 5 cm below right costal margin;
12. The most frequently met clinical symptom in chronic viral hepatitis C in children is:
  - A. jaundice;
  - B. physical asthenia;
  - C. nausea;
  - D. abdominal pain;
  - E. abdominal distension.
13. The duration of antiviral treatment in chronic viral hepatitis C depends on the following index:
  - A. advanced histologic hepatic lesion;
  - B. prolonged evolution of chronic viral hepatitis C;
  - C. high level of RNA-VHC
  - D genotype VHC;
  - E. patient's age.
14. Indicate what from following affirmations referring to pathogenesis of autoimmune hepatitis is not specific to this disease;
  - A. the hepatic histologic lesions are predominantly composed from plasmocytary infiltration in portal tracts;
  - B. it is associated with another autoimmune affections;
  - C. patients present antihepatic circulating autoantibodies;
  - D. presence of autoantibodies ANA and anti SMA in autoimmune hepatitis type I ("lipoid");
  - E. this type of chronic hepatitis does not respond to therapy with glucocorticoids/immunosuppressors;
15. Indicate what from indicated autoantibodies is not specific for autoimmune hepatitis in children:
  - A. antinuclear antibodies;
  - B. antimitochondrial antiAMA antibodies;
  - C. anti- smooth muscles antibodies;
  - D. antimicrosomal liver and kidney antibodies;
  - E. antibodies against "soluble hepatic antigen".

16. Indicate what from circulatory antibodies is characteristic for chronic viral hepatitis D:
- A. anti-LKM<sub>1</sub> antibodies;
  - B. positive HBsAg and VHD IgG;
  - C. antinuclear antiANA antibodies;
  - D. antibodies anti- hepatic anti LC soluble antigen;
  - E. positive HBsAg.
17. Indicate the specific markers for type III of autoimmune hepatitis:
- A. presence of anti-LKM<sub>1</sub> antibodies;
  - B. presence of circulating antibodies anti-hepatic soluble antigen;
  - C. anti CMV IgG;
  - D. anti VEB VCA IgG;
  - E. presence of anti- AMA mitochondrial antibodies.
18. Select the correct affirmation referring to the treatment of children with chronic viral hepatitis B in non-replicative phase:
- A. long-term administration of prednisolone;
  - B. administration in injection of pegylated interferon alpha 2 beta daily;
  - C. administration of specific anti-hepatitis B immunoglobulins;
  - D. follow-up without medications;
  - E. administration of nucleosidic analogs (lamivudine) per os.
19. Indicate what from listed paraclinical indices is not characteristic for toxic drug-induced hepatitis:
- A. presence of DNA VHB;
  - B. direct hyperbilirubinemia;
  - C. increased aminotransferases and tests for cholestasis;
  - D. histologically – presence of cholestasis and hepatic steatosis;
  - E. hepatosplenomegaly and jaundice.
20. Indicate what from listed indices is necessary for to determine the stage of chronic hepatitis:
- A. determining of DNA VHC;
  - B. evaluation of necro-inflammatory process in hepatic tissue;
  - C. evaluation of aminotransferases increasing level;
  - D determination of hepatic fibrosis degree determined histologically or using elastometry;
  - E. appreciation of albumin serum level.

