

**ASSESSMENT FUND**

of discipline « Infectious diseases »

Level of higher education

**SPECIALIST**

Field of study

*31.05.01. – RF, 560001 – KG general medicine*  
(code and name of the field of study)

Qualification

*General practitioner*

**1. LIST OF COMPETENCIES WITH INDICATION OF THE STAGES OF THEIR FORMATION IN THE PROCESS OF MASTERING THE DISCIPLINE**

<i>Competencies being developed</i>	<i>Planned learning outcomes for the discipline, characterizing the stages of competence development</i>	<i>Types of assessment tools / section code in this document</i>
<b><i>GPC-7: Able to prescribe treatment and monitor its effectiveness and safety</i></b>	<p><b>Knowledge:</b> Methods of drug and non-drug treatment, indications for the use of medical devices for the most common diseases. Groups of drugs used to provide medical care in the treatment of the most common diseases; their mechanism of action, medical indications and contraindications for use. compatibility, possible complications, side effects, adverse reactions, including serious and unexpected ones; features of providing medical care in emergency situations.</p>	<p>Block A, C: — MCQs; — conversation</p>
	<p><b>Skills:</b> Develop a treatment plan for children and adults with the most common diseases in accordance with the procedures for providing medical care. Follow clinical guidelines, considering standards of medical care. To prevent or eliminate complications, side effects, adverse reactions, including unexpected ones, arising because of diagnostic or therapeutic manipulations, the use of drugs and/or medical devices, non-drug treatment.</p>	<p>Block B, C: — interpretation of lab.tests. — conversation;</p>
	<p><b>Expertise:</b> Experience in developing a treatment plan for children and adults with the most common diseases in accordance with current procedures for providing medical care, clinical guidelines, and considering standards of medical care. Skills in providing emergency and urgent medical care to patients with the most common diseases, in accordance with current procedures for providing medical care, clinical guidelines, considering standards of medical care. Selection and prescription of medications, medical devices for the most common diseases for the treatment of the most common diseases in children and adults in accordance with current procedures for providing medical care, clinical guidelines, considering standards of medical care.</p>	<p>Block B: — interpretation of lab.tests.</p>

<i>Competencies being developed</i>	<i>Planned learning outcomes for the discipline, characterizing the stages of competence development</i>	<i>Types of assessment tools / section code in this document</i>
<i>PC-4: Readiness to collect and analyze patient complaints, medical history data, examination results, laboratory, instrumental, pathological and other studies in order to recognize the condition or establish the presence or absence of a disease</i>	<b>Knowledge:</b> Methods of collecting and analyzing patient complaints, patient history data, indications and contraindications for additional clinical and paraclinical methods of examining the patient; Etiology and pathogenesis, clinical manifestations and diagnosis of major infectious diseases ѓ	Block A, C: — MCQs; — conversation
	<b>Skills:</b> Collect and analyze patient complaints, data from his anamnesis; prescribe laboratory, instrumental, pathological and other studies to recognize the condition or establish the presence or absence of an infectious disease.	Block B, C: — interpretation of lab.tests. — conversation;
	<b>Expertise:</b> Skills for critically assessing the results of laboratory and pathological studies to recognize a condition or establish the presence or absence of an infectious disease, principles of medical ethics and deontology when interacting with patients.	Block B: — interpretation of lab.tests.
<i>PC-5: the ability to determine the patient's main pathological conditions, symptoms, disease syndromes, nosologies in accordance with the International Statistical Classification of Diseases and Related Health Problems, 10<sup>th</sup> revision</i>	<b>Knowledge:</b> The main methods of examination of pathological conditions, symptoms and syndromes of various nosology forms. Specificity of detection of various pathological conditions, symptoms, syndromes of diseases, nosology forms in accordance with ICD-10 (international classification of diseases-10). The main syndromes of organs and systems damage and their specificity at various nosology forms in accordance with ICD-10	Block A, C: — MCQs; — conversation
	<b>Skills:</b> Interpret the results of the examination of various infections. Analyze various types of pathological conditions, symptoms, syndromes in various infections in accordance with ICD-10. Differentiate symptoms and syndromes with similar pathological conditions.	Block B, C: — interpretation of lab.tests. — conversation;
	<b>Expertise:</b> Common clinical examination methods (history taking, examination, palpation, percussion, auscultation). Skills to identify various symptoms, syndromes and pathological conditions in various infections in accordance with ICD-10. Skills to substantiate clinical diagnosis in accordance with ICD-10.	Block B: — interpretation of lab.tests.

<i>Competencies being developed</i>	<i>Planned learning outcomes for the discipline, characterizing the stages of competence development</i>	<i>Types of assessment tools / section code in this document</i>
<i>PC-7: Capable of determining the method of managing patients with various nosologies</i>	<b>Knowledge:</b> The specifics of collecting an anamnesis of an infectious patient. The main clinical manifestations of oncologic forms of infectious pathology. The basic principles of treatment and rehabilitation in infectious pathology.	Block A, C: — MCQs; — conversation
	<b>Skills:</b> Take anamnesis and plan of laboratory and instrumental examination. Interpret the results of the examination of the infectious patient. Develop a plan for the treatment and rehabilitation of the infectious patient.	Block B, C: — interpretation of lab.tests. — conversation;
	<b>Expertise:</b> Physical examination methods (history taking, examination, palpation, percussion, auscultation) of the infectious patient. Skill of a substantiation of the clinical diagnosis of the infectious patient. Skills of etiotropic, pathogenetic and specific therapy in infectious diseases.	Block B: — interpretation of lab.tests.
<i>PC-8: Readiness to manage and treat patients with various nosologies in outpatient and day hospital settings</i>	<b>Knowledge:</b> Structural organization of the infectious disease service, principles of the structure and operation of infectious disease hospitals, departments, and boxes. The main issues of pathogenesis and clinical manifestations (symptoms, syndromes) of infectious diseases Basic principles of treatment and rehabilitation in infectious pathology.	Block A, C: — MCQs; — conversation
	<b>Skills:</b> Assess the severity of an infectious disease and be able to predict its course and outcome. To diagnose emergency conditions in an infectious patient, as well as to determine follow-up medical support in life-threatening conditions. Formulate a diagnosis in accordance with the requirements of the ICD.	Block B, C: — interpretation of lab.tests. — conversation;
	<b>Expertise:</b> Skills in providing a range of therapeutic and preventive measures at the pre- and hospital stages. Skill in providing emergency (urgent) and first medical aid for infectious diseases. In methods of examining a patient with infectious pathology (inspection, palpation, percussion, auscultation).	Block B: — interpretation of lab.tests.

<i>Competencies being developed</i>	<i>Planned learning outcomes for the discipline, characterizing the stages of competence development</i>	<i>Types of assessment tools / section code in this document</i>
<i>PC-11: Ready to participate in providing emergency medical care in conditions requiring urgent medical intervention</i>	<b>Knowledge:</b> Types of emergency care for infectious diseases. Algorithm for providing emergency care for infectious diseases. Features of treatment of emergency conditions in infectious pathology.	Block A, C: — MCQs; — conversation
	<b>Skills:</b> Determine the tactics of emergency care in infectious pathology. Use the algorithm for providing emergency care in infectious pathology. Treat emergency conditions in infectious diseases.	Block B, C: — interpretation of lab.tests. — conversation;
	<b>Expertise:</b> Principles of providing emergency care in infectious pathology. Algorithm for providing emergency care in infectious pathology. Skills in providing emergency care in urgent conditions of infectious pathology.	Block B: — interpretation of lab.tests.
<i>PC-14: Ability to maintain medical records</i>	<b>Knowledge:</b> List of accounting and reporting medical documentation in medical organizations. Characteristics of accounting and reporting medical documentation in infectious disease medical organizations. Regulatory documentation adopted in healthcare, as well as documentation for assessing the quality and effectiveness of medical organizations.	Block A, C: — MCQs; — conversation
	<b>Skills:</b> To navigate the current regulatory legal acts on labor and apply labor legislation in specific practical situations. Prepare medical documentation in accordance with regulatory acts. Maintain medical records of various types in medical organizations.	Block B, C: — interpretation of lab.tests. — conversation;
	<b>Expertise:</b> Skills in working with accounting and reporting documentation of various types in medical institutions. Skills in comparative characterization of medical documentation of various types in medical institutions. Methods of maintaining medical records of various types in outpatient and inpatient institutions.	Block B: — interpretation of lab.tests.

## 2. TECHNOLOGICAL MAPS OF THE DISCIPLINE

### Course 5, semester 9, reporting – Credit

<i>Section according to course outline</i>	<i>Control</i>	<i>Control method</i>	<i>Credit minimum (points)</i>	<i>Credit maximum (points)</i>	<i>Control schedule (week)</i>
<b>Section 1</b>					
<i>Gastrointestinal infections</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	5	11	3
	Boundary	MCQ	5	11	
<b>Section 2</b>					
<i>Viral hepatitis</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	5	8	5
	Boundary	MCQ	5	8	
<b>Section 3</b>					
<i>Vector-borne infections</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	5	8	7
	Boundary	MCQ	5	8	
<b>Section 4</b>					
<i>Highly contagious and conventional infection</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	5	8	8
	Boundary	MCQ	5	8	
<b>Total per semester</b>			<b>40</b>	<b>70</b>	
<b>Intermediate Control (credit)</b>	MCQ; Interpretation of lab tests data		<b>20</b>	<b>30</b>	<b>8</b>
<b>Semester rating by discipline</b>			<b>60</b>	<b>100</b>	

Course 5, semester 10, reporting – exam

<i>Section according to course outline</i>	<i>Control</i>	<i>Control method</i>	<i>Credit minimum (points)</i>	<i>Credit maximum (points)</i>	<i>Control schedule (week)</i>
<b>Section 5</b>					
<i>Infection with neurological disorders</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	2
	Boundary	MCQ	4	7	
<b>Section 6</b>					
<i>Airborne and respiratory manifestation infections</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	4
	Boundary	MCQ	4	7	
<b>Section 7</b>					
<i>Infection with skin lesion</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	5
	Boundary	MCQ	4	7	
<b>Section 8</b>					
<i>Infections with multiple organ dysfunction and lymphadenopathy syndrome</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	7
	Boundary	MCQ	4	7	
<b>Section 9</b>					
<i>Helminthes</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	8
	Boundary	MCQ	4	7	
<b>Total per semester</b>			40	70	
<b>Intermediate Control (exam)</b>	MCQ; Interpretation of lab tests data		<b>20</b>	<b>30</b>	9
<b>Semester rating by discipline</b>			<b>60</b>	<b>100</b>	

### 3. TESTS AND OTHER MATERIALS REQUIRED FOR ASSESSING LEARNING RESULTS IN THE DISCIPLINE (ASSESSMENT TOOLS)

#### BLOCK A

#### MCQs

#### GASTROINTESTINAL INFECTIONS

**1. *Typhoid fever is caused by:***

- 1) Salmonella typhimurium;
- 2) Salmonella typhi abdominale;
- 3) Salmonella anatum;
- 4) Salmonella enteritidis;
- 5) Panama salmonella.

#

**2. *The source of infection in typhoid fever are:***

- 1) Carnivores;
- 2) Herbivores;
- 3) Human;
- 4) Insects;
- 5) Birds.

#

**3. *What is the rash pattern in typhoid fever?***

- 1) Petechial;
- 2) Spotted;
- 3) Vesicular;
- 4) Roseolous;
- 5) Pustular.

#

**4. *To detect latent intestinal bleeding in typhoid fever, the following test is performed:***

- 1) Wright test;
- 2) Gregersen's reaction;
- 3) Coombs reaction;
- 4) Hedderson test;
- 5) Vidal test.

#

**5. *A 24-year-old patient came to the hospital with complaints of fever for two weeks, headache, abdominal pain, periodic loose stools. On examination, the skin was pale, there were single elements of a roseolous rash on the skin of the abdomen, a thickly furred tongue, hepatosplenomegaly, pain on palpation of the abdomen in the right iliac region, dullness of percussion sound, enteric stool. From the history, it was revealed that a week before the disease, the patient was visiting relatives in the south, often swimming in the lake. What is the likely diagnosis for this patient?***

- 1) Enterovirus infection;

- 2) Rotavirus infection;
- 3) Typhoid fever;
- 4) Epidemic typhus;
- 5) Pseudotuberculosis.

#

**6. *If a typhoid-paratyphoid infection is suspected, what test will clarify the clinical diagnosis?***

- 1) FBC, urinalysis, stool test;
- 2) Bacteriological yield of blood, urine, feces;
- 3) Coagulation tests;
- 4) Viral hepatitis markers;
- 5) Biochemical blood test.

#

**7. *Typhoid fever is characterized by the following combination of blood counts:***

- 1) Leukocytosis, neutrophilia, increased ESR;
- 2) Leukopenia, white blood count without shifts, increased ESR;
- 3) Leukopenia, relative lymphocytosis, increased ESR;
- 4) Leukopenia, relative lymphocytosis, normal ESR;
- 5) Normocytosis, neutrophilia, slightly elevated ESR.

#

**8. *What is the mechanism of transmission of infection in salmonellosis:***

- 1) airborne;
- 2) fecal-oral;
- 3) vector-borne;
- 4) through the blood
- 5) vertical;

#

**9. *Select the symptoms that characterize the gastrointestinal form of salmonellosis.***

- 1) Nausea, vomiting, copious greenish watery stools, diffuse abdominal pain, high fever;
- 2) Vomiting without nausea, without abdominal pain, normal temperature;
- 3) Cramping abdominal pain, scanty stools, high fever;
- 4) Copious watery stools such as "rice water", without abdominal pain, normal temperature;
- 5) Nausea, repeated vomiting, cramping epigastric pain, normal temperature

#

**10. *Salmonellosis is characterized by a pattern of feces:***

- 1) Liquid with an admixture of vitreous mucus;
- 2) Copious, watery;
- 3) Scanty in the form of a lump of mucus streaked with blood;
- 4) Liquid, plentiful, with an admixture of pus, blood, a sharp fetid odor;
- 5) Liquid, with an admixture of fresh blood.

#

**11. The antibiotic of choice in the treatment of gastrointestinal forms of salmonellosis is:**

- 1) Benzylpenicillin;
- 2) Ciprofloxacin;
- 3) Clarithromycin;
- 4) Rifampicin;
- 5) Meropenem.

#

**12. What symptoms distinguish a generalized form of salmonellosis from a localized one?**

- 1) Vomit;
- 2) Stomach ache;
- 3) Liquid stool;
- 4) Hepatosplenomegaly;
- 5) Fever.

#

**13. Salmonellosis is different from cholera by:**

- 1) hypovolemia;
- 2) profuse diarrhea;
- 3) oligoanuria;
- 4) intoxication, hyperthermia;
- 5) convulsions.

#

**14. A 30-year-old man has a fever up to 38,5<sup>0</sup>C, headache, cramping pains around the navel and lower abdomen, frequent loose stools with mucus up to 8 times a day, a decrease in blood pressure to 110/70 mm Hg. The disease began acutely 2 days ago. The result of which test will be decisive for the diagnosis of salmonellosis?**

- 1) Coproscopy;
- 2) FBC;
- 3) Serological test;
- 4) Biochemical blood test;
- 5) Bacteriological yield of feces.

#

**15. A 30-year-old man has a fever up to 38.5, headache, cramping pains around the navel and lower abdomen, frequent loose stools with mucus up to 8 times a day, a decrease in blood pressure to 110/70 mm Hg. The disease began acutely 2 days ago. Which variant of the localized form of salmonellosis corresponds to the patient's symptoms?**

- 1) Gastritis;
- 2) Gastroenteritis;
- 3) Gastroenterocolitic;
- 4) Enterocolitis;
- 5) Colitis;

#

**16. Specify the percentage of body weight loss of decompensated dehydration in cholera?**

- 1) 1%
- 2) 3%;
- 3) 6%;
- 4) 9%;
- 5) 10% or more.

#

**17. The drug of choice for supportive care of a cholera patient with III degree of dehydration is:**

- 1) Rehydron;
- 2) Rheopolyglucin;
- 3) 5% solution of glucose;
- 4) 0.9% nacl solution;
- 5) "quartasol".

#

**18. What combination of symptoms is characteristic of cholera?**

- 1) Copious, odorless, watery stools, lack of intoxication and abdominal pain;
- 2) Nausea, vomiting, copious watery stools, abdominal pain, intoxication;
- 3) Watery, fetid stools, pain around the navel, repeated vomiting;
- 4) Loose, greenish stools with mucus, diffuse abdominal pain.
- 5) Scanty stools with mucus and blood, cramping pains, intoxication;

#

**19. The disease, which began with copious watery stools, which in a few hours became like rice water without fecal odor, is most similar to:**

- 1) Dysentery;
- 2) Salmonellosis;
- 3) Amoebiasis;
- 4) Balantidiasis;
- 5) Cholera.

#

**20. What is the mechanism of diarrhea in cholera:**

- 1) Penetration of vibrio into enterocytes;
- 2) Desquamation of the mucous membrane of the small intestine;
- 3) Damage to the autonomic innervation of the small intestine;
- 4) The effect of the toxin on the adenylate cyclase system of enterocytes;
- 5) Penetration of the pathogen into the blood;

#

**21. The combination of rice water stools, weakness, glassy symptom, oliguria, muscle cramps, subnormal temperature and hypotension are characteristic of:**

- 1) Rotavirus infection;
- 2) Salmonellosis;
- 3) Food poisoning;
- 4) Cholera;

5) Atypical form of dysentery;

#

**22. The combination of rice water stools, weakness, glassed symptom, oliguria, muscle cramps in the limbs, subnormal body temperature and hypotension correspond to:**

- 1) Dehydration of the I degree;
- 2) Dehydration II degree;
- 3) Dehydration III degree;
- 4) Dehydration of the IV degree;
- 5) Dehydration shock.