## ***Multiple complement***

1. Enumerate the antiviral remedies approved for the treatment of chronic viral hepatitis B in children:
  - A. interferon alpha 2 and alpha 2b standard;
  - B. acyclovir;
  - C. interferon alpha 2b pegylated;
  - D. entecavir;
  - E. adefovir.
2. Indicate the characteristic signs for chronic active hepatitis in children:
  - A. asteno-vegetative syndrome;
  - B. necroses in bridges of hepatocytes;
  - C. cholestasis syndrome;
  - D. vegeto-vascular dystonia;
  - E. respiratory distress.
3. Indicate the markers specific for cholestasis syndrome in children:
  - A. hepatomegaly;
  - B. increasing of gamma- GT (glutamyltranspeptidase);
  - C. increasing of cholesterol;
  - D. hepatic fibrosis of F3 degree;
  - E. hypoalbuminemia.
4. What from below named histologic signs signify the histologic activity of chronic hepatitis in children?
  - A. periportal necrosis;
  - B. intralobular necrosis;
  - C. inflammatory necrosis in portal tract;
  - D. periportal fibrosis;
  - E. kept architectonics of kept hepatic lobule with hepatocytes having radial location.
5. The monitoring of antiviral treatment of chronic viral hepatitis C in children includes the examination of following paraclinical parameters:
  - A. monthly examination of ALAT and ASAT;
  - B. repeated determination of VHC genotype;
  - C. determination of hemogram, thrombocytes every 3 months;
  - D. determination at 48 weeks of VHC RNA;
  - E. determination at 12, 24, 48 weeks of VHC RNA.

6. What are the indications for the treatment with interferons of chronic viral hepatitis B in children?
  - A. ALAT, ASAT increased more than 2 norms and HBsAg positive;
  - B. viremia DNA VHB under 2000 iu/ml;
  - C. viremia DNA VHB over 2000 iu/ml;
  - D. presence of cytolysis syndrome, HBsAg negative, DNA VHB negative;
  - E. phase of VHB viremia, cytolysis syndrome, Knodel score more than 15 points.
7. The antiviral treatment of chronic viral hepatitis B in children provides the following schemes:
  - A. interferon alpha standard 3-6 IU/m<sup>2</sup> x 3 times/week during 6 months;
  - B. interferon alpha standard 3-6 IU/m<sup>2</sup> x 3 times/week + ribavirin 1000 mg per day, during 1 year;
  - C. administration of adefovir per os;
  - D. interferon alpha 5 IU/m<sup>2</sup> + lamivudin 100 mg per day during 24 weeks;
  - E. interferon alpha 2 beta pegylate 50-80 mck/week 24 weeks.
8. Indicate the affirmations corresponding to chronic viral hepatitis C in children:
  - A. the chronicity of VHC acute infection appears in 70% of cases;
  - B. in persons contacted with VHC infection through blood transfusions the evolution to hepatic cirrhosis in 10-20 years is 20%;
  - C. the degree of hepatic disease progressing is higher in patients with high level of RNA HVC;
  - D. the hepatic affection is more severe in patients infected with genotype 2;
  - E. the evolution of chronic hepatitis with VHC is not influenced by alcohol consumption.
9. What are the clinical characteristics of autoimmune hepatitis in children?
  - A. slow, vague onset with fatigue, loss of appetite, pains in right hypochondrium;
  - B. onset with signs of acute hepatic failure;
  - C. normal biochemical hepatic tests;
  - D. presence of arthralgies, myalgies and subfebrility;
  - E. presence of Raynaud syndrome
10. What below-named informations are positive for chronic VHD infection in children?
  - A. superinfection with VHD in chronic viral hepatitis B leads in 70-80% of cases to hepatic cirrhosis forming;
  - B. superinfection with VHD determines the progressing to hepatic cirrhosis during 5-10 years;
  - C. the form chronic viral hepatitis D clinical manifestation is hepatosplenomegaly, cytolysis having 10-20 values comparable to norm;
  - D. presence of autoantibodies anti-LKM 1;
  - E. presence of hepatic failure signs.

11. Indicate the elements which define the phase of VHB infection replication:
  - A. presence in serum of DNA VHB;
  - B. HBeAg positive;
  - C. DNA VHB > 2000 IU/ml;
  - D. increased ALAT and ASAT;
  - E. hypoalbuminemia 28 g/l.
12. Indicate the schemes of antiviral treatment in chronic viral hepatitis C genotype 1 in children:
  - A. diet 5 (Pevzner), hepatoprotectors, symptomatic treatment;
  - B. combined therapy INF alpha 2b pegylate + ribavirin 24 weeks;
  - C. combined therapy INF alpha 2b pegylate + ribavirin 48 weeks;
  - D. monotherapy with ribavirin 48 weeks;
  - E. treatment with silimarin during 2 years.
13. The autoimmune hepatitis type II a has the following characteristics:
  - A. increased incidence in males;
  - B. evolves with increased titers of anti-LKM1 antibodies;
  - C. has positive effect to therapy with glucocorticoids;
  - D. presents normal titer of class IgG serum globulins;
  - E. frequently is associated with chronic viral hepatitis C.
14. For to determine the degree of chronic hepatitis histologic activity in children it is necessary to determine the following parameters:
  - A. the degree of hepatocytes necrosis;
  - B. the degree of hepatic fibrosis;
  - C. the degree of portal inflammation process;
  - D. special coloration of hepatic tissue for to find the Cu accumulations presence;
  - E. structure and architectonic of hepatic lobule.
15. What are the instrumental methods necessary for to confirm the diagnosis of chronic hepatitis in children?
  - A. arteriography of hepatic vessels;
  - B. elastography of liver;
  - C. Blind method of hepatic biopsy with Menghini needle;
  - D. abdominal sonography and portal Doppler;
  - E. abdominal radiography.
16. The replicative phase of chronic viral hepatitis D is characterizing by the presence of following markers:
  - A. presence in serum of antiVHD IgM antibodies;
  - B. presence in serum of RNA VHD;
  - C. presence in liver of AgHVD;
  - D. presence in serum of HBsAg;
  - E. presence of summary antiVHD or IgG.

17. What chronic hepatitis in children can be treated by the administration of antiviral remedies such as interferon alpha 2 beta standard or pegylated in monotherapy?
- A. autoimmune hepatitis;
  - B. acute drug-induced hepatitis;
  - C. chronic viral hepatitis B in replicative phase;
  - D. chronic viral hepatitis C in replicative phase;
  - E. chronic metabolic hepatitis in Gierke glycogenosis.
18. The etiopathogenetic treatment of autoimmune hepatitis in children includes the administration of following medications:
- A. prednisolone;
  - B. interferon alpha 2 beta pegylated;
  - C. levamisole;
  - D. albendazole;
  - E. azathioprine.
19. The syndrome of hepatocytolysis and cholestasis in chronic hepatitis in children is characterized by the following laboratory signs:
- A. increased level of ALAT and ASAT transaminases;
  - B. high level of VHC or VHB RNA;
  - C. increased level of lactate dehydrogenase LDH4 and LDH5;
  - D. increased level of total bilirubin from the account of direct fraction;
  - E. increased level of gamma-glutamyltranspeptidase (GGTP).
20. Indicate the criteria of eligibility accepted for the initiation of antiviral treatment with interferons of chronic viral hepatitis C in children:
- A. decompensated hepatic cirrhosis;
  - B. increased level of ALAT 1,5 times over superior limit of norm;
  - C. chronic viral hepatitis C with histologic activity;
  - D. hepatic fibrosis F2 or F3;
  - E. detectable RNA VHC.
21. The syndrome of cholestasis in chronic hepatitis in children is manifested by the following modifications:
- A. increased serum level of prothrombin index;
  - B. decreased serum level of gamma glutamyltranspeptidase (GGTP);
  - C. increased serum level of alkaline phosphatase;
  - D. increased level of total bilirubin from the account of direct fraction;
  - E. increased serum level of cholesterol.