#

**23. What volume of polyionic solutions should be administered to a cholera patient with II degree dehydration, if his weight before illness was 70 kg?**

- 1) 1,4 L;
- 2) 2,1 L;
- 3) 4,2 L;
- 4) 4,9 L;
- 5) 5,6 L;

#

**24. A cholera patient is in a state of dehydration shock. Choose a drug to help:**

- 1) Dexamethasone;
- 2) Adrenalin;
- 3) Albumen;
- 4) Chlosol;
- 5) Dopamine;

#

**25. Shigellosis belongs to the group:**

- 1) Enteropathogenic intestinal infections;
- 2) Enterotoxigenic intestinal infections;
- 3) Enteroinvasive intestinal infections;
- 4) Persistent diarrhea;
- 5) Secretory diarrhea.

#

**26. The cause of the gastroenterocolitic variant of acute dysentery is usually:**

- 1) Shigella Flexner;
- 2) Sonne's shigella;
- 3) Boyd's shigella;
- 4) Grigoriev-Shiga's shigella;
- 5) Large-Sax's shigella.

#

**27. Shigellosis predominantly affects:**

- 1) Stomach;
- 2) Proximal small intestine;
- 3) Distal small intestine;
- 4) Proximal large intestine;
- 5) Distal large intestine.

#

**28. The most severe complication of shigellosis is:**

- 1) Rectal prolapse;
- 2) Hyperthermia;
- 3) Toxic shock;
- 4) Cachexia;
- 5) Convulsive syndrome.

#

**29. A 40-year-old man fell ill acutely with fever up to 40°C, accompanied by chills, headache, severe weakness. At the same time, there were severe pains in the abdomen with excruciating tenesmus, stools more than 20 times a day like "meat slops". Spasmodic and painful sigmoid colon is palpated. The patient is being treated. Which of the following drugs is unnecessary?**

- 1) Ciprofloxacin;
- 2) Drotaverine;
- 3) 0.9% nacl iv;
- 4) Multivitamins;
- 5) Etamsylate;

#

**30. A 40-year-old man fell ill acutely with fever up to 40°C, accompanied by chills, headache, severe weakness. At the same time there were severe pains in the abdomen with excruciating tenesmus, stool more than 20 times a day, scanty, in the form of lumps of mucus streaked with blood. Spasmodic and painful sigmoid colon is palpated. Inflammation of which part of the gastrointestinal tract corresponds to the patient's symptoms?**

- 1) Gastritis;
- 2) Gastroenteritis;
- 3) Enteritis;
- 4) Enterocolitis;
- 5) Colitis;

#

**VIRAL HEPATITIS**

**1. For viral hepatitis A:**

- 1) Characteristic lack of clear seasonality;
- 2) Morbidity has a group character;
- 3) More common in children under 1 year of age;
- 4) Predominantly affects the elderly;
- 5) Patients are most contagious in the icteric period.

**2. Viral hepatitis A ends with:**

- 1) Formation of virus carriers;
- 2) Recovery;
- 3) Chronic hepatitis;
- 4) Acute renal failure;
- 5) Death.

#

**3. The marker of the acute period of HAV is:**

- 1) Anti-HAV-IgG;
- 2) Anti-HCV;
- 3) HBeAg;
- 4) Anti-HAV-IgM;
- 5) Anti-HBs.

#

**4. The most informative biochemical test of the preicteric period of HAV is:**

- 1) Total bilirubin;
- 2) Blood protein;
- 3) ALT, AST;
- 4) Alkaline phosphatase;
- 5) Cholesterol.

#

**5. When examining children from the focus of viral hepatitis, an 8-year-old child in the absence of clinical manifestations in the blood revealed: Anti-HAV-IgM, ALT-420 U/L. What is your diagnosis?**

- 1) Hepatitis B;
- 2) Hepatitis C;
- 3) Hepatitis D;
- 4) Hepatitis A;
- 5) Hepatitis E.

#

**6. An 18-year-old patient was admitted to the hospital because her mother noticed jaundice in her daughter. She has no other complaints, well-being. Historical data - she did not suffer from jaundice, there were no parenteral interventions for six months. Physical findings - there is a slight yellowness of the sclera and skin, the liver at the edge of the costal arch, sensitive to palpation and percussion. Total bilirubin - 140  $\mu\text{mol/L}$ , direct bilirubin - 105  $\mu\text{mol/L}$ , ALT - 400 U/L, thymol test -19 units. What is your diagnosis?**

- 1) Viral hepatitis A;
- 2) Hemolytic jaundice;
- 3) Viral hepatitis B;
- 4) Atresia of the biliary tract;
- 5) Gilbert's syndrome.

#

**7. The most characteristic variant of the preicteric period of viral hepatitis A is:**

- 1) Flu-like;
- 2) Asthenovegetative;
- 3) Dyspeptic;
- 4) Arthralgic;
- 5) Combined.

#

**8. The mode of transmission of the hepatitis E virus:**

- 1) From mother to fetus;
- 2) Parenteral;
- 3) Sexual;
- 4) Through a mosquito bite;
- 5) Through the water;

#

**9. Viral hepatitis E is characterized by:**

- 1) Severe course in the elderly;
- 2) Severe course in pregnant women;
- 3) Long-term carriage of the virus in children;
- 4) Rapid development of cirrhosis;
- 5) Association with sexual contact.

#

**10. A 25-year-old patient was delivered to the infectious diseases hospital by ambulance on the 6th day of illness with complaints of headache, weakness, loss of appetite, pain in the right hypochondrium and epigastrium, nausea, single vomiting and loose stools. Physical findings are a moderate condition, the skin and sclera are icteric. The abdomen is soft, painful in the right hypochondrium, the liver below the costal arch up to 3.0 cm, painful on palpation, soft-elastic consistency, smooth edge. Urine is dark. From the epidemic anamnesis, it was revealed that the patient had a rest with relatives in Uzbekistan, swam in a canal, drank raw water, ate fruits. What is your preliminary diagnosis?**

- 1) Hepatitis B
- 2) Hepatitis C
- 3) Hepatitis D
- 4) Hepatitis A
- 5) Hepatitis E

#

**11. A marker of acute hepatitis E is:**

- 1) Anti-HAV-IgM
- 2) Anti-HCV-IgM
- 3) HBeAg
- 4) Anti-HEV-IgM
- 5) Anti-HBs

#

**12. In viral hepatitis, the manifestation of cholestasis is:**

- 1) Increased blood levels of serum iron;
- 2) An increase in the level of indirect bilirubin in the blood;
- 3) Increased cholesterol levels and alkaline phosphatase activity;
- 4) Increased activity of ALT, AST;
- 5) Decrease in thymol test.

#

**13. Viral hepatitis is characterized by:**

- 1) Biochemical tests allow to differentiate the etiology of hepatitis;
- 2) Biochemical tests currently have no diagnostic value;
- 3) Detection of HBsAg is the latest serological sign of HBV;
- 4) HBsAg is the most important HEV marker;
- 5) Detection of markers in the blood allows to verify the type of hepatitis.

#

**14. The diagnostic sign of the development of acute liver failure is:**

- 1) Progression of jaundice;
- 2) Proteinuria;
- 3) Change in the color of urine;
- 4) Encephalopathy;
- 5) Enlargement of the liver.

#

**15. Clinical signs of precoma in viral hepatitis:**

- 1) Hepatomegaly, splenomegaly;
- 2) Bradycardia, hypotension;
- 3) Tachycardia, fingertip tremor;
- 4) Liver enlargement, presence of spider veins;
- 5) Palmar erythema, venous pattern on the sides of the abdomen.

#

**16. Signs of cytolysis of hepatocytes in viral hepatitis are:**

- 1) Increased bilirubin and alkaline phosphatase;
- 2) Increased activity of aminotransferases;
- 3) Increase in thymol and decrease in sublimate tests;
- 4) Increased bilirubin and globulins;
- 5) Increase in lipoproteins and cholesterol.

#

**17. Terms of medical observation of those who recovered from HAV and HEV:**

- 1) 1 month;
- 2) 3 months;
- 3) 6 months;
- 4) 12 months;
- 5) 24 months.

**18. Natural transmission of the hepatitis B virus can occur through:**

- 1) Blood transfusion;
- 2) Intravenous administration of drugs;
- 3) Cosmetic manipulations;
- 4) Sexual intercourse;
- 5) Shaking hands with an HBsAg carrier.

#

**19. In acute hepatitis B without a delta agent in the blood serum, ELISA reveals:**

- 1) HBsAg;
- 2) anti-HCV;
- 3) anti-HAV-IgM;
- 4) HBcorAg;
- 5) anti-HDV-IgM

#

**20. After a course of vaccination against hepatitis B, in the blood serum by ELISA, the following are detected:**

- 1) anti-HBcore-IgM;
- 2) anti-HBcore-IgG;
- 3) anti-HBe;
- 4) anti-HBs;
- 5) HBsAg;

#

**21. In viral hepatitis B, a specific marker is not detected in the blood:**

- 1) HBsAg;
- 2) HBeAg;
- 3) HBcAg;
- 4) anti-HBs;
- 5) anti-HBc-IgM.

#

**22. Not common for viral hepatitis:**

- 1) HBsAg is a marker of the acute period of hepatitis B;
- 2) Serological diagnostics is important only for anti-epidemic measures;
- 3) A positive PCR indicates viral replication;
- 4) Detection in the blood of HBsAg is observed only in the early stages;
- 5) Detection of immunological markers is used only for examination of inpatients.

#

**23. Prolonged circulation of HBsAg after hepatitis B is a criterion for:**

- 1) Chronic process;
- 2) Active virus replication;
- 3) Development of cirrhosis of the liver;
- 4) Exacerbation of hepatitis;
- 5) Exacerbation of the severity of the disease.

**24. In a patient who had experienced acute hepatitis B several years ago without the subsequent formation of chronic hepatitis, the following is determined in the blood serum:**

- 1) anti-HBcore IgM;
- 2) anti-HBcore IgG;
- 3) HBsAg;
- 4) HBeAg;
- 5) anti-HAV IgM.

#

**25. Correct statement regarding viral hepatitis:**

- 1) Hepatitis A often affects children under one year old;
- 2) The mechanism of damage to hepatocytes in hepatitis B is similar to that in hepatitis A;
- 3) The genetic factor is not significant for the course and outcome of HCV;
- 4) The mildest forms of HBV are observed in individuals with an overactive immune system;
- 5) Damage to hepatocytes in hepatitis B is due to immune-mediated processes.

#

**26. The child was delivered from a normal pregnancy. The mother is a carrier of HbsAg. What preventive measures are necessary for the child?**

- 1) Postpone hepatitis B vaccination for 1 month;
- 2) Postpone hepatitis B vaccination for 6 months;
- 3) Vaccinate hepatitis B in the first 12 hours of life in combination with immunoglobulin;
- 4) Postpone hepatitis B vaccination for 1 year;
- 5) Hepatitis B vaccination is contraindicated.

#

**27. A 40-year-old patient was admitted to the hospital on the 13<sup>th</sup> day of illness with complaints of nausea, vomiting, daytime sleepiness, insomnia at night, bleeding gums, dark urine, and acholic stools. The disease had a gradual onset with the development of weakness, loss of appetite, pain in the joints, fever up to 37.3<sup>0</sup>C. On the 12<sup>th</sup> day of the disease, dark urine and discoloration of the stool were noted. Examination revealed jaundice and hepatosplenomegaly. What disease can you think of?**

- 1) Viral hepatitis A;
- 2) Viral hepatitis E;
- 3) Viral hepatitis B;
- 4) Viral hepatitis C;
- 5) Viral hepatitis D.

#

**28. The drug of choice in the treatment of chronic hepatitis B is:**

- 1) Gamma globulin;
- 2) HBV vaccine;
- 3) Polyvalent serum;
- 4) Nucleoside analogs;
- 5) Acyclovir.

#

**29. Indicate the incorrect statement in relation to viral hepatitis D:**

- 1) Caused by a defective virus that requires HBsAg to replicate;
- 2) With simultaneous infection with viruses B and D, acute mixed hepatitis develops;
- 3) Virus D infection of carriers of HBsAg is not accompanied by clinical manifestations;
- 4) Infection with virus D in patients with chronic hepatitis B causes a sharp exacerbation of the disease;
- 5) HBV vaccination prevents HDV infection.

#

**30. HDV-infection is:**

- 1) Caused by a virus containing DNA;
- 2) Refers to the most common form of viral hepatitis;
- 3) Has predominantly fecal-oral transmission;
- 4) Responds well to corticosteroid treatment;
- 5) Caused by a virus containing RNA.

#

**31. Indicate the incorrect statement regarding HDV-infection:**

- 1) Virus replication is possible in the presence of HBsAg;
- 2) Often HDV markers are detected in patients with chronic hepatitis and liver cirrhosis;
- 3) With co-infection, clinical manifestations have a two-phase course;
- 4) In contrast to HBV, in acute HDV, the temperature often rises above 38°C during the icteric period;
- 5) Co-infection has a mild course with a greater likelihood of chronicity.

#

**32. Acute delta hepatitis (superinfection) can develop in:**

- 1) Healthy people who are not carriers of HBsAg;
- 2) Patients with chronic hepatitis B;
- 3) Patients with hepatitis A;
- 4) Patients with chronic hepatitis C;
- 5) Patients with hepatitis E.

#

**33. A 34-year-old patient, an anesthesiologist, came to the hospital with complaints of fever, pain in the right hypochondrium, knee and wrist joints. Sick for 3 days, noticed the appearance of a rash on the body, nausea intensified, there was repeated vomiting, urine color changed, body temperature increased to 39.7°C. Physical findings: serious condition, jaundice, arthralgia, pain in the right hypochondrium. The abdomen is swollen, painful in the right hypochondrium, the liver is palpated 4.0 cm below the edge of the costal arch. The spleen is enlarged. In a biochemical blood test: Total bilirubin - 232 µmol/L, direct bilirubin - 150 µmol/L, indirect - 82 µmol/L, ALT - 624 U/L, AsAT - 423 U/L, thymol test - 14 units. ELISA: detected HBsAg, anti-HBcore IgG and anti-HDV IgM. What is your diagnosis?**

- 1) Acute viral hepatitis D, super-infection;
- 2) Acute Viral hepatitis B, severe course;
- 3) Acute viral hepatitis D, co-infection;

- 4) Acute viral hepatitis B, icteric form;
- 5) Acute viral hepatitis B, fulminant form.

#

**34. In the presence of symptoms of cholestasis in patients with chronic hepatitis, it is advisable to prescribe:**

- 1) Acetylsalicylic acid;
- 2) Citric acid;
- 3) Arachidonic acid;
- 4) Almagel;
- 5) Ursodeoxycholic acid.

#

**35. Dispensary observation of convalescents of viral hepatitis B is carried out during:**

- 1) 2 months;
- 2) 3 months.
- 3) 6 months;
- 4) 12 months;
- 5) 24 months.

#

**36. For viral hepatitis:**

- 1) The development of chronic hepatitis is characteristic of HAV;
- 2) The most common outcome of any hepatitis is chronicity;
- 3) The development of chronic hepatitis is characteristic of HCV;
- 4) The course of the disease is usually undulating;
- 5) Acute forms of HEV end with the development of cirrhosis of the liver.

#

**37. The method of early diagnosis of acute hepatitis C is:**

- 1) PCR diagnostics;
- 2) Linked immunosorbent assay;
- 3) Blood chemistry;
- 4) Determination of urobilin in urine;
- 5) Determination of thymol test.

#

**38. A 20-year-old patient consulted a doctor on the 5th day of illness. Worried about fever from the 1st day of illness, weakness, fatigue, sore throat, coughing. Self-administered aspirin. Against this background, on the 4th day of illness, heaviness in the epigastrium, nausea, a sharp decrease in appetite, and dark urine appeared. Objectively: the patient is lethargic, moderate icterus of the sclera and mucous membranes of the oral cavity. The liver is palpated 1 cm below the costal arch. Pulse 64 beats per minute, BP - 100/60. Lives in a student dormitory with 4 people in a room.**

**Specify the probable diagnosis:**

- 1) Infectious mononucleosis;
- 2) Adenovirus infection;

- 3) Viral hepatitis;
- 4) Toxic hepatitis;
- 5) Toxoplasmosis.

#

**39. Indicate the correct statement regarding viral hepatitis:**

- 1) Hepatitis B is characterized by a mild course;
- 2) With viral hepatitis B, there is always severe itching;
- 3) Flu-like syndrome is most characteristic of hepatitis E;
- 4) With viral hepatitis B, arthralgia is often observed;
- 5) Fever is most characteristic of viral hepatitis C.

#

**40. A 36-year-old patient is being treated in an infectious diseases hospital for viral hepatitis. The icteric period lasts 6 weeks. The jaundice does not increase, the itching of the skin disturbs for 2 weeks. Feeling satisfactory. Sleeps badly due to itching. Appetite is not changed. Objectively: jaundice of the skin and sclera is moderate. There are traces of scratching on the skin of the body. The liver is palpated 4.5 cm below the costal arch, the edge is smooth, elastic, painless. Light stool, dark urine. Biochemical parameters: total bilirubin - 260  $\mu\text{mol/L}$ , direct bilirubin - 224  $\mu\text{mol/L}$ , ALT - 400 U/L, cholesterol - 8.8 Mmol/L, alkaline phosphatase - 400 U/L. In the analysis of urine, bile pigments are determined. Blood test without pathological abnormalities. Specify the probable diagnosis:**

- 1) Severe form of viral hepatitis;
- 2) Chronic hepatitis;
- 3) Cholestatic form of viral hepatitis;
- 4) Gilbert's syndrome;
- 5) Cancer of the head of the pancreas.

#

**41. In the treatment of patients with hepatitis C, the main medicine is:**

- 1) Virazole;
- 2) Foscarnet;
- 3) Sofosbuvir;
- 4) Ribavirin;
- 5) Phosphogliv.

#

**42. A 29-year-old man, an active blood donor, has been a plasma donor for the last 6 months. He was sent to the hepatocenter by a blood transfusion station due to an increase in transaminases: ALT - 350 IU/L. Previously, such an increase in enzyme tests was not recorded. Makes no complaints. Examination revealed a slight enlargement of the liver. From the epidemiological history, it was found that an increase in aminotransferases was detected in 2 more donors of this station. ELISA diagnostics for markers of viral hepatitis B, C, D showed a negative result. What is your expected diagnosis?**

- 1) Chronic viral hepatitis C, minimal activity;
- 2) Acute viral hepatitis B, anicteric form;
- 3) Acute viral hepatitis C, anicteric form;
- 4) Acute viral hepatitis B, preicteric period;

5) Gilbert's syndrome.

#

**43. Correct statement regarding viral hepatitis:**

- 1) Infection with HAV often leads to the development of clinically pronounced forms of the disease;
- 2) The causative agent of HCV has a cytopathic effect on hepatocytes;
- 3) The HBV virus is not capable of long-term persistence in the body;
- 4) The causative agent of HAV belongs to the hepadnaviruses;
- 5) The delta virus can only replicate in the presence of the hepatitis C virus.

#

**44. The two-wave course of the icteric period is typical for:**

- 1) HAV;
- 2) HBV;
- 3) HCV;
- 4) HDV;
- 5) HEV.

#

**45. Name possible markers of chronic hepatitis B with delta superinfection:**

- 1) HBsAg, Анти-НВс-IgG, Анти-HDV-IgM;
- 2) HBsAg, Анти-НВс-IgM, Анти-HDV-IgM;
- 3) Анти-НВс-IgG, Анти-НВс, Анти-HDV-IgM;
- 4) Анти-НВс, Анти-НВс-IgG, Анти-HDV-IgG;
- 5) HBsAg, Анти-НВс-IgG, Анти-HCV-IgM;

#

**46. HBV+HDV co-infection is characterized by:**

- 1) The development of chronic hepatitis;
- 2) Acute onset with high fever, arthralgia;
- 3) Gradual onset;
- 4) Improvement with the appearance of jaundice;
- 5) Normal thymol test.

#

**47. The outcome in cirrhosis of the liver occurs faster when:**

- 1) Chronic hepatitis C;
- 2) Cytomegalovirus hepatitis;
- 3) Chronic hepatitis B;
- 4) HDV/HBV superinfections;
- 5) Viral hepatitis E;

#

**48. Superinfection with delta virus is dangerous for the patient:**

- 1) Hepatitis B;
- 2) Hepatitis A;

- 3) Hepatitis E;
- 4) Hepatitis G;
- 5) Hepatitis C.

#

**49. Vaccination of hepatitis B protects the patient from:**

- 1) Only Hepatitis B;
- 2) Hepatitis B and D;
- 3) Hepatitis B and C;
- 4) All Hepatitis;
- 5) Hepatitis B and TTV.

#

**50. With the fulminant form of viral hepatitis:**

- 1) The size of the liver decreases;
- 2) The size of the liver increases;
- 3) In the blood test, leukopenia, lymphocytosis are determined;
- 4) Jaundice decreases;
- 5) No disturbance of consciousness.

#

**51. In the fulminant form of viral hepatitis, the most informative biochemical indicator of severity is:**

- 1) Increased levels of  $\beta$ -lipoproteins;
- 2) Increase in transaminase activity by more than 10 times;
- 3) Increased levels of bilirubin;
- 4) Decrease in prothrombin index;
- 5) Decrease in the concentration of sodium, potassium.

## **VECTOR-BORNE INFECTIONS**

**1. Paroxysm of fevers with tertian malaria begins:**

- 1) In the evening;
- 2) In the first half of the day;
- 3) In the afternoon;
- 4) Any time of the day;
- 5) At night.

#

**2. For the destruction of tissue sporozoites of malarial plasmodium, the following is used:**

- 1) Tetracycline;
- 2) Ofloxacin;
- 3) Primaxin;
- 4) Delagil;
- 5) Mitomycin.

#

**3. *The decisive method of laboratory diagnosis of malaria are:***

- 1) Complete detailed blood test;
- 2) Microscopy of a thick blood drop and blood smear;
- 3) Serological reactions;
- 4) Biological sample;
- 5) Bacteriological blood test;

#

**4. *Febrile attacks with quartan malaria are repeated every:***

- 1) 24 hours;
- 2) 36 hours;
- 3) 48 hours;
- 4) 72 hours;
- 5) 96 hours.

#

**5. *Paroxysms of fever in tropical malaria (falciparum malaria) are repeated from the beginning of the previous one:***

- 1) After 24 hours;
- 2) After 36 hours;
- 3) After 48 hours;
- 4) After 72 hours;
- 5) After 96 hours;

#

**6. *Paroxysms of fever in tertian malaria are repeated every:***

- 1) 24 hours;
- 2) 36 hours;
- 3) 48 hours;
- 4) 72 hours;
- 5) 96 hours.

#

**7. *What biological samples are used for laboratory confirmation of the diagnosis of malaria?***

- 1) Blood;
- 2) Feces;
- 3) Urine;
- 4) Bile;
- 5) Phlegm.

#

**8. *What drug affects the erythrocyte forms of Plasmodium?***

- 1) Hydroxychloroquine;
- 2) Primaquine;
- 3) Metrogil;
- 4) Quinocide;
- 5) Doxycycline;

**9. A 37-year-old patient was admitted to the clinic on the 3<sup>rd</sup> day of illness. Complained of headache, periodic fever with chills. The temperature rose to 40<sup>o</sup>C and kept for about 4 hours. The decrease in temperature was accompanied by profuse sweating. Subsequently, similar attacks occurred every other day in the evenings and were accompanied by tremendous chills, sweat, headache and muscle pain, and sometimes vomiting. The patient returned from Ethiopia shortly before the illness. Specify the probable diagnosis:**

- 1) Acute brucellosis;
- 2) Leptospirosis;
- 3) Malaria;
- 4) Sepsis;
- 5) Typhoid fever.

#

**10. The source of infection in epidemic typhus is:**

- 1) Mosquitoes;
- 2) Rodents;
- 3) Sick person;
- 4) Lice;
- 5) Cockroaches.

#

**11. For epidemic typhus (choose the wrong answer):**

- 1) Body lice are the carrier of the infection;
- 2) Often occurs in crowded conditions;
- 3) Clinically difficult to diagnose;
- 4) The infectiousness of the patient persists for several years;
- 5) Susceptible mainly to the elderly.

#

**12. The carriers of epidemic typhus are:**

- 1) Bed bugs;
- 2) Pubic lice;
- 3) Fleas;
- 4) Body lice;
- 5) Ixodid ticks.

#

**13. Epidemic typhus is characterized by a rash:**

- 1) Roseolous;
- 2) Roseolous-petechial;
- 3) Roseolous-papular;
- 4) Macular;
- 5) Papular-hemorrhagic.

#

**14. The rarest symptom of the peak period of epidemic typhus is:**

- 1) Headache;
- 2) Sore throat;

- 3) Maculopapular rash;
- 4) Insomnia;
- 5) Delirium with hallucinations and agitation of patients.

#

**15. *In epidemic typhus, on the 2<sup>nd</sup>-3<sup>rd</sup> day of the illness, an enanthema appears at the base of the uvula, this symptom is called:***

- 1) Kernig's symptom;
- 2) Symptom of Padalka;
- 3) Symptom Stefansky;
- 4) Rosenberg's symptom;
- 5) Symptom of Chiari-Avtsyn.

#

**16. *The symptom of Chiari-Avtsyn with epidemic typhus develops in terms of:***

- 1) 1-2 days of illness;
- 2) 7-8 days of illness;
- 3) 3-4 days of illness;
- 4) on the 10<sup>th</sup> day of illness;
- 5) 1 month after recovery.

#

**17. *The symptom of Chiari-Avtsyn is:***

- 1) The appearance of roseola on the chest;
- 2) Enanthema on soft palate;
- 3) Conjunctival enanthema in the form of purple-violet spots on the transitional fold of the conjunctiva;
- 4) Accentuation of the rash in the natural folds of the skin;
- 5) Bleeding from injection sites.

#

**18. *For laboratory diagnosis of epidemic typhus, use:***

- 1) Complement fixation reaction;
- 2) Isolating the blood culture of the pathogen;
- 3) Intradermal allergy test;
- 4) Wright's reaction;
- 5) Bioassay.

#

**19. *Atypical symptoms of Status typhosus in epidemic typhus are:***

- 1) Lethargy;
- 2) Euphoria, anxiety;
- 3) Hallucinations;
- 4) Speech is slurred, incoherent;
- 5) Speech is clear, logically connected.

#

**20. The drugs of choice for the treatment of epidemic typhus are:**

- 1) Semi-synthetic penicillins;
- 2) Third generation cephalosporins;
- 3) Aminoglycosides;
- 4) Biseptol;
- 5) Tetracyclines.

#

**21. The most effective drug in the treatment of epidemic typhus is:**

- 1) Azithromycin;
- 2) Penicillin;
- 3) Ceftriaxone;
- 4) Doxycycline;
- 5) Amikacin.

#

**22. Etiotropic therapy of patients with epidemic typhus and Brill's disease should continue until:**

- 1) 2 days of normal temperature;
- 2) Normalization of the size of the spleen;
- 3) 25 days;
- 4) Obtaining negative results of bacteriological studies;
- 5) Normalization of biochemical parameters.

#

**23. Brill's disease is:**

- 1) Rickettsiosis due to Burnett's rickettsia;
- 2) Chlamydia;
- 3) Spirochetosis;
- 4) Systemic borreliosis;
- 5) Recurrent typhus.

#

**24. Q fever is characterized by:**

- 1) Caused by rickettsia;
- 2) Common in countries with hot climates;
- 3) Is an anthroponosis;
- 4) Found mostly in cities;
- 5) Spread by rats.

#

**25. Q-fever is not characterized:**

- 1) Natural focal disease;
- 2) Transmitted in a variety of ways;
- 3) Found mostly in rural areas;
- 4) Characterized by a short (up to 5 days) febrile period;
- 5) Acute onset.

#

**26. The antibiotic of choice for treating Q fever in pregnancy is:**

- 1) Ciprofloxacin;
- 2) Trimethoprim-sulfamethoxazole (Biseptol);
- 3) Tetracycline;
- 4) Cefuroxime;
- 5) Ampicillin.

#

**27. To diagnose Q fever, use:**

- 1) Blood culture;
- 2) Indirect fluorescence;
- 3) PCR;
- 4) Skin allergy test;
- 5) Biological sample.

#

**28. Prevention of Q fever is:**

- 1) Immunization with toxoid;
- 2) Immunization with a live whole cell vaccine;
- 3) Introduction of specific immunoglobulin;
- 4) Introduction of specific serum;
- 5) Immunization with a killed vaccine.

#

**29. Emergency prophylaxis, for those who were in the focus of Q fever, includes the administration of the following drugs:**

- 1) Penicillin;
- 2) Immunoglobulins;
- 3) Doxycycline;
- 4) Rifampicin;
- 5) Streptomycin.

#

**30. A disease that occurs in the warm season in rural areas and is accompanied by fever, headache, maculo-papular rash, infiltrate on the skin with necrosis in the center, fits into the:**

- 1) Epidemic typhus
- 2) Measles
- 3) Scarlet fever
- 4) Tick-borne encephalitis
- 5) Tick-borne spotted fever

#

## COMMUNICABLE AND CONVENTIONAL DISEASES

1. *A 28-year-old man turned to the district doctor with complaints of fever up to 38°C, chills, sweating, general weakness, an ulcer on the skin of his right forearm. Sick for 10 days. In the epidemiological history, it is established that he took part in the slaughter of a cow from a neighbor a week before the illness. When viewed on the skin of the lower third of the right forearm, there is an ulcer with a black scab in the center, with pronounced edema around it, redness of the skin around the scab. No changes were found in other organs. Which of the following diagnoses is most appropriate?*

- 1) Ulceroglandular tularemia,;
- 2) Bubonic plague,;
- 3) Cutaneous anthrax;
- 4) Erythematous bullous erysipelas;
- 5) Chronic furunculosis.

#

2. *A 30-year-old man addressed a family doctor with complaints of an ulcer with a black scab in the center, severe swelling around the ulcer with reddening of the skin, the ulcer was painless on palpation. In history - fell ill 12 days ago, with chills, fever up to 39°C, headache, 3 days ago an ulcer appeared on the skin of the face. Works at a hide and wool processing company. FBC: WBCs - $12 \times 10^9/L$ , lymphocytes-27%, ESR-18 mm/h. Which of the following diagnoses can be made preliminary?*

- 1) Chronic furunculosis;
- 2) Ulceroglandular tularemia;
- 3) Bubonic plague;
- 4) Cutaneous anthrax;
- 5) Erythematous erysipelas of face.

#

3. *A 30-year-old man addressed a family doctor with complaints of an ulcer with a black scab in the center, severe swelling around the ulcer with reddening of the skin, the ulcer was painless on palpation. In history - fell ill 12 days ago, with chills, fever up to 39°C, headache, 3 days ago an ulcer appeared on the skin of the face. Works at a hide and wool processing company. FBC: WBCs - $12 \times 10^9/L$ , lymphocytes-27%, ESR-18 mm/h. The doctor made a preliminary diagnosis: anthrax. Which of the following laboratory diagnostic tests allows you to clarify the diagnosis?*

- 1) Blood culture;
- 2) Urine culture;
- 3) Stool culture;
- 4) Yield of eschar effusion;
- 5) Sputum culture.

#

4. *A 28-year-old man turned to the district doctor with complaints of fever up to 38 degrees, chills, sweating, general weakness, an ulcer on the skin of his right forearm. Sick for 10 days. In the epidemiological history, it is established that he took part in the slaughter of a cow from a neighbor a week before the illness. When viewed on the skin of the lower third of*

*the right forearm, there is an ulcer with a black scab in the center, with pronounced edema around it, redness of the skin around the scab. No changes were found in other organs. The district doctor made a preliminary diagnosis: Anthrax. Which drug is the most effective?*

- 1) Penicillin;
- 2) Rifampicin;
- 3) Erythromycin;
- 4) Doxycycline;
- 5) Gentamicin.

#

**5. A 36-year-old patient, a worker in a slaughter shop, was taken to the infectious diseases department by ambulance with complaints of severe cutting pain in the abdomen, nausea, repeated vomiting with blood streaks, loose stools 3 times with blood. From the history it is indicated that he was ill for 1.5 days, at first he had chills, fever up to 39<sup>0</sup>C, headache, pain and burning in the throat, then the above symptoms joined. Also, from the epidemic anamnesis, it was established that 2 days ago the patient ate poorly cooked barbecue from thick pieces of beef at the workplace. Which of the following diseases should be considered first?**

- 1) Gastroenterocolitic salmonellosis;
- 2) Dysentery, gastroenterocolitis;
- 3) Intestinal yersiniosis;
- 4) Gastrointestinal anthrax;
- 5) Enteroaggregative escherichiosis.

#

**6. A 30-year-old man was taken to the infectious department by ambulance with complaints of fever up to 40<sup>0</sup>C, severe chills, pain and tightness in the chest, shortness of breath, cough with copious bloody sputum in the form of "cherry jelly" and headache. Sick for 2 days. From the epidemiological anamnesis: he works in a private shop for the processing of hides and wool. Physical findings - a serious condition, but consciousness is not disturbed, the skin is pale, the tongue is clean, the pharynx is hyperemic. During auscultation of the lungs, a large number of moist rales are heard, RR-36 per minute, heart rate-114 per minute. Which of the following diseases should be considered first?**

- 1) Community-acquired pneumonia;
- 2) Pulmonary tularemia;
- 3) Pneumonic plague;
- 4) Pulmonary legionellosis;
- 5) Inhalation anthrax.

#

**7. A 38-year-old patient was delivered in a serious condition to the infectious department by ambulance. When examined by a doctor in the admission department, it was revealed: consciousness is preserved, pale, fever up to 35.8<sup>0</sup>C, heart rate-130 per minute, respiratory rate-40 per minute, severe weakness, blood pressure - 60/20 mm Hg. On the skin of the face there is an ulcer with a black scab in the center, painless, with a pronounced swelling of the surrounding soft tissues. From the epidemiological anamnesis: a week ago, the patient and**

*his brother slaughtered a cow. The doctor of the admission department made a diagnosis: Cutaneous anthrax, severe course. Sepsis? What complication has developed in the patient?*

- 1) DIC syndrome;
- 2) Infectious-toxic shock;
- 3) Edema and swelling of the brain;
- 4) Acute renal failure;
- 5) Vascular collapse.

#

**8. *Regime-restrictive measures in relation to persons who were in contact with sick people are important in the prevention of:***

- 1) Malaria
- 2) Plague
- 3) Tick-borne encephalitis
- 4) Tularemia
- 5) Brucellosis

#

**9. *A 50-year-old patient was admitted to the clinic on the 1st day of illness. Physical examination of the patient revealed a serious condition, temperature 39°C, cyanosis of the skin and mucous membranes, shortness of breath. Edema of the skin of the face, neck, upper body, dark scab near the nose with sanious discharge, small vesicles around, hyperemic skin. The swelling area is painless. Specify the probable diagnosis.***

- 1) Erysipelas;
- 2) Phlegmon;
- 3) Anthrax;
- 4) Erysipeloid;
- 5) Bubonic plague.