22. The hepatoprive syndrome in chronic hepatitis in children is characterized by the following modifications:
- A. increased serum level of transaminases;
  - B. presence of hypoalbuminemia;
  - C. increased serum level of alkaline phosphatase;
  - D. presence of hypofibrinogenemia;
  - E. presence of hypoprothrombinemia.
23. The markers of immuno-inflammatory syndrome in chronic hepatitis in children are as follows:
- A. hypergammaglobulinemia;
  - B. hypoalbuminemia;
  - C. increased level of serum immunoglobulins;
  - D. leucocytosis and lymphocytosis;
  - E. increased titer of complement C3.
24. What below mentioned clinical signs are considered as extrahepatic manifestations of autoimmune hepatitis in children?
- A. jaundice of sclera and teguments;
  - B. arthralgies and arthrites;
  - C. violet abdominal striae;
  - D. maculo-papulous cutaneous eruptions;
  - E. essential cryoglobulinemia.
25. What are the contraindications for antiviral treatment with interferons in chronic viral hepatitis B in children?
- A. presence in blood of positive HBeAg;
  - B. Presence of autoimmune hepatitis or another autoimmune diseases signs;
  - C. presence in patients of psychical and behavioral disorders signs
  - D. female sex;
  - E. severe leucopenia and severe thrombocytopenia.
26. The predictive factors for favorable response to antiviral therapy in chronic viral hepatitis C (CVHC) in children are:
- A. 2-5 times increased level of ALAT;
  - B. short duration of CVHC evolution;
  - C. low VHC viral charge;
  - D. VHC genotype 1a and 1b;
  - E. VHC genotype 2 and 3.
27. What from below listed criteria are not characteristic for diagnosis of autoimmune hepatitis in children?
- A. hypergammaglobulinemia;
  - B. presence of antinuclear antibodies;
  - C. presence of viral hepatitis VHB or VHC markers;
  - D. favorable response to corticosteroids administration;
  - E. presence of cupruria, cupremia, of diminished serum ceruloplasmin.

28. What from hepatic viruses have demonstrated potential of chronicity?
- A. VHB;
  - B. VHC;
  - C. VHA;
  - D. VHE;
  - E. VHD.
29. Select the autoantibodies specific for autoimmune hepatitis in children:
- A. anti-smooth muscle antibodies (SMA);
  - B. antinuclear antibodies (ANA);
  - C. anti-mitochondrial antibodies (AMA);
  - D. anti-soluble hepatic antigen antibodies (SLA);
  - E. antimicrosomal hepatic and renal antibodies (LKM).
30. What informations referring to the therapy of autoimmune hepatitis are true?
- A. corticotherapy represents the principal therapeutic method;
  - B. the prednisolone maintaining dose is selected individually;
  - C. the prednisolone maintaining dose can be 10 mg/day if is associated with azathioprine;
  - D. azathioprine can be used in monotherapy, in dose of 50 mg/day;
  - E. patients resistant to corticotherapy need passing to antiviral remedies.
31. The following affirmations referring to classification of chronic hepatitis are true:
- A. the degree of histologic activity is determined by fibrosis severity;
  - B. hepatic fibrosis is used for to classify the stage of disease;
  - C. piece-meal necrosis defines the periportal necrosis;
  - D. classification of chronic hepatitis in function of severity degree takes into account the fibrosis and hepatic steatosis degree;
  - E. bridging necrosis confirms the severe degree of histologic activity and defines  
the bridges of necrosis between portal tract and central vein.
32. What affirmations referring to chronic hepatitis are true?
- A. chronic viral hepatitis C evolves rarely with anti-LKM1 antibodies;
  - B. the antibodies anti-LKM3 and ANA are present in autoimmune hepatitis;
  - C. antinuclear antibodies are present in autoimmune hepatitis type III;
  - D. in autoimmune hepatitis type III the antihepatic antiSLA autoantibodies are present;
  - E. autoimmune hepatitis type IV evolves with antiVHD and antiLKM3.