#

**10. *The source of anthrax are:***

- 1) Rodents;
- 2) Cats, dogs;
- 3) Cattle;
- 4) mosquitoes;
- 5) People.

#

**11. *A 28-year-old man was delivered to the infectious diseases department by ambulance with complaints of severe chills, fever up to 39°C, severe headache, pronounced general weakness, and sharp pain in the left inguinal region. Sick for 3 days. From the epidemiological anamnesis: he works as a huntsman. Objectively: the patient is conscious, the face is hyperemic, on the left in the inguinal region the lymph nodes are enlarged to the size of a "nut", motionless, sharply painful, the skin above them is hyperemic. There were no changes in the organs. What diagnosis can be made in advance?***

- 1) Inguinal lymphadenitis
- 2) Glandular tularemia;

- 3) Bubonic plague
- 4) Tuberculosis of the inguinal lymph node
- 5) Felinoz

#

**12. The vector of plague transmission occurs through:**

- 1) Lice;
- 2) Fleas;
- 3) Ticks;
- 4) Mosquitoes;
- 5) Flies.

#

**13. Plague is caused by:**

- 1) Yersinia enterocolitica;
- 2) Yersinia pseudotuberculosis;
- 3) Yersinia pestis;
- 4) Listeria monocytogenes;
- 5) Salmonella enteritidis.

#

**14. Which of the following laboratory tests confirms the diagnosis of bubonic plague?**

- 1) Culture of mucus from the oropharynx;
- 2) Blood culture;
- 3) Sputum culture;
- 4) Bubo punctate culture;
- 5) CSF culture.

#

**15. A 30-year-old man turned to a family doctor with complaints of severe chills, fever up to 40°C, severe headache, loss of appetite, severe cough with bloody sputum, shortness of breath, and sharp pains in the chest. The disease had a sudden onset 2 days ago. From the epidemiological anamnesis: a hunter, 5 days ago skinned and butchered the carcass of a marmot caught with a trap. Objectively: on the right in the axillary region, the lymph nodes are enlarged to the size of a "nut", soldered into a single conglomerate, sharply painful, the skin above them is hyperemic; during auscultation of the lungs, hard breathing is heard, crepitating small wheezing, respiratory rate-36 per minute, heart rate-112 per minute, blood pressure-80/60 mm Hg. What disease should be considered?**

- 1) Pulmonary tularemia;
- 2) Inhalation anthrax;
- 3) Plague, primarily pneumonic;
- 4) Plague, secondary pneumonic;
- 5) Pulmonary tuberculosis.

#

**16. A 26-year-old patient in the infectious department with a diagnosis of bubonic plague, severe course, on the 2nd day after admission, the doctor revealed the following symptoms: confusion, pallor of the skin with a petechial rash, acrocyanosis, cold extremities, heart rate 130 per minute, thready pulse, BP-70/40 mm Hg, respiratory rate 38 per minute. What complication corresponds to the described symptoms in this patient?**

- 1) DIC;
- 2) Acute adrenal insufficiency;
- 3) Edema and swelling of the brain;
- 4) Infectious-toxic shock;
- 5) Vascular collapse.

#

**17. For primary pneumonic plague is not typical:**

- 1) Severe intoxication
- 2) Bubo;
- 3) Cough;
- 4) Dyspnea;
- 5) Bloody sputum.

#

**18. What clinical form of tularemia develops in the air-dust route of infection?**

- 1) Ulceroglandular;
- 2) Glandular;
- 3) Pulmonary;
- 4) Abdominal;
- 5) Septic.

#

**19. A 24-year-old patient, a geologist, often drank water from shallow reservoirs while working. He fell ill with an acute high temperature, sore throat when swallowing, pain in the neck on the left. Physical findings - a condition of moderate severity, the oropharyngeal mucosa is hyperemic, there is a dense grayish-yellow coating on the left enlarged tonsil, it is difficult to remove, the posterior cervical lymph nodes are enlarged to the size of a pigeon's egg on the left, mobile, painless. Body temperature 39°C. Specify the probable diagnosis:**

- 1) Ornithosis
- 2) Typhoid fever
- 3) Leptospirosis
- 4) Tularemia
- 5) Epidemic typhus

#

**20. A 45-year-old patient, 5 days before the disease, hunted muskrats, processed skins at home. The disease began acutely, chills appeared, the body temperature quickly increased to 39°C, headache and muscle pain appeared. In the right axillary region, an enlarged lymph node, slightly painful, not soldered to the surrounding tissues. The skin over the bubo is not changed. A diagnosis of tularemia was made. Specify the probable route of infection:**

- 1) Water borne

- 2) Food-borne;
- 3) Air-dust;
- 4) Contact;
- 5) Vector-borne.

#

**21. What antibiotic is used to treat tularemia?**

- 1) Penicillin;
- 2) Erythromycin;
- 3) Gentamicin;
- 4) Ceftriaxone;
- 5) Ampicillin;

#

**22. A 30-year-old patient returned from a hike in the taiga, where he lived in a tent and drank water from a stream. He fell ill acutely with fever, pain in the eyeballs, in the lower back, on the 6<sup>th</sup> day he noticed a decrease in diuresis, vomiting, anxiety, hemorrhages on the skin appeared. Specify the diagnosis:**

- 1) Anthrax;
- 2) Tularemia;
- 3) Tick-borne encephalitis;
- 4) HFRS;
- 5) Typhoid fever.

#

**23. A 24-year-old patient, a geologist, often drank water from shallow reservoirs while working. He fell ill with an acute high temperature, sore throat when swallowing, pain in the neck on the left. Physical findings - a condition of moderate severity, the oropharyngeal mucosa is hyperemic, there is a dense grayish-yellow coating on the left enlarged tonsil, it is difficult to remove, the posterior cervical lymph nodes are enlarged to the size of a pigeon's egg on the left, mobile, painless. Body temperature 39C. Specify the probable diagnosis:**

- 1) Ornithosis
- 2) Typhoid fever
- 3) Leptospirosis
- 4) Tularemia
- 5) Epidemic typhus

#

**24. Hemorrhagic fever with renal syndrome is caused by:**

- 1) Hantavirus;
- 2) Flavivirus;
- 3) Filovirus;
- 4) Arenavirus;
- 5) All answers are correct.

#

**25. One of the dangerous specific complications of HFRS is:**

- 1) Acute liver failure;
- 2) Purulent meningitis;
- 3) Acute renal failure;
- 4) Perforation of intestinal ulcers;
- 5) No correct answer.

#

**26. Carriers of hemorrhagic fevers can be:**

- 1) Mosquitoes, ticks;
- 2) Lice, fleas;
- 3) Fleas, mosquitoes;
- 4) Ticks, lice;
- 5) All of the above

#

**27. Etiotropic therapy with ribavirin is prescribed if the causative agent of hemorrhagic fever is:**

- 1) Bunyavirus;
- 2) Flavivirus;
- 3) Filovirus;
- 4) Togavirus;
- 5) All of the above.

#

**28. The following laboratory data were revealed in a patient with HFRS. Blood test: RBCs and hemoglobin is within the normal range; moderate leukocytosis, mainly due to neutrophils and bands; the number of monocytes is increased, plasma cells are determined; moderate increase in ESR. Urinalysis: specific gravity - 1005, protein - 1.32 g/L, squamous epithelium - 10-15 in the microscopic field, leukocytes - 2-3 in the microscopic field, RBC - 30-40 in the microscopic field. Hyaline cylinders - 4-6, granular - 1-2 in the microscopic field. Biochemical parameters: creatinine - 280  $\mu\text{mol/L}$ , urea - 19 mmol/L. These laboratory parameters correspond to the period of the disease:**

- 1) Incubation;
- 2) Initial;
- 3) Oliguric;
- 4) Polyuric;
- 5) Convalescence period.

#

**29. In a patient with HFRS on the 4th day of the oliguric period, pain in the lower back sharply increased, pain appeared in the right hypochondrium. Almost constantly worried about nausea, vomiting, increased weakness. Careful palpation in the lumbar region on the right causes severe pain. BP is low, pulse is weak, frequent. The patient is pale. In the blood - a decrease in erythrocytes and hemoglobin, leukocytosis.**

**What complication has developed?**

- 1) Azotemic uremia;
- 2) Kidney rupture;

- 3) Eclampsia;
- 4) Acute vascular insufficiency;
- 5) Gastrointestinal bleeding.

#

**31. A patient with HFRS in the oliguric period is constantly worried about nausea, repeated vomiting. There was a hiccup. The level of urea and creatinine in the blood increases rapidly. There was drowsiness, involuntary twitching of mimic muscles, arm muscles. The amount of urine excreted does not exceed 50 ml per day for the second day. Specify the basic principles of treatment of the patient:**

- 1) High doses of lasix and mannitol;
- 2) Extracorporeal hemodialysis;
- 3) Hemosorption;
- 4) Hyperbaric oxygenation;
- 5) Pararenal novocaine blockade.

## NEUROINFECTIONS

**1. Meningococcal meningitis is characterized by:**

- 1) PMN's pleocytosis (1000 cells/ $\mu$ L).
- 2) Slightly positive sedimentary reactions.
- 3) Lymphocytic pleocytosis (200 cells/ $\mu$ l).
- 4) Decreased concentration of protein in CSF.
- 5) Protein-cell dissociation.

#

**2. A 4-year-old child had fever up to 38.0-38.5<sup>0</sup>C, difficult nasal breathing, and a rare dry cough for 2 days. On the third day, the mother noted a single rash on the lower extremities. The fever persisted. The skin became pale, cool to the touch. A rash of "star-shaped" shape, a purple hue, in some parts of the body the rash merged. Consciousness is impaired, the child is inhibited, from the moment the condition deteriorated, the child did not urinate. The child was taken to an infectious hospital and hospitalized in severe condition in the intensive care unit. The preliminary diagnosis is:**

- 1) Scarlet fever. Acute renal failure.
- 2) Measles, rash period. Measles encephalitis.
- 3) Flu. Neurotoxicosis (hemorrhagic syndrome, meningismus).
- 4) Meningococcal infection, meningococemia. Septic shock.
- 5) Enterovirus exanthema. Edema of the brain.

#

**3. 8 years old child of, fell ill, with an acute onset of fever up to 39<sup>0</sup>C, difficulty in nasal breathing, a rare dry cough. By the third day of illness, the child's condition worsened markedly, fever persisted, toxic phenomena increased, a headache appeared, vomiting was noted twice, which was not associated with food intake. A district doctor was called. Physical findings: the child's posture on the side with his head thrown back, answers questions with a delay, in monosyllables, reacts to pain stimuli with a grimace, when supine, there is a pronounced rigidity of the occipital muscles. The tactics of the district doctor:**

- 1) Prescribe treatment, recommend outpatient monitoring of the child.
- 2) Issue a referral for hospitalization.
- 3) Call an ambulance to transport the child to the infectious diseases hospital.
- 4) Give an injection of an antibiotic and, accompanied by an emergency resuscitation team, hospitalize the child in an infectious diseases hospital.
- 5) Immediate initiation of infusion and antibiotic therapy in an outpatient clinic.

#

**4. A 30-year-old patient A. is in an infectious hospital in the intensive care unit in an extremely serious condition. The preliminary diagnosis is "meningococcal infection, mixed severe form (meningitis, meningococemia), complicated by cerebral edema and septic shock". What tests are needed to confirm the diagnosis of meningococcal infection?**

- 1) CBC and biochemical blood test.
- 2) Bacteriological culture of blood.
- 3) CSF bacterioscopy.
- 4) CSF latex agglutination test (LA).
- 5) CSF PCR assay.

#

**5. A 13-year-old teenager was admitted to the hospital unconscious on the 2<sup>nd</sup> day of illness. Fever up to 39.2°C, reflexes are present, there is a stiff neck, no rash is detected. The liver and spleen are not enlarged. The pulse is rhythmic, not tense with a frequency of 56 per minute. BP is 100/70 mm Hg. In the CBC - leukocytosis  $23.0 \times 10^9/L$ , ESR 40 mm/h. The preliminary diagnosis is:**

- 1) HFRS.
- 2) Meningitis.
- 3) Flu.
- 4) Typhus.
- 5) Subarachnoid hemorrhage.

#

**6. Meningococemia is characterized by:**

The stage of the spread of the rash (face, trunk, limbs).

Hemorrhagic star-shaped rash on the lower limbs and buttocks.

Measles-like rash.

Roseolous and roseolous-papular rash.

Vesicular rash with add phenomenon.

#

**7. A 16-year-old teenager, fell ill, with an acute onset of fever up to 40°C with chills. By the end of the day, a hemorrhagic rash appeared on the skin of the distal extremities. Meningeal symptoms are absent. Before the disease, he had rhinitis for 7 days. What is the most likely diagnosis:**

- 1) Typhoid fever.
- 2) Typhus.
- 3) Adenovirus infection.
- 4) Flu.

5) Meningococcal infection.

#

**8. The antibiotic of choice for treating meningococcal meningitis is:**

- 1) Ampicillin.
- 2) Benzylpenicillin.
- 3) Ampiox.
- 4) Gentamicin.
- 5) Erythromycin.

#

**9. The district doctor was called to examine the newborn baby, 14 days old. Anamnesis: childbirth took place at home without sanitary and hygienic standards. On examination, the child is conscious, has subfebrile fever, when crying, there is difficulty in opening the mouth, the umbilical wound is edematous, hyperemic, with scanty serous discharge, urination and defecation are not disturbed. According to the parents, generalized convulsions were noted the day before, which disappeared on their own within 15-20 seconds. Presumptive diagnosis:**

- 1) Neonatal botulism.
- 2) Encephalopathy due to jaundice.
- 3) Tetanus in newborns.
- 4) Sepsis of newborns.
- 5) Acute violation of cerebral circulation.

#

**10. What are the symptoms of the classic tetanus triad:**

- 1) High fever, trismus, tonic convulsions.
- 2) Asthenia, "sardonic smile", hyperesthesia.
- 3) Trismus, "sardonic smile", swallowing disorder.
- 4) Anxiety, dysphagia, opisthotonus.
- 5) Fever, opisthotonus, hyperesthesia.

#

**11. A child is 12 years old at the family doctor's appointment. According to the mother, for 2-3 days her son had a temperature of up to 37.2 ° C, malaise, anxiety, an increased reaction to external stimuli. Anamnestic data are not very informative: the disease is not associated with anything; the child is not vaccinated for medical reasons. Examination on the left lower leg revealed hyperemia around the healed wound, due to a blow with a hoe, which the child did while helping his grandfather in the garden a week ago, on palpation, there is a moderate stiffness of the muscles surrounding the wound. Presumptive diagnosis and tactics of the district doctor?**

- 1) Wound botulism. Prescription of anti-botulinum serum.
- 2) Infection with *Cl. Perfringens*. Wound treatment.
- 3) Tetanus. Wound treatment. Administration of anti-tetanus serum.
- 4) Rabies. Wound treatment. Administration of rabies serum.
- 5) Erysipelas. Antibiotic therapy.

#

**12. What is the leading symptom of tetanus?**

- 1) Fever.
- 2) Tonic convulsions.
- 3) Paralysis.
- 4) Impaired consciousness.
- 5) Diarrhea.

#

**13. What medicine is used to prevent and treat tetanus?**

- 1) Antimicrobial serum.
- 2) Antitoxic serum.
- 3) Bacteriophage.
- 4) Horse serum.
- 5) Human immunoglobulin.

#

**14. Possible complications of tetanus are:**

- 1) Septic shock, renal failure.
- 2) Contracture of muscles and joints.
- 3) Pneumonia, paralysis of the heart muscle.
- 4) Tears of muscles and tendons, dislocations.
- 5) Intestinal intussusception, rectal prolapse.

#

**15. With which diseases it is necessary to differentiate tetanus:**

- 1) Epilepsy.
- 2) Leptospirosis.
- 3) Strychnine poisoning.
- 4) Acute violation of cerebral circulation.
- 5) Botulism.

#

**16. The patient has periodic convulsions of the muscles of the trunk. The mouth opens with difficulty. Clear consciousness, temperature is normal, muscle hypertonus. There is an IV degree burn on the left hand after an electrical injury. Specify the most likely diagnosis:**

- 1) Rabies.
- 2) Wound botulism.
- 3) Tetanus.
- 4) Encephalitis.
- 5) Violation of cerebral circulation.

#

**17. A 4-year-old boy was taken to an infectious disease hospital. The disease has an acute onset with fever, dry cough, scanty mucous discharge from the nose. When trying to get on his feet, the child sits on the floor, there is a decrease in muscle tone of the lower extremities. According to the mother, the child had no contacts with infectious patients, was not**

*vaccinated for medical contraindications. There is still a 6-month-old child in the family, who received a live Sabine vaccine about a month ago. Presumed diagnosis:*

- 1) Cerebral palsy.
- 2) Poliomyelitis, paralytic form.
- 3) Tick-borne encephalitis, poliomyelitis form.
- 4) Duchenne's myodystrophy.
- 5) Mumps meningoencephalitis.

#

**18. The typical signs of paralytic poliomyelitis are:**

- 1) Sensory disorder.
- 2) Disorder of motor function in the limbs.
- 3) Atony.
- 4) Hyperkinesis.
- 5) The defeat of the cranial nerves.

#

**19. Which parts of the central nervous system are affected by polio:**

- 1) Anterior horns of the spinal cord.
- 2) The posterior horns of the spinal cord.
- 3) The white matter of the spinal cord.
- 4) The membranes of the brain.
- 5) The cerebral cortex.

#

**20. The day after the DPT + OPV vaccination, the child began to limp. There was a limitation of movement in the leg, a decrease in tendon reflexes and sensitivity. Presumptive diagnosis:**

- 1) Vaccine-associated polio.
- 2) Guillain-Barre syndrome.
- 3) Postvaccinal encephalitis.
- 4) Traumatic neuropathy.
- 5) Encephalitis.

#

**21. State the correct statement for polio:**

- 1) It is widespread everywhere.
- 2) It is caused by a special kind of rickettsia.
- 3) According to the mechanism of transmission, it refers to intestinal infections.
- 4) It proceeds like colitis.
- 5) It is treated with tetracycline drugs.

#

**22. What mechanism (route) of infection is possible with tick-borne encephalitis?**

- 1) Airborne.
- 2) Contact and household.
- 3) Hemocontact.
- 4) Food borne.

5) Fecal-oral.

#

**23. Vaccination against tick-borne encephalitis is performed for:**

- 1) Patients with any form of tick-borne encephalitis up to 7 days of illness;
- 2) After removing the tick;
- 3) Doctors with infections in inpatient and outpatient clinics;
- 4) Persons travelling to natural sites of encephalitis mites;
- 5) Residents of endemic pockets of tick-borne encephalitis;

#

**24. The most frequent clinical form of tick encephalitis in the Kyrgyz Republic is:**

- 1) Febrile.
- 2) Meningoencephalitic.
- 3) Meningeal.
- 4) Polyradiculoneuritic.
- 5) Polymyelitic.

#

**25. The incubation period for rabies correlates with:**

- 1) Premorbid condition.
- 2) Localization, depth and vastness of bites.
- 3) Primary and secondary immunodeficiency.
- 4) The human body weight.
- 5) A type of animal.

#

**26. The earliest symptom of rabies is:**

- 1) Hypersensitivity to visual and auditory stimuli.
- 2) Hyperesthesia.
- 3) Sleep disturbance.
- 4) Unreasonable fear.
- 5) "Scar symptom"

#

**27. The paralytic stage of rabies is characterized by:**

- 1) Depression
- 2) Agitation
- 3) Salivation
- 4) Psychological sedation
- 5) Hydrophobic attack

#

**28. The main sources of infection in rabies are:**

- 1) Dogs.
- 2) Foxes.
- 3) Wolves.

- 4) Farm animals.
- 5) All the listed animals.

#

**29. *The most dangerous in botulism is:***

- 1) visual impairment;
- 2) violation of swallowing;
- 3) respiratory disorders;
- 4) aspiration;
- 5) intestinal paresis;

#

**30. *Name the transmission factors in botulism:***

- 1) Fermented milk products;
- 2) Home preservation;
- 3) Confectionery products;
- 4) Raw vegetables and fruits;
- 5) Cereal porridge.

#

**31. *In botulism, nerve damage is characterized by:***

- 1) Paresis of the oculomotor muscles;
- 2) Disorder of consciousness;
- 3) Convulsive syndrome;
- 4) Violation of sensitivity;
- 5) Meningeal syndrome.

#

**32. *A 45-year-old sick woman complains of pronounced weakness, dry mouth, "blurred vision", double vision of objects, difficulty swallowing solid food. Ill for 2 days, the disease began with nausea and vomiting once 5-6 hours after eating canned eggplant salad. During the examination, the doctor stated that the patient had bilateral ptosis, mydriasis, limited mobility of the eyeballs, hoarseness of voice and slurred speech, intestinal paresis. Violations from the cardiovascular and respiratory systems were not detected. What kind of preliminary diagnosis can you think about?***

- 1) Salmonellosis;
- 2) Stem encephalitis;
- 3) Food botulism;
- 4) Acute violation of cerebral circulation;
- 5) Polio.

#

**33. *A 45-year-old sick woman complains of pronounced weakness, dry mouth, "blurred vision", double vision of objects, difficulty swallowing solid food. Ill for 2 days, the disease began with nausea and vomiting once 5-6 hours after eating canned eggplant salad. During the examination, the doctor stated that the patient had bilateral ptosis, mydriasis, limited mobility of the eyeballs, hoarseness of voice and slurred speech, intestinal paresis. Violations***

*from the cardiovascular and respiratory systems were not detected. Which pairs of cranial nerves are affected in the patient?*

- 1) I and II pairs;
- 2) III and I pairs;
- 3) III and IX pairs;
- 4) IV and XI pairs;
- 5) V pairs.

#

**34.** *A 45-year-old sick woman complains of pronounced weakness, dry mouth, "blurred vision", double vision of objects, difficulty swallowing solid food. Ill for 2 days, the disease began with nausea and vomiting once 5-6 hours after eating canned eggplant salad. During the examination, the doctor stated that the patient had bilateral ptosis, mydriasis, limited mobility of the eyeballs, hoarseness of voice and slurred speech, intestinal paresis. Violations from the cardiovascular and respiratory systems were not detected. Which pair of cranial nerves is not affected in the patient?*

- 1) III pairs;
- 2) IX pairs;
- 3) X pairs;
- 4) IV pairs;
- 5) XII pairs.

#

**35.** *For specific botulism diagnostics:*

- 1) Bacteriological test;
- 2) Coprological test;
- 3) Neutralization reaction in mice;
- 4) Cerebrospinal fluid test;
- 5) Indirect hemagglutination reaction.

#

**36.** *A 45-year-old sick woman complains of pronounced weakness, dry mouth, "blurred vision", double vision of objects, difficulty swallowing solid food. Ill for 2 days, the disease began with nausea and vomiting once 5-6 hours after eating canned eggplant salad. During the examination, the doctor stated that the patient had bilateral ptosis, mydriasis, limited mobility of the eyeballs, hoarseness of voice and slurred speech, intestinal paresis. Violations from the cardiovascular and respiratory systems were not detected. Which of the following is mandatory in a patient's therapy? Which of the following means is mandatory in the patient's therapy?*

- 1) Specific bacteriophage;
- 2) Antitoxic serum;
- 3) Immunoglobulin;
- 4) Antibacterial serum;
- 5) Antiviral serum.

#

## RESPIRATORY INFECTION

1. *A 7-month-old girl was admitted to the hospital on the 7<sup>th</sup> day of her illness with a diagnosis of ARI, right-sided ethmoiditis. The disease had an acute onset from blushing of the eyes, coughing and a cold. The temperature during the week was 38<sup>0</sup>C. In the last 3 days, there was diarrhea up to 3-4 times a day, the stool was liquefied, without mucus. Upon admission, the child's condition was moderate. Nasal breathing is sharply disturbed, abundant mucous discharge from the nose. Puffiness of the eyelids, narrowing of the palpebral fissures, more on the right. The conjunctiva is sharply edematous, hyperemic, loosened. On the lower eyelid on the right there is a grayish film, tightly soldered to the conjunctiva. Moist cough. Hard breathing in the lungs, single moist rales are heard. Pharynx is moderately hyperemic. The liver protrudes from under the child's arch by 3 cm, the spleen by 1 cm. Make a diagnosis.*

- 1) Diphtheria
- 2) Parainfluenza
- 3) Adenovirus infection
- 4) Influenza
- 5) Infectious mononucleosis

#

2. *An 8-year-old child with diphtheria of the tonsils was diagnosed with a lesion of the IX pair of cranial nerves. What is not characteristic of diphtheria paralysis of the soft palate and pharyngeal muscles?*

- 1) Pain when swallowing
- 2) Choking while eating
- 3) Pouring liquid food through the nose
- 4) Difficulty swallowing
- 5) Nasal and hoarse voice

#

3. *At the doctor's appointment is a 5-year-old child. From the history it was established that at the age of 2 months the child suffered a severe form of whooping cough, complicated by right-sided focal pneumonia. Attacks of prolonged convulsive cough were frequent, up to 25 times a day. On the 2<sup>nd</sup> week, pneumonia developed, the child had apnea up to 2-3 times a day, lasting up to 40-50 seconds. within 10 days. The child had a developmental delay; he began to walk from 1 year 4 months, to speak from 3 years. Intellect and speech delay were revealed. What is the reason for the violation of the neuropsychic status in a child?*

- 1) Hypoxia
- 2) Hypoproteinemia
- 3) Hypokalemia
- 4) Intoxication
- 5) Hypoglycemia

#

4. *An 8-year-old girl was admitted to the intensive care unit at 10 p.m. with a diagnosis of episynndrome. The girl's mother came down with the flu a week ago. The disease in a child had a sudden onset, with headache, vomiting. At 8 p.m. she lost consciousness, convulsions*

*developed. She was admitted to the hospital in a very serious condition with incessant convulsions. On admission: temperature is 40<sup>0</sup>C, unconsciousness, limb cramps. Cyanosis of the face, acrocyanosis, shortness of breath. In the lungs - vesicular breathing, without wheezing. Heart sounds are quickened, muffled. The pharynx is diffusely hyperemic, the posterior wall is granular. There are no meningeal phenomena, reflexes are depressed, craniocerebral innervation is not disturbed. Make a preliminary diagnosis.*

- 1) Influenza, convulsive syndrome.
- 2) Meningitis
- 3) Encephalitis
- 4) Hypoxic neuropathy
- 5) Polyneuropathy

#

**5. A 4-month-old child has a suspected RS infection. RS infection in children of the first 6 months of life is most often characterized by:**

- 1) Bronchitis
- 2) The development of atelectasis of the lungs
- 3) Bronchiolitis
- 4) Interstitial pneumonia
- 5) Abscessing pneumonia

#

**6. A 2.5-month-old child has a disease with a gradual onset. There was a cough at normal temperature, during the week the cough intensified, more often at night, on the 8<sup>th</sup> day it became paroxysmal up to 20 times a day, with vomiting, a single cessation of breathing. What is your diagnosis?**

- 1) Parainfluenza
- 2) Pertussis
- 3) Congenital stridor
- 4) RS infection
- 5) Adenovirus infection

#

**7. In the summer, 6 children fell ill in the kindergarten for 2 days. Three had fever up to febrile numbers, one had these symptoms combined with catarrhal manifestations, two were diagnosed with herpetic sore throat, one had serous meningitis. What is the most likely diagnosis?**

- 1) Enteroviral infection
- 2) Adenovirus infection
- 3) Flu
- 4) Infectious mononucleosis
- 5) West Nile Fever

#

**8. A 15-year-old patient complains of sore throat, general weakness. Temperature - 37.9 ° C. She fell ill after contact with a patient with "angina". Physical findings: the skin is pale,**

*moist, the mouth is free to open, the tonsils are edematous, covered with a gray dense coating, which is difficult to remove, forming a bleeding surface. The plaque extends to the palatine arches, a small uvula, the cervical lymph nodes are enlarged, slightly painful. What is the preliminary diagnosis?*

- 1) Tonsillar diphtheria, disseminated form
- 2) Purulent tonsillitis
- 3) Catarrhal tonsillitis
- 4) Tonsillar diphtheria, localized form
- 5) Ulcerative angina

#

**9.** *A 25-year-old patient with 2-sided enlargement and tenderness of the salivary glands, fever and symptoms of intoxication, on the 5th day of the disease, had a headache, repeated vomiting. What additional test should be carried out to diagnose the developed phenomenon?*

- 1) Lumbar puncture
- 2) FBC
- 3) Urine test
- 4) Urine diastasis
- 5) Zimnitsky test

#

**10.** *A 5-year-old patient, the day before, felt a slight malaise, a slight headache, and weakness. Today the temperature has risen to 38.5<sup>0</sup>C with chills, severe headache, severe pain when moving the eyeballs. The skin of the face and conjunctiva of the eyes are hyperemic. There was a dry hacking cough. The pharynx is hyperemic, there are pinpoint hemorrhages on the soft palate. Harsh breathing is auscultated. What is the most likely diagnosis?*

- 1) Flu
- 2) Typhoid fever
- 3) Epidemic typhus
- 4) Q fever
- 5) Enteroviral infection

#

**11.** *A 4-year-old child suffering from tonsillitis on the 4th day of illness lost his voice, complained of difficulty in breathing. On examination, the skin is pale, moist, inspiratory dyspnea, respiratory rate 30 per minute. What is the most likely diagnosis?*

- 1) False croup
- 2) Foreign body
- 3) Bronchial asthma
- 4) True croup
- 5) Acute pharyngitis

#

**12.** *A 3-year-old child has 2-sided enlargement and tenderness of the salivary glands, with fever and symptoms of intoxication; on the 5<sup>th</sup> day of illness, a headache and repeated vomiting appeared. What organ damage should be considered?*

- 1) Meningeal membranes

- 2) Pancreas
- 3) Submandibular salivary gland
- 4) Brain tissues
- 5) All answers are correct

#

**13. A 6-year-old child was admitted to the infectious hospital from a focus of diphtheria infection with a diagnosis of carriage of the bacterium *C. diphtheriae* gravis. When carrying a diphtheria bacillus, the following actions are not performed:**

- 1) Administration of diphtheria antitoxin
- 2) Isolation of the patient
- 3) Prescription of antibiotics
- 4) All answers are correct
- 5) There is no correct answer

#

**14. Whooping cough is suspected in a 2-year-old child. For whooping cough is not typical:**

- 1) The presence of reprises
- 2) Cough paroxysms end in vomiting
- 3) Cough is wet with a lot of sputum
- 4) A coughing fit ends with thick sputum
- 5) Face turns red when coughing

#

**15. An increase in the incidence of enterovirus infection has been registered in a large industrial city. The predominant mechanism of transmission of enteroviruses is:**

- 1) Fecal-oral
- 2) Airborne
- 3) Vector-borne
- 4) Parenteral
- 5) Transplacental

#

**16. A 1.5-year-old child was admitted to the hospital on the 5th day of illness. The temperature on all days of illness is within 38-39°C. Shortness of breath, cyanosis of the nasolabial triangle. Pronounced runny nose. The pharynx is hyperemic, loosened, in the lacunae of the tonsils - effusion, mucus on the wall of the pharynx. Catarrhal conjunctivitis. The cervical lymph nodes are enlarged. Harsh breathing in the lungs. On the right, at the angle of the scapula, crepitant rales are heard. Make a diagnosis.**

- 1) Adenovirus infection, nasopharyngeal fever.
- 2) Flu
- 3) Parainfluenza
- 4) Enteroviral infection.
- 5) Meningococcal infection, nasopharyngitis

#

**17. A 5-month-old child was admitted to the reception of the hospital. Status praesens objectivus: temperature is 37.8°C, nasal congestion, sneezing, dry obsessive cough, expiratory dyspnea, acrocyanosis, cyanosis of the nasolabial triangle. Slight hyperemia of the mucous membranes of the pharynx. During percussion of the lungs, a pulmonary sound with a boxy shade is determined, auscultatory - abundant small wheezing on both sides. Chest X-ray shows emphysema.**

- 1) Respiratory syncytial infection
- 2) Flu
- 3) Adenovirus infection
- 4) Parainfluenza
- 5) Rhinovirus infection

#

**18. A 1.5-year-old child was admitted to the hospital on the 5th day of illness. The temperature on all days of illness is within 38-39°C. On physical examination, shortness of breath, cyanosis of the nasolabial triangle, severe nasal congestion, runny nose are noted. The pharynx is hyperemic with profusely flowing mucus, conjunctivitis. The cervical lymph nodes are enlarged up to 1.5 cm. On auscultation of the lungs, hard breathing is heard, with crepitant rales on the right. What is your diagnosis?**

- 1) Adenovirus infection: nasopharyngoconjunctival fever.
- 2) Flu
- 3) Parainfluenza
- 4) Enteroviral infection
- 5) Meningococcal infection, nasopharyngitis

#

**19. A 6-year-old child was admitted with complaints of fever up to 40.2°C, headache and muscle pain, epistaxis. The disease had an acute onset with symptoms of intoxication, headaches, muscle pain, catarrhal phenomena in the nasopharynx. At the time of admission, the patient's condition was severe: lethargy, moderate catarrhal phenomena. There are single petechiae on the skin and mucous membranes of the oral cavity. What is your preliminary diagnosis?**

- 1) Severe Influenza with hemorrhagic syndrome
- 2) Measles
- 3) Severe Adenovirus infection
- 4) Meningococemia
- 5) Dermatovisceral form of Hemorrhagic vasculitis

#

**20. A 5-year-old child was admitted to the emergency room of the hospital in August with complaints of fever up to 38°C, sore throat when swallowing, and muscle aches. When examining the pharynx, there is a bright hyperemia, on the soft palate, anterior arches, tonsils, vesicles up to 3 mm in diameter are noted, surrounded by a halo of hyperemia. Likely diagnosis?**

- 1) Herpangina
- 2) Quinsy
- 3) Aphthous stomatitis
- 4) Infectious mononucleosis

5) Diphtheria

#

**21. A 2-year-old child, not vaccinated, was admitted on the 2<sup>nd</sup> day of illness with a temperature of 37.6°C, a “barking” cough, and hoarseness of voice. On the 4<sup>th</sup> day of illness, the temperature is 37.4°C, the cough is less sonorous, the voice is aphonic, noisy and labored breathing, the respiratory rate is 60 per 1 minute with retraction of the intercostal muscles, the heart sounds are muffled, perioral cyanosis. No violations were found in other organs. What is your preliminary diagnosis?**

- 1) Diphtheria of the larynx, croup
- 2) Influenza, stenosing laryngotracheobronchitis
- 3) Parainfluenza, stenosing laryngotracheobronchitis
- 4) Obstructive bronchitis
- 5) Foreign body of the larynx

#

**22. A 2-year-old child has been ill for 2 weeks, coughed for 7 days, the temperature was subfebrile. Then the cough became paroxysmal up to 15 times a day, accompanied by reddening of the face, reprisals, viscous glassy sputum. Hemorrhages in the sclera of both eyes, on the frenulum of the tongue - a wound. Harsh breathing in the lungs. Which drug can prevent this disease?**

- 1) DPT - vaccine
- 2) Immunoglobulin
- 3) Antibiotic
- 4) Sulfanilamide
- 5) Bacteriophage.