33. What markers represent serologic diagnostic tests positive for chronic viral hepatitis B?
- A. negative RNA-VHD;
  - B. positive HBsAg;
  - C. positive intrahepatic HBcAg;
  - D. anti-HBc IgM antibodies;
  - E. HBeAg.
34. What affirmations referring to the stage of chronic hepatitis are true?
- A. stage I represents the absence of fibrosis;
  - B. stage I represents soft periportal fibrosis;
  - C. stage III represents severe fibrosis and “fibrosis bridging”;
  - D. stage II represents moderate fibrosis with porto-portal septae;
  - E. stage III represents severe fibrosis and cirrhosis.
35. What affirmations referring to active chronic hepatitis are true?
- A. preserved architectonic of hepatic lobule structure without necro-inflammatory activity;
  - B. focal necrosis inside of hepatic lobule;
  - C. periportal necrosis with bridge necrosis;
  - D. necrotic inflammatory process is extended in the interior of focal lobule;
  - E. the histopathologic examination finds the presence of hepatic steatorrhea.
36. The chronic hepatitis in children in remission period is characterized by the following clinic-paraclinical signs:
- A. moderately increased ALAT and ASAT;
  - B. normal serum levels of ALAT and ASAT;
  - C. presence of asthenia, loss of appetite, pains in right hypochondrium;
  - D. prothrombin index 95%;
  - E. prothrombin index under 60%.
37. What markers signify the status of anti-HVB vaccinated child?
- A. absence in serum of HBsAg;
  - B. presence in serum of antiHBs in titer more than 10 IU/ml;
  - C. absence in serum of HBeAg;
  - D. absence in serum of summary antiHBcore or IgG;
  - E. presence of antiHBe.
38. The specific prophylaxis of VHB and VHD infection in children includes the following measures:
- A. administration in the first 12-24 hours of antiHVB vaccine after scheme 0,1,2,12;
  - B. administration of antiHVB specific immunoglobulin;
  - C. antiHVB vaccination of new-born over 48 hours after birth;
  - D. administration by new-born of human immunoglobulin in the first 48 hours;
  - E. excluding of breastfeeding from mother with positive HBsAg.

39. The prophylaxis of VHC infection in children includes the following measures:

- A. antiHVB vaccination;
- B. use of qualitatively sterilized and by one-self using instrumentation;
- C. avoidance of muco-cutaneous microtraumatism, tattoo, piercing in adolescents;
- D. individualization of common use objects using (teeth brushes, scissors, earrings etc.);
- E. performing of general blood analysis.

40. The prophylaxis of VHD infection in children includes the following measures:

- A. administration of human immunoglobulin at postexposure;
- B. vaccination and revaccination anti VHB of children;
- C. determination of antiVHD IgM and summary;
- D. quantitative determination of DNA VHB;
- E. use of diagnostic qualitatively sterilized and by one-self using instrumentation.

**CHRONIC HEPATITES  
SIMPLE COMPLEMENT**

1 D

2 B

3 B

4 D

5 E

6 C

7 B

8 A

9 C

10 D

11 B

12 B

13 D

14 E

15 B

16 B

17 B

18 D

19 A

20 D

## MULTIPLE COMPLEMENT

- 1 A,C,D
- 2 A,B,C
- 3 B, C
- 4 A,B,C,D
- 5 A,C,E
- 6 A,C,E
- 7 A,C, E
- 8 A,B,C
- 9 A,B,D
- 10 A,B,C,E
- 11 A,B,C
- 12 A,C
- 13 A,B,C,E
- 14 A,B,C,D
- 15 B,C,D
- 16 B,C,D,E
- 17 C,D
- 18 A.E
- 19 A,C,D,E
- 20 B,C,D,E
- 21 B,C,D,E
- 22 B,D,E
- 23 C,D,E
- 24 B,D,E
- 25 B,C,E
- 26 B,C,E
- 27 C,E
- 28 A,B,E
- 29 A,B,D,E
- 30 A,B,C,D
- 31 B,C,E
- 32 A,D,E
- 33 B,C,E
- 34 B,C,D
- 35 B,C,D
- 36 B,D
- 37 A,B,C,D
- 38 A,B
- 39 A,B,C,D
- 40 B,E