#

**23. The child is 3 years old with an acute onset of the disease. The temperature is 40 ° C, repeated vomiting, there were short-term seizures. Objectively: the skin is clean, pale. The pharynx is moderately hyperemic, clear, rare cough. There is hard breathing in the lungs, no wheezing. The heart tones are slightly muffled, accelerated. Mildly positive meningeal symptoms. Lumbar puncture: the cerebrospinal fluid is transparent, flows out under high pressure, PMNs 4 cells (lymphocytes), the content of protein, glucose and chlorides is within normal limits. Make a diagnosis.**

- 1) Meningism
- 2) Serous meningitis
- 3) Purulent meningitis
- 4) Epileptic syndrome
- 5) Polyneuropathy

#

**24. The child is suspected of having an enterovirus infection. What are the clinical forms of this infection?**

- 1) All of the following
- 2) Epidemic myalgia
- 3) Intestinal form
- 4) Epidemic fever

5) Gerpangina

#

**25. Child aged 1 year 6 months. was taken to the hospital at 3 am with a diagnosis of ARI, false croup. The disease had a sudden onset, at 2 o'clock in the morning there was a rough barking cough, the child began to suffocate. On examination, the patient's condition is severe, temperature is 38°C, noisy breathing, participation of auxiliary muscles in breathing. Frequent rough, barking cough, hoarse voice. The pharynx is unchanged, there is vesicular breathing in the lungs, there is no cyanosis. After the treatment, the child fell asleep. Breathing during sleep is calm. Determine the degree of stenosis of the larynx:**

- 1) Stenosis grade 2
- 2) Stenosis grade 1
- 3) Stenosis grade 3
- 4) Foreign body of the bronchi
- 5) Asthmatic status

#

**26. A 4-year-old child was admitted with complaints of "barking" cough, shortness of breath, hoarseness of voice. The disease began suddenly at night. The fever is 39°C, the nasal mucosa is dry, clean, the pharynx is slightly hyperemic, there is a fine granularity on the posterior wall of the pharynx. Breathing is noisy, audible at a distance. Respiratory rate 40 per minute. Slight retraction of the epigastric region and supraclavicular fossae, aggravated by exercise. Single dry rales are heard in the lungs, heart sounds are sonorous, quickened. The abdomen is soft and painless. The liver and spleen are not palpated. Make a diagnosis.**

- 1) Stenosing laryngotracheitis 1 degree
- 2) Foreign body of the bronchi
- 3) Diphtheria croup
- 4) Allergic edema of the larynx
- 5) Pharyngeal abscess

#

**27. For parainfluenza is most characteristic:**

- 1) Severe toxic syndrome
- 2) Laryngitis
- 3) Tonsillitis
- 4) Bronchiolitis
- 5) Abdominal syndrome

#

**28. The characteristic seasonality of respiratory syncytial infection is:**

- 1) Summer - Autumn
- 2) Autumn - Winter
- 3) Winter - Spring
- 4) Spring - Summer
- 5) All seasons

#

**30. The most typical transmission path of coronavirus infection are:**

- 1) Airborne, foodborne, contact household
- 2) Vector-borne, contact, foodborne
- 3) Transplantation, sexual, parenteral
- 4) Alimentary, perinatal, blood transfusion
- 5) Contact, airborne

#

**31. The causative agent of SARS-CoV infection is:**

- 1) Picornoviridae
- 2) Paramyxoviridae
- 3) Coronaviridae
- 4) Reoviridae
- 5) Adenoviridae

#

**32. Typical clinical symptoms of coronavirus infection include:**

- 1) Pain in the abdomen, vomiting, headache
- 2) Fever, cough, shortness of breath
- 3) Rapidly increasing symptoms of intoxication in the first hours of the disease, weakness, myalgia
- 4) Increase in body temperature to a maximum on the first day, vomiting, palpitations
- 5) Fever, loose, patchy buccal mucosa, facial puffiness, purulent nasal discharge

#

**33. Pulse oximetry allows you to:**

- 1) Identify patients with hypoxemia who need respiratory support;
- 2) Evaluate the effectiveness of respiratory support;
- 3) Detect acute heart failure;
- 4) Detect pneumonia.
- 5) Detect infected people

#

**34. The purpose of pulse oximetry is:**

- 1) Detection of respiratory failure;
- 2) Detection of pneumonia;
- 3) Assessment of the severity of hypoxemia;
- 4) Detection of acute heart failure.
- 5) Detection of renal failure

#

**35. Rhinovirus infection can be complicated by:**

- 1) Otitis media
- 2) Exacerbation of asthma
- 3) Bronchiolitis
- 4) All of the above
- 5) None of the above

#

**36. In the treatment of uncomplicated rhinovirus infection, the following are used:**

- 1) Decongestants
- 2) Antihistamines
- 3) Analgesics
- 4) None of the above
- 5) All of the above

#

**37. Prevention of rhinovirus infection consists in:**

- 1) Vaccination
- 2) Hand washing
- 3) Food washing
- 4) Use of antiviral drugs
- 5) Antibiotic use

#

**38. Sources of rhinovirus infection are:**

- 1) Livestock
- 2) Reptiles
- 3) Birds
- 4) People
- 5) Rodents

#

**39. Rhinovirus infection often has seasonality:**

- 1) Winter-spring
- 2) Spring-summer
- 3) Summer-autumn
- 4) Autumn-winter
- 5) Throughout the year

#

**40. The pathognomic symptom of mumps is:**

- 1) Symptom of Padalka
- 2) Rosenberg's symptom
- 3) Symptom of Murson
- 4) Symptom of Chiari-Avtsyn
- 5) None of the above

#

### **INFECTION WITH SKIN LESION**

**1. The incubation period for measles is:**

- 1) From 2 hours to 2 days;
- 2) 5-7 days;
- 3) 9-21 days;
- 4) 21-25 days;
- 5) Up to 45 days.

#

**2. Rash with measles appears:**

- 1) Simultaneously;
- 2) Impulsive;
- 3) Migratory;
- 4) Stage by stage;
- 5) Undulating.

#

**3. A patient with chickenpox is contagious in terms of:**

- 1) A week before the appearance of rashes;
- 2) From the last day of the incubation period to the 5th day from the appearance of the last element;
- 3) Three days from the onset of the disease;
- 4) From the last day of the incubation period to 3 days of rashes;
- 5) From the first day of the rash to the 7th day of the rash.

#

**4. The source of infection in scarlet fever is:**

- 1) Patient with streptococcal infection;
- 2) Carrier of Staphylococcus aureus;
- 3) Patient with herpes zoster;
- 4) Carrier of non-toxigenic corynebacteria;
- 5) Patient with erythrasma;

#

**5. The rash of scarlet fever is:**

- 1) Vesicular;
- 2) Small-spotted;
- 3) Maculopapular;
- 4) Bullous;
- 5) Roseolous;

#

**6. The causative agent of erysipelas is:**

- 1) Meningococcus;
- 2) Staphylococcus;
- 3) Streptococcus;
- 4) Pneumococcus;
- 5) Virus.

#

**7. Pigmentation of the rash with measles is explained by:**

- 1) Anergy development;
- 2) fragility of capillaries;
- 3) Diapedesis of erythrocytes into subcutaneous fat;
- 4) Paralytic dilatation of precapillaries;
- 5) Hemorrhages in the subcutaneous tissue

#

**8. *With what should measles be differentiated in the catarrhal period?***

- 1) Coronavirus infection;
- 2) Respiratory syncytial infection;
- 3) Parainfluenza;
- 4) Rhinovirus infection;
- 5) Adenovirus infection.

#

**9. *Subclinical (mitigatus) measles develops in:***

- 1) Vaccinated people;
- 2) While taking antibiotics;
- 3) After the gamma globulin administration;
- 4) After prolonged corticosteroid therapy;
- 5) While taking antiviral drugs.

#

**10. *Rubella is dangerous for:***

- 1) Newborns;
- 2) Pregnant women;
- 3) Young women;
- 4) Old people;
- 5) School children;

#

**11. *Acquired rubella is characterized by a combination of syndromes:***

- 1) Intoxication, tonsillitis, exanthema;
- 2) Intoxication, exanthema, polyadenopathies;
- 3) Intoxication, exanthema, gastrointestinal lesions;
- 4) Intoxication, hepatolienal, exanthema;
- 5) Intoxication, exanthema, respiratory tract lesions.

#

**12. *A 19-year-old patient complained of fever, weakness, rash on the body. He fell ill 3 days ago. Physical findings: the condition is closer to moderate severity, the temperature is 39<sup>0</sup>C, there is an abundant rash on the skin of the face, trunk - spots, papules and vesicles, a rash is also noted on the scalp and on the oral mucosa. Specify the probable diagnosis:***

- 1) Enterovirus infection
- 2) Sepsis
- 3) Generalized herpes
- 4) Chicken pox
- 5) Pseudotuberculosis

#

**13. *"Portions" of rash with chickenpox is:***

- 1) The rash appears from top to bottom;
- 2) The rash appears with every rise in temperature;

- 3) Rash appears from bottom to top;
- 4) The rash appears on the scalp;
- 5) The rash appears on the palms and soles.

#

**14. A rash with scarlet fever appears due to part of the pathogenesis:**

- 1) Septic;
- 2) Allergic;
- 3) Toxic;
- 4) Autoimmune;
- 5) Necrotic.

#

**15. Late complications of scarlet fever are due to the following part of the pathogenesis:**

- 1) Septic;
- 2) Allergic;
- 3) Toxic;
- 4) Autoimmune;
- 5) Necrotic.

#

**16. The rash with scarlet fever ends with:**

- 1) Pigmentation;
- 2) Scarring;
- 3) Depigmentation;
- 4) Peeling;
- 5) Crusting;

#

**17. Repeated erysipelas occurs:**

- 1) within 1 year at the same location;
- 2) within 2 years at the same location;
- 3) after 2 years in another location;
- 4) after 2 years at the same location;
- 5) after 1 year in another location.

#

**18. Recurrent erysipelas occurs after the primary:**

- 1) After 3 years or more in the same location;
- 2) Within 2 years at the same location;
- 3) After 2 years in another location;
- 4) After 2 years at the same location;
- 5) Within 1 year in another location.

#

**19. A 20-year-old patient complained of cough, lacrimation, weakness, sore throat, rash, and fever. Sick for 6 days, a rash appeared on the 4<sup>th</sup> day of illness on the face. The examination**

*revealed a moderate condition, temperature - 39<sup>0</sup>C, scleritis, conjunctivitis, on the skin of the face there is an abundant, sometimes confluent maculopapular rash, on the mucous membrane of the oropharynx, cheeks - enanthema in the form of millet grains. Specify the probable diagnosis:*

- 1) Measles;
- 2) Rubella;
- 3) Meningococemia;
- 4) Scarlet fever;
- 5) Pseudotuberculosis.

#

**20. A 4-year-old child has measles. On the 7<sup>th</sup> day of the disease, destructive pneumonia and pyopneumothorax were diagnosed. What measures cannot be taken?**

- 1) Transfer to the surgical department;
- 2) Call a surgeon;
- 3) Thoracocentesis;
- 4) To strengthen antibiotic therapy;
- 5) Detoxification therapy.

#

**21. On the third day of illness, a student came to the clinic with complaints of fever, headache, copious discharge from the nose, and lacrimation. On examination, rhinitis, conjunctivitis, hyperemia of the pharynx was revealed, the tonsils were not enlarged, without overlays, whitish overlays were noted on the buccal mucosa that could not be removed with a spatula, the lymph nodes were not enlarged, no pathology was detected in the cardiovascular, pulmonary and digestive systems. From the history it is established that the patient is not vaccinated for "religious reasons". After examination, the patient with a diagnosis of acute respiratory viral infections and stomatitis, was sent home with medical recommendations. What disease was missed by the doctor?**

- 1) Adenovirus infection;
- 2) Measles;
- 3) Rhinovirus infection;
- 4) Scarlet fever;
- 5) Diphtheria.

#

**22. A 30-year-old patient was examined by a doctor called to the house, who revealed rhinitis, conjunctivitis, hyperemia of the pharynx, on the mucous membrane of the cheeks - whitish overlays that cannot be removed with a spatula. Based on the pathognomonic symptom, the doctor diagnosed measles. What is the name of this symptom?**

- 1) Murson's symptom;
- 2) Symptom of Filatov-Koplik;
- 3) Filatov's symptom;
- 4) Symptom of Padalka;
- 5) Pastia's sign;

#

**23. A woman at the 4<sup>th</sup> week of pregnancy, previously free of rubella, was in contact with a patient with rubella. What are your recommendations?**

- 1) Save the pregnancy
- 2) Prescribe gamma globulin;
- 3) Have a medical abortion;
- 4) Monitor the development of the fetus (ultrasound every 2 weeks);
- 5) Take antiviral drugs;

#

**24. With rubella, peripheral blood reveals:**

- 1) Leukocytosis with lymphocytosis and monocytosis;
- 2) Lymphocytosis, plasma cells;
- 3) Leukocytosis due to lymphocytosis;
- 4) Anemia with leukopenia;
- 5) Leukocytosis, atypical mononuclear cells;

#

**25. A family doctor was called to see a 5-year-old girl who complains of weakness and sore throat. Sick for 3 days. At home, on the advice of friends, the child was treated with ampicillin. An objective examination revealed: subfebrile temperature, hyperemia of the pharynx, soreness of the occipital and posterior cervical lymph nodes, a small-spotted rash, which was noticed on the second day of taking the antibiotic. From the history - the child is not vaccinated, the allergic history is not burdened. What is your preliminary diagnosis?**

- 1) Scarlet fever;
- 2) Allergic dermatitis;
- 3) Measles;
- 4) Rubella;
- 5) Infectious mononucleosis.

#

**26. A 60-year-old patient was hospitalized on the 5<sup>th</sup> day of illness with complaints of chills, fever, headache and vomiting. The examination revealed abundant rashes in the form of papules, grouped vesicles on the skin of the left subscapular region along the XI-XII intercostal space with the transition to the chest. There is a burning pain along the skin rash. Specify the diagnosis:**

- 1) Chicken pox;
- 2) Herpes simplex
- 3) Herpes zoster
- 4) Lyme disease
- 5) Toxicoderma

#

**27. Chickenpox is characterized by:**

- 1) False polymorphism of the rash;
- 2) True polymorphism of the rash;
- 3) Enlargement of the parotid salivary glands;
- 4) Stages of rashes;

5) Spotted rash.

#

**28. A 4-year-old child, 8 days after the onset of a vesicular rash with subfebrile temperature, developed severe headache, nausea, dizziness and unsteady gait. What disease should be considered?**

- 1) Measles encephalitis;
- 2) Meningococcal encephalitis;
- 3) Varicella encephalitis;
- 4) Rubella encephalitis;
- 5) Tick-borne encephalitis.

#

**29. Dizziness, unsteady gait, ataxia is more common with encephalitis of the following etiology:**

- 1) Measles;
- 2) Chickenpox;
- 3) Rubella;
- 4) Post-vaccination;
- 5) Herpetic;

#

**30. An allergic complication of scarlet fever is:**

- 1) Otitis;
- 2) Sinusitis;
- 3) Nephrosis;
- 4) Lymphadenitis;
- 5) Arthritis.

#

**31. A 4-year-old child consulted a doctor with a small punctate rash all over his body on hyperemic skin, sore throat, and fever. On examination, there is a thickening of the rash in the folds of the body and limbs, a bright hyperemia of the pharynx, hypertrophy of the tonsils, the coated tongue along the back and along the edges free from plaque, "papillary". What is your diagnosis?**

- 1) Tonsillitis;
- 2) Allergic dermatitis;
- 3) Parvovirus infection;
- 4) Pseudotuberculosis;
- 5) Scarlet fever

#

**32. The pathognomonic symptom of scarlet fever is:**

- 1) Pastia's symptom;
- 2) Murson's symptom;
- 3) Filatov-Koplik's symptom;
- 4) Symptom of "slapped cheeks";
- 5) Fillipovich's symptom.

**33. What complex of symptoms is characteristic for scarlet fever?**

- 1) Fever, rash, diarrhea;
- 2) Fever, rash, catarrhal phenomena with an exudative component;
- 3) Fever, rash, hepatosplenomegaly;
- 4) Fever, rash, sore throat;
- 5) Fever, rash, meningeal signs;

#

**34. A distinctive clinical sign of erysipelas from phlegmon is:**

- 1) Erythema with edema;
- 2) Fever;
- 3) Soreness;
- 4) A clear border of erythema;
- 5) Signs of inflammation in the FBC.

#

**35. The antibiotic of choice in the treatment of primary erysipelas in a hospital is:**

- 1) I generation cephalosporin;
- 2) III generation cephalosporin;
- 3) II generation cephalosporin;
- 4) Penicillin;
- 5) Macrolide.

#

**36. The duration of antibacterial therapy of primary erysipelas is:**

- 1) 5 days;
- 2) 7 days;
- 3) 10 days;
- 4) 14 days;
- 5) At least 2 days after the disappearance of fever.

#

**37. A 14-year-old patient was admitted to the clinic on the 5<sup>th</sup> day of illness with complaints of jaundice of the skin and sclera, a scarlet fever-like rash, hyperemia and swelling of the face, hands and feet, disorders of the gastrointestinal tract. What is your preliminary diagnosis:**

- 1) Pseudotuberculosis
- 2) Infectious mononucleosis
- 3) Leptospirosis
- 4) Hepatitis
- 5) Measles

#

**38. A 5-year-old child fell ill acutely with fever up to 38.5°C, pain in the throat and abdomen. After 3 days, a rash appeared on the skin. He was admitted to the hospital on the 4<sup>th</sup> day of illness in a severe condition. On examination, the child is lethargic, pale, profuse small-spotted rash all over the body, thickening on the face, hands and feet, pronounced hyperemia of the pharyngeal mucosa, muffled heart sounds, painful stomach, liquid feces, 2 times a day, without impurities. What is your preliminary diagnosis?**

- 1) Pseudotuberculosis.
- 2) Scarlet fever.
- 3) Staphylococcal infection with scarlet fever-like syndrome.
- 4) Rubella.
- 5) Enteroviral exanthema.

#

**39. Pseudotuberculosis is transmitted by:**

- 1) Airborne
- 2) Foodborne
- 3) Sexual
- 4) Contact household
- 5) Perinatal

#

**40. Parvovirus B19 is so named because of:**

- 1) The virus was detected in human blood serum sample No. 19 from set B
- 2) The virus caused illness in 19 volunteers
- 3) The incubation period for the infection is 19 days.
- 4) Binds to the erythrocyte B19 receptor
- 5) Isolation of the patient is required for 19 days

#

**41. The most common form of parvovirus B19 infection in children is:**

- 1) Erythema Infectiosum
- 2) Mezadenitis
- 3) Neurotoxicosis
- 4) Purulent tonsillitis
- 5) Nasopharyngeal fever

#

**42. An 8-year-old child was examined by a local pediatrician. Complaints of fever, loss of appetite, rash that began on the face and gradually spread to the whole body, pain in the legs. From history - the child is vaccinated according to the immunization calendar. Physical findings: moderate condition, temperature 37.8 C, appetite reduced, rash localized throughout the body, maculopapular confluent, with "clean" areas in the center, cheeks hyperemic. The pharynx is hyperemic; the tonsils are without overlays. From the side of the respiratory, cardiovascular and digestive systems, no pathology was detected. What is the preliminary diagnosis?**

- 1) Parvovirus B19 infection
- 2) Measles
- 3) Rubella
- 4) Scarlet fever
- 5) Chicken pox

#

## MULTIPLE ORGAN LESIONS

1. *A 30-year-old man turned to his family doctor with complaints of severe chills, excessive sweating, fever up to 39°C, weakness and fatigue for a week. The patient lives in a rural area and has a farm. At an objective examination, the condition is relatively satisfactory, there is no intoxication, the position is active. Palpable submandibular, axillary, parotid and inguinal lymph nodes up to 1 cm in size, mobile. Hepatosplenomegaly was noted. No changes were found in other organs. What preliminary diagnosis can you make?*

- 1) Typhoid fever;
- 2) Malaria;
- 3) Tularemia;
- 4) Acute brucellosis;
- 5) Q fever.

#

2. *A 50-year-old woman, a milkmaid, fell ill a month ago when the patient developed chills, sweating, fever up to 39°C, aching pain in the knee and ankle joints. Objectively, the joints are not externally changed. Submandibular, axillary, inguinal lymph nodes the size of a pea. Hepatosplenomegaly. Which of the following diseases is most likely in the patient?*

- 1) Acute rheumatic fever;
- 2) Rheumatoid arthritis;
- 3) Gouty arthritis;
- 4) Reiter's disease;
- 5) Acute Brucellosis.

#

3. *A 28-year-old man went to the doctor with complaints of chills, sweating, fever up to 38°C during the last 10 days. An objective examination revealed an increase in peripheral lymph nodes, an increase in the liver and spleen. The laboratory examination revealed the following results: Vidal's test - negative, blood for a thick drop and a thin smear - negative, Wright's test - 1:400, Hadlson's test - sharply positive, complement fixation reaction with Burnett's rickettsiae antigens - negative. What clinical diagnosis can you make?*

- 1) Typhoid fever;
- 2) Paratyphoid A or B;
- 3) Malaria;
- 4) Q fever;
- 5) Acute brucellosis.

#

4. *A 28-year-old man turned to a family doctor with complaints of aching pain in the large joints of the limbs, shortness of breath, palpitations, retrosternal pain on the left; the patient is a farmer by profession, has been ill for 8 months, when, after a short-term fever, chills, sweating, the above complaints gradually joined in stages. Physical findings: lymphadenopathy, hepatomegaly +1.5-2 cm in MCL. Auscultatory: rough systolic murmur at the apex, diastolic murmur at the base of the heart. In the FBC: leukocytes- $4 \times 10^9/L$ , lymphocytes-40%, ESR-10 mm/h. Which of the following diseases does the patient have?*

- 1) Rheumatoid arthritis;

- 2) Chronic rheumatic disease;
- 3) Chronic brucellosis;
- 4) Gouty arthritis;
- 5) Reiter's disease.

#

**5. *The diagnosis of chronic brucellosis is made with the duration of the disease:***

- 1) More than 1.5 months up to 3 months;
- 2) Over 3 months up to 4 months;
- 3) More than 4 months up to 6 months;
- 4) More than 6 months;
- 5) Over 2 years.

#

**6. *The source of infection in HIV are patients:***

- 1) During the incubation period;
- 2) Acute HIV-infection;
- 3) Chronic persistent lymphadenopathy;
- 4) Virus carriers;
- 5) All of the above.

#

**7. *All of the following are members of the retrovirus family except:***

- 1) Human immunodeficiency viruses;
- 2) Human T-cell lymphoma virus;
- 3) Simian immunodeficiency virus;
- 4) FMD (foot and mouth disease) virus;
- 5) Feline Immunodeficiency Virus.

#

**8. *All of the following cells contain the CD4 receptor protein except:***

- 1) T-helpers (T4);
- 2) Macrophages;
- 3) Monocytes;
- 4) Red blood cells;
- 5) T-suppressors (T8).

#

**9. *The leading cause of immunodeficiency and damage to various organs and tissues in HIV infection:***

- 1) Formation of antibodies to tetrapeptides of human cell membranes;
- 2) Cytopathic action of the virus;
- 3) Impaired macrophage function;
- 4) Decreased production of T-lymphocytes in the bone marrow;
- 5) All of the above.

#

**10. A hallmark of all retroviruses, including HIV:**

- 1) The presence of a surface membrane;
- 2) Presence of RNA;
- 3) Integration into the host cell genome;
- 4) The presence of a core;
- 5) Lymphotropism.

#

**11. Clinical signs of progression of HIV infection:**

- 1) Oral candidiasis, "hairy leukoplakia";
- 2) Herpetic infection;
- 3) Fever, malaise;
- 4) Diarrhea, weight loss;
- 5) All of the above.

#

**12. Flu-like syndrome in acute HIV infection is characterized by all of the following symptoms, except:**

- 1) Лихорадка, озноб;
- 2) Геморрагический синдром;
- 3) Интоксикация: головная боль, миалгии, артралгии, анорексия, недомогание;
- 4) Умеренная полиаденопатия, увеличение селезенки;
- 5) Фарингит, тонзиллит, кореподобная сыпь.

#

**13. Symptoms of thrombocytopenic purpura in acute HIV infection are:**

- 1) Nosebleeds;
- 2) Ecchymosis, hemorrhage, petechiae;
- 3) Bleeding gums, uterine bleeding;
- 4) Platelet count within 40,000 within 1 to 3 months;
- 5) All of the above.

#

**14. The main clinical signs of chronic HIV encephalopathy, except for:**

- 1) Decrease in intelligence, sharp restriction of the lexicon;
- 2) Scattered and focal neurological symptoms;
- 3) Decreased interest in self, slovenliness;
- 4) All of the above;
- 5) Disturbance of consciousness.

#

**15. Histological abnormalities in the lymph nodes in acute HIV infection are:**

- 1) Lymphohistiocytic infiltration;
- 2) Inflammatory changes;
- 3) Sclerosis of lymphoid tissue;
- 4) Hyperplasia of lymphoid tissue;
- 5) Disappearance of the structure of the lymph node.

**16. *In the gastrointestinal form of acute HIV infection, all of the following can occur except:***

- 1) Loose stools with mucus;
- 2) Anorexia;
- 3) Pseudomembranous colitis;
- 4) Nausea, vomiting;
- 5) Pain in the abdomen.

#

**17. *Polyadenopathy in acute HIV infection is characterized by:***

- 1) Fever, sweating, chilling;
- 2) Fatigue, decreased performance;
- 3) The occipital and posterior cervical lymph nodes increase first, then the submandibular, axillary, inguinal;
- 4) Lymph nodes are soft, painless, not soldered to each other;
- 5) All of the above.

#

**18. *All of the following are major steps in HIV replication except:***

- 1) Interaction of viral envelope proteins with target cell receptor proteins;
- 2) Synthesis of an additional viral RNA molecule;
- 3) Activation of HIV proteins by target cell protein kinases;
- 4) Synthesis of DNA using reverse transcriptase;
- 5) Integration of the newly formed virus-specific DNA into the genome of the affected cell.

#

**19. *The maximum duration of the latent phase of HIV infection:***

- 1) Up to 6 months;
- 2) 6 - 12 months;
- 3) 25 years;
- 4) More than 10-15 years;
- 5) Possibly for life.

#

**20. *The main clinical syndromes of acute HIV infection:***

- 1) Mononucleosis-like, flu-like;
- 2) Polyadenopathy, gastroenteritis;
- 3) Infection of the lower respiratory tract (interstitial pneumonia);
- 4) Serous meningitis, encephalopathy, myelopathy, nephropathy, thrombocytopenia;
- 5) All of the above.

#

**21. *What structural unit of HIV provides DNA synthesis on the virus RNA template:***

- 1) Outer membrane protein;
- 2) Virion core proteins;
- 3) Reverse transcriptase;
- 4) Transmembrane protein;
- 5) Everything is true.

**22. *In infectious mononucleosis, the most commonly affected are:***

- 1) The cardiovascular system;
- 2) Respiratory system;
- 3) Gonads;
- 4) Salivary glands;
- 5) The lymph nodes.

#

**23. *What are the typical changes in peripheral blood in infectious mononucleosis:***

- 1) Leukopenia;
- 2) Lymphopenia;
- 3) Atypical mononuclear cells;
- 4) Cytomegals with a large nucleus;
- 5) Thrombocytopenia.

#

**24. *What changes in the blood are characteristic of infectious mononucleosis:***

- 1) Neutrophilia + lymphopenia;
- 2) Lymphocytosis + atypical mononuclear cells;
- 3) Lymphopenia + atypical mononuclear cells;
- 4) Lymphocytosis + eosinophilia;
- 5) Neutrophilia + lymphomonocytosis.

#

**25. *In the treatment of severe infectious mononucleosis, the following are used:***

- 1) Hormones;
- 2) Antibiotics;
- 3) Immunomodulators;
- 4) Immunoglobulin;
- 5) Enzymes.

#

**26. *Specify target cells for Epstein-Barr virus:***

- 1) B-lymphocytes;
- 2) T-lymphocytes;
- 3) Hepatocytes;
- 4) Enterocytes;
- 5) Myocytes.

#

**27. *The clinical symptom of infectious mononucleosis may be exanthema in the form of:***

- 1) Petechial rash;
- 2) Erythema nodosum;
- 3) Morbilliform rash;
- 4) Vesicular rash;
- 5) Scarlet-like rash.

#

**28. *Specify the antibiotic contraindicated in infectious mononucleosis:***

- 1) Cefotaxime;
- 2) Ceftriaxone;
- 3) Azithromycin

- 4) Ampicillin;
- 5) Ciprofloxacin.

#

**29. Choose what is characteristic of infectious mononucleosis:**

- 1) Polyadenia, hepatosplenomegaly, tonsillitis, intoxication;
- 2) Polyadenia, tonsillitis, intoxication;
- 3) Polyadenia, tonsillitis, conjunctivitis, intoxication;
- 4) Polyadenia, intoxication, pneumonia;
- 5) Polyadenia, arthralgia, intoxication.

#

**30. A patient with infectious mononucleosis has purulent tonsillitis. What therapy does the patient need?**

- 1) Prescribing antihistamines;
- 2) Prescribing antibacterial drugs;
- 3) Prescribing hormonal drugs;
- 4) Administration of fresh frozen plasma;
- 5) Prescribing antiviral drugs.

#

**31. What diseases should be differentiated from infectious mononucleosis:**

- 1) Adenovirus infection;
- 2) Hemorrhagic fevers;
- 3) Diphtheria of the oropharynx;
- 4) Mumps;
- 5) Enterovirus infection.

#

**32. The diagnosis of leptospirosis is confirmed by:**

- 1) Detection of leptospira in the blood in dark-field microscopy;
- 2) Vidal test;
- 3) Burne's analysis;
- 4) Detection of leptospira in feces.

#

**33. Typical complications of leptospirosis are:**

- 1) Acute renal failure;
- 2) Acoustic neuritis;
- 3) Peritonitis;
- 4) Cholecystitis;
- 5) Colitis.

#

**34. Typical for leptospirosis is:**

- 1) Hypertension;
- 2) Myalgia;
- 3) Neuralgia;
- 4) Respiratory syndrome;
- 5) Diarrhea.

#

**35. *Typical symptom complex of leptospirosis:***

- 1) Arthralgia, diarrhea, acute adrenal insufficiency;
- 2) Fever, myalgia, liver failure;
- 3) Abdominal pain, vomiting, diarrhea;
- 4) Ptosis, miosis, anisocoria, strobism;
- 5) Tenesmus, bloody stools.

#

**36. *Infection with leptospirosis occurs when:***

- 1) When swimming in water;
- 2) When bitten by ticks;
- 3) When using pickled mushrooms;
- 4) When in contact with a sick person;
- 5) When bitten by mosquitoes.

## **HELMINTHIASES**

**1. *The most common symptom of enterobiasis is:***

- 1) Hemoptysis;
- 2) Fever;
- 3) Itching in the perianal region;
- 4) Chest pain;
- 5) Cough.

#

**2. *Swelling of the face and conjunctivitis are symptoms of...***

- 1) Teniarinhoz;
- 2) Trichuriasis;
- 3) Taeniasis;
- 4) Trichinellosis.

#

**3. *Intermediate hosts of trematodes are:***

- 1) Human;
- 2) Shellfish;
- 3) Cats;
- 4) Fishes;
- 5) Pigs;

#

**4. *Cestodoses include helminthiasis:***

- 1) Echinococcosis;
- 2) Ascariasis;
- 3) Opisthorchiasis;
- 4) Fasciolosis;

5) Schistosomiasis.

#

**5. To diagnose opisthorchiasis, microscopy can be performed of:**

- 1) Blood;
- 2) Urine;
- 3) Duodenal contents;
- 4) Feces;
- 5) Phlegm;

#

**6. From cestodoses with a primary lesion of the liver and lungs, there is ...**

- 1) Diphyllbothriasis;
- 2) Teniarinhoz;
- 3) Alveococcosis;
- 4) Hymenolepiasis;
- 5) Teniasis

#

**BLOCK B**  
**INTERPRETATION OF LABORATORY TEST DATA**

**ELISA FOR MARKERS OF VIRAL HEPATITIS**

anti-HAV-IgM – **positive**  
HBsAg – negative  
anti-HBc-IgM – negative  
anti-HCV (total) – negative  
anti-HDV-IgG – negative

**ELISA FOR MARKERS OF VIRAL HEPATITIS**

anti-HAV-IgM – negative  
anti-HEV-IgM – negative  
HBsAg – **positive**  
HBeAg – **positive**  
anti-HBc-IgM – **positive**  
anti-HCV (total) – negative  
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HBeAg – negative

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anti-HCV-Ig (total) – negative

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HBsAg – **positive**  
HBeAg – **positive**  
anti-HBc-IgM – **positive**  
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anti-HDV-IgM – **positive**

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anti-HAV-IgG – **positive**  
anti-HEV-IgM – negative  
HBsAg – **positive**  
HBeAg – **positive**  
anti-HBc-IgM – **positive**  
anti-HCV (total) – negative  
anti-HDV-IgG – negative  
anti-HDV-IgM – negative

### **ELISA FOR MARKERS OF VIRAL HEPATITIS**

anti-HAV-IgM – negative  
anti-HAV-IgG – negative  
anti-HEV-IgM – negative  
HBsAg – **positive**  
HBeAg – **positive**  
anti-HBc-IgG – **positive**  
anti-HBc-IgM – negative  
anti-HCV (total) – negative  
anti-HDV-IgG – **positive**  
anti-HDV-IgM – negative

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anti-HAV-IgM – negative  
anti-HAV-IgG – **positive**  
anti-HEV-IgM – **positive**  
HBsAg – negative  
HBeAg – negative  
anti-HBc-IgM – negative  
anti-HCV-total – negative  
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anti-HAV-IgG – **positive**

anti-HEV-IgM – negative

HBsAg – negative

HBeAg – negative

anti-HBc-IgM – **positive**

anti-HCV (total) – negative

anti-HDV-IgG – negative

anti-HDV-IgM – negative

## **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – grayish

Transparency – cloudy

Total cells – 2140 per  $\mu\text{L}$

Total protein – 1.42 g/L

None-Appelt's test – +++

Pandy's test – ++++

Neutrophils – 94%

Lymphocytes – 6%

Glucose – 1.3 mmol/L

Chloride – 108 mmol/L

**Bacteriological findings:** many cells of diplococci located intracellularly

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – grayish

Transparency – cloudy

Total cells – can't be counted

Total protein – 2,64 g/L

None-Appelt's test – +++

Pandy's test – ++++

Neutrophils – 91%

Lymphocytes – 9%

RBCs appear

Glucose – 1,59 mmol/L

Chloride – 98,0 mmol/L

**ELISA:** Streptococcus pneumonia - positive

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – grayish

Transparency – cloudy

Total cells – 1376 per  $\mu$ L

Total protein – 1,24 g/L

None-Appelt's test – +++

Pandy's test – ++++

Neutrophils – 95%

Lymphocytes – 5%

Glucose – 1,1 mmol/L

Chloride – 104,0 mmol/L

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – colorless

Transparency – complete

Total cells – 274 per  $\mu\text{L}$

Total protein – 2,1 g/L

None-Appelt's test – ++

Pandy's test – ++

Neutrophils – 38%

Lymphocytes – 62%

Glucose – 1,29 mmol/L

Chloride – 118,0 mmol/L

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – colorless

Transparency – complete

Total cells – 149 per  $\mu\text{L}$

Total protein – 0,97 g/L

None-Appelt's test – ++

Pandy's test – ++

Neutrophils – 3%

Lymphocytes – 97%

Glucose – 2,3 mmol/L

Chloride – 114,0 mmol/L

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – grayish

Transparency – cloudy

Total cells – can't be counted

Total protein – 3,1 g/L

None-Appelt's test – ++++

Pandy's test – ++++

Neutrophils – 80%

Lymphocytes – 20%

RBCs appear

Glucose – 1,2 mmol/L

Chloride – 109,0 mmol/L

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – colorless

Transparency – complete

Total cells – 8 per  $\mu\text{L}$

Total protein – 0,16 g/L

None-Appelt's test – negative

Pandy's test – negative

Neutrophils – 0%

Lymphocytes – 100%

Glucose – 3,1 mmol/L

Chloride – 118,0 mmol/L

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – colorless

Transparency – complete

Total cells – 2 per  $\mu\text{L}$

Total protein – 0,072 g/L

None-Appelt's test – negative

Pandy's test – negative

Neutrophils – 0%

Lymphocytes – 100%

Glucose – 1,9 mmol/L

Chloride – 110,0 mmol/L

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – bloody

Transparency – xanthochromic, transparent

Total cells – 600 per  $\mu\text{L}$

Total protein – 1,12 g/L

None-Appelt's test – +++

Pandy's test – +++

RBCs – 99%

Lymphocytes – 1%

Glucose – 3,0 mmol/L

Chloride – 118,0 mmol/L

### **LABORATORY TEST OF CEREBROSPINAL FLUID (CSF)**

Color – colorless

Transparency – complete

Total cells – 321 per  $\mu\text{L}$

Total protein – 0,92 g/L

None-Appelt's test – +++

Pandy's test – ++

Neutrophils – 32%

Lymphocytes – 68%

Glucose – 1,2 mmol/L

### **STOOL ANALYSIS**

Consistency – liquid

Form – not completed

Green color

Mucus – ++++

Streaks of blood

Leukocytes – 25-30 in the microscopic field

RBCs – 30-35 in the microscopic field

Protozoan – not detected

Worm eggs – not detected

**The yield of stool culture:** Sh. Flexneri

### **STOOL ANALYSIS**

Consistency – liquid

Form – not completed

Brown color

Mucus – +++

Amyloid – ++

Leukocytes – 19-22 in the microscopic field

RBCs – 12-14 in the microscopic field

Protozoan – not detected

Worm eggs – not detected

**The yield of stool culture:** E. coli O151

## **CLINICAL CHEMISTRY**

Protein, total – 58,3 g/L

Urea nitrogen – 3,5 mmol/L

Creatinine – 73,1  $\mu\text{mol/L}$

Bilirubin (total) – 415,5  $\mu\text{mol/L}$

direct – 329,2  $\mu\text{mol/L}$

indirect – 86,3  $\mu\text{mol/L}$

AST – 486 U/L

ALT – 647 U/L

Glucose - 5,2 mmol/L

Thymol test - 5.9 U

## **STOOL ANALYSIS**

Consistency – mushy

Form – not completed

Brown color

Mucus – ++

Fat ++

Fatty acids++

Unaltered muscle fibers ++

Plant fiber:

digested +

undigested ++

Starch ++

Iodophilic flora ++

Leukocytes – 25-33 in the microscopic field

RBCs – 2-3 in the microscopic field

Protozoan – not detected

Worm eggs – not detected

### **CLINICAL CHEMISTRY**

Protein, total – 71,3 g/L

Albumen – 35,6 g/L

Bilirubin (total) – 37 µmol/L

direct – 26 µmol/L

indirect – 11 µmol/L

AST – 540 U/L

ALT – 670 U/L

Thymol test - 15 U

Prothrombin index – 82,7%

Prothrombin time – 18 s

### **CLINICAL CHEMISTRY**

Protein, total – 75,9 g/L

Albumen – 35,0 g/L

Creatinine – 110,0 µmol/L

Bilirubin (total) – 60 µmol/L

direct – 45 µmol/L

indirect – 15 µmol/L

AST – 879 U/L

ALT – 1216 U/L

Thymol test – 13,0 U

Glucose – 8,8 mmol/L

Amylase – 356 U/L

## **CLINICAL CHEMISTRY**

Protein, total – 54,1 g/L

Urea nitrogen – 19,0 mmol/L

Creatinine – 383,4  $\mu\text{mol/L}$

Bilirubin (total) – 269,8  $\mu\text{mol/L}$

direct – 180,4  $\mu\text{mol/L}$

indirect – 89,4  $\mu\text{mol/L}$

AST – 454 U/L

ALT – 672 U/L

Glucose - 5,1 mmol/L

Thymol test – 17,0 U

## BLOCK C

### TEST QUESTIONS ON INFECTIOUS DISEASES

1. What is the etiologic agent of typhoid fever?
2. Describe the major routes of transmission of typhoid fever.
3. What are the key clinical stages of typhoid fever?
4. What is “rose spot” and when does it appear?
5. What laboratory tests are used to confirm typhoid fever?
6. What complications are most common in untreated typhoid fever?
7. What are the principles of antibiotic therapy for typhoid fever?
8. How does chronic carriage of *S. Typhi* develop?
9. What preventive measures are effective against typhoid fever?
10. How do typhoid vaccines differ in type and indications?
11. What species cause nontyphoidal salmonellosis?
12. What are the major sources of nontyphoidal salmonellosis?
13. What is the usual incubation period of nontyphoidal salmonellosis?
14. What are typical gastrointestinal symptoms of nontyphoidal salmonellosis?
15. How is dehydration assessed in salmonellosis?
16. When is antibiotic therapy indicated for nontyphoidal *Salmonella*?
17. What complications can develop in immunocompromised patients in nontyphoidal salmonellosis?
18. What laboratory tests confirm the diagnosis of nontyphoidal salmonellosis?
19. Why are antimotility drugs contraindicated in nontyphoidal salmonellosis?
20. What preventive measures reduce salmonellosis outbreaks?
21. What pathogens cause cholera?
22. What is the mechanism of cholera toxin?
23. What are the pathognomonic signs of severe cholera?
24. Describe classification of dehydration severity in cholera.
25. What types of rehydration solutions are used in cholera?
26. When is antibiotic therapy recommended in cholera?
27. What distinguishes classical and El Tor biotypes of *V. Cholera*?
28. What complications occur in untreated patients in cholera?
29. How is cholera prevented during outbreaks?
30. What vaccines exist for cholera and how effective are they?
31. What distinguishes food poisoning from infectious gastroenteritis?
32. What toxins are commonly implicated in *S. aureus* food poisoning?
33. What is the typical incubation period for staphylococcal intoxication?
34. What foods are most associated with *C. perfringens* foodborne illness?
35. What are the key clinical manifestations of *Bacillus cereus* poisoning?
36. Which laboratory tests support diagnosis of food poisoning?
37. What prevention strategies reduce foodborne intoxications (poisoning)?
38. Why are antibiotics not indicated in most toxic infections (poisoning)?
39. What species of *Shigella* are most pathogenic?
40. What is the infectious dose of *Shigella*?

41. What clinical features define bacillary dysentery?
42. How is severity of shigellosis classified?
43. What complications can develop in severe cases of shigellosis?
44. What laboratory tests confirm the diagnosis of shigellosis?
45. What is the treatment of choice in shigellosis?
46. Why do *Shigella* strains develop antibiotic resistance quickly?
47. What supportive therapies are recommended in shigellosis?
48. How is shigellosis prevented in childcare institutions?
49. What pathogens cause amebiasis?
50. Describe the life cycle of *Entamoeba histolytica*.
51. What are typical symptoms of intestinal amebiasis?
52. What is amebic dysentery?
53. What is the most common extraintestinal manifestation of amebiasis?
54. How is amebic liver abscess diagnosed?
55. Which drugs eradicate tissue forms of *Entamoeba histolytica*?
56. Which drugs eliminate luminal cysts of *Entamoeba histolytica*?
57. How is amebiasis transmitted?
58. What preventive measures reduce incidence of amebiasis?
59. What pathogens cause intestinal yersiniosis?
60. What animal reservoirs are involved in epidemiology of intestinal yersiniosis?
61. What are the main gastrointestinal symptoms of intestinal yersiniosis?
62. What is “pseudoappendicitis” and why does it occur in intestinal yersiniosis?
63. What complications of intestinal yersiniosis can develop in children?
64. What lab tests confirm diagnosis of intestinal yersiniosis?
65. When is antibiotic therapy needed in intestinal yersiniosis?
66. What conditions favor *Yersinia* growth in food?
67. How do chronic and reactive forms of intestinal yersiniosis manifest?
68. How can outbreaks of intestinal yersiniosis be prevented?
69. What virus causes hepatitis A?
70. What is the primary mode of transmission hepatitis A virus (HAV)?
71. What are the clinical stages of HAV-infection?
72. What laboratory markers confirm acute HAV-infection?
73. Why does HAV not cause chronic infection?
74. What are typical complications of HAV-infection?
75. What is the treatment approach in HAV-infection?
76. What groups should be vaccinated in HAV-infection?
77. How effective is post-exposure prophylaxis of HAV-infection?
78. What public health measures reduce HAV outbreaks?
79. What type of virus is hepatitis B virus (HBV)?
80. What are the major routes of transmission of HBV?
81. What HBV markers indicate acute infection?
82. What markers indicate chronic HBV-infection?
83. What factors influence chronicity in HBV-infection?
84. What complications may develop in HBV-infection?
85. What drugs are used for chronic HBV-infection?
86. Who should receive HBV vaccine?

87. What defines inactive HBV carrier state?
88. What is the role of HBIG in prevention?
89. What virus causes hepatitis C?
90. How is hepatitis C virus (HCV) primarily transmitted?
91. Why is HCV often asymptomatic initially?
92. Which markers diagnose acute and chronic HCV-infection?
93. What genotypes are clinically important in HCV-infection?
94. What are the major complications of chronic HCV-infection?
95. What classes of direct-acting antivirals exist in treatment of HCV-infection?
96. What factor determines treatment duration in HCV-infection?
97. Why is no vaccine available in HCV-infection?
98. What harm-reduction strategies prevent HCV spread?
99. What is the unique feature of hepatitis D virus (HDV) replication?
100. What is the difference between co-infection and superinfection in HDV-infection?
101. Which markers diagnose HDV-infection?
102. What clinical forms are most severe in HDV-infection?
103. What complications occur more frequently in HDV-infection?
104. How does HBV vaccination prevent HDV-infection?
105. What drugs are used in HDV-infection management?
106. What is the role of interferons in treatment of HDV-infection?
107. What factors worsen prognosis of HDV-infection?
108. How is HDV transmitted?
109. What virus causes hepatitis E?
110. What are the main transmission routes of hepatitis E virus (HEV)?
111. Why is HEV-infection severe in pregnancy?
112. What genotypes of HEV infect humans?
113. How is HEV-infection diagnosed?
114. Can HEV-infection become chronic?
115. What complications can occur in HEV-infection?
116. What is the recommended treatment of HEV-infection?
117. Are vaccines available in HEV-infection?
118. How can HEV-infection outbreaks be prevented?
119. What defines fulminant liver failure?
120. Which viral hepatitis types most commonly cause fulminant liver failure?
121. What are early clinical signs of fulminant liver failure?
122. What are the stages of hepatic encephalopathy?
123. What lab findings indicate severe liver injury?
124. What is the role of coagulopathy in diagnosis of fulminant liver failure?
125. What complications of fulminant liver failure threaten life?
126. What prognostic scoring systems are used in fulminant liver failure?
127. What pathogen causes North Asian tick-borne rickettsiosis?
128. What tick species transmit the North Asian tick-borne rickettsiosis?
129. What is the typical clinical triad of North Asian tick-borne rickettsiosis?
130. What is “eschar” and how is it identified in North Asian tick-borne rickettsiosis?
131. What laboratory tests help confirm diagnosis of North Asian tick-borne rickettsiosis?
132. What is the characteristic rash distribution in North Asian tick-borne rickettsiosis?

133. What is the treatment of choice on North Asian tick-borne rickettsiosis?
134. What complications may occur in North Asian tick-borne rickettsiosis?
135. How is differential diagnosis performed in North Asian tick-borne rickettsiosis?
136. How can North Asian tick-borne rickettsiosis be prevented?
137. What *Plasmodium* species infect humans?
138. What mosquito transmits malaria?
139. What is the life cycle of *Plasmodium*?
140. What are clinical signs of severe malaria?
141. Why is *P. falciparum* most dangerous?
142. What tests confirm malaria?
143. What drugs treat *falciparum* malaria?
144. What drugs prevent relapse of vivax/ovale malaria?
145. What resistance issues exist in malaria?
146. How can malaria be prevented?
147. What pathogen causes epidemic typhus?
148. How is *Rickettsia prowazekii* transmitted?
149. What is the pathogenesis of vascular injury in epidemic typhus?
150. What are the clinical features of epidemic typhus?
151. What tests confirm diagnosis of epidemic typhus?
152. What is the typical rash progression in epidemic typhus?
153. What complications may develop in epidemic typhus?
154. What antibiotic is first-line in treatment of epidemic typhus?
155. How does epidemic typhus differ from murine typhus?
156. How can outbreaks of epidemic typhus be prevented?
157. What is Brill–Zinsser disease?
158. How does Brill–Zinsser disease relate to epidemic typhus?
159. Why does recurrence of Brill–Zinsser disease occur years later?
160. What are the typical symptoms of Brill–Zinsser disease?
161. What laboratory tests support diagnosis of Brill–Zinsser disease?
162. How does severity compare of Brill–Zinsser disease to primary infection?
163. What complications may occur in Brill–Zinsser disease?
164. What is the treatment of choice in Brill–Zinsser disease?
165. How is differential diagnosis performed in Brill–Zinsser disease?
166. Why is Brill–Zinsser disease important epidemiologically?
167. What organism causes Q fever?
168. What animal reservoirs transmit Q fever?
169. What is the most common transmission route of Q fever?
170. What are acute clinical forms of Q fever?
171. What is chronic Q fever?
172. What laboratory tests confirm *Coxiella* infection?
173. What complications may occur in Q fever?
174. What is the recommended treatment for acute Q fever?
175. What is the treatment for chronic Q fever endocarditis?
176. How can Q fever be prevented?
177. What pathogen causes cat-scratch disease?
178. How is *Bartonella henselae* transmitted?

179. What is the typical clinical presentation of cat-scratch disease?
180. What is the inoculation papule in cat-scratch disease?
181. What complications of cat-scratch disease occur in immuno-compromised patients?
182. What laboratory tests support diagnosis of cat-scratch disease?
183. When is antibiotic therapy indicated in cat-scratch disease?
184. What is the treatment of choice in cat-scratch disease?
185. What is Parinaud oculoglandular syndrome?
186. How can cat-scratch disease be prevented?
187. What bacterium causes plague?
188. What are the main clinical forms of plague?
189. How is bubonic plague transmitted?
190. What are the characteristic signs of bubonic plague?
191. What differentiates pneumonic plague from bubonic plague?
192. What laboratory tests confirm plague?
193. What complications may develop in plague?
194. What antibiotics are recommended for treatment of plague?
195. How is plague prevented in endemic regions?
196. What public health measures are necessary during plague outbreaks?
197. What pathogen causes tularemia?
198. What are the main routes of infection in tularemia?
199. What clinical forms of tularemia exist?
200. What is the typical ulceroglandular presentation of tularemia?
201. What diagnostic tests are used in tularemia?
202. What complications can develop in tularemia?
203. What antibiotics are first line for treatment of tularemia?
204. What is the role of serology in diagnosis of tularemia?
205. How can tularemia be prevented?
206. What animal reservoirs play a major role in tularemia?
207. What organism causes anthrax?
208. What forms of anthrax exist?
209. What is the pathogenesis of anthrax toxin?
210. What are the signs of cutaneous anthrax?
211. How does inhalational anthrax present clinically?
212. What laboratory methods confirm diagnosis of anthrax?
213. What antibiotics are used for treatment of anthrax?
214. What is the role of antitoxin therapy in anthrax?
215. How is anthrax prevented in high-risk groups?
216. What are the risks of bioterrorism in anthrax?
217. What viruses cause Hemorrhagic Fever with Renal Syndrome (HFRS)?
218. What rodent reservoirs are involved in HFRS?
219. What are the main stages of HFRS?
220. What laboratory findings indicate kidney involvement in HFRS?
221. What complications can develop in HFRS?
222. How is shock prevented in HFRS?
223. What therapies are used to manage renal failure in HFRS?
224. What are the typical clinical features of severe forms of HFRS?

225. How is HFRS diagnosed?
226. What preventive strategies reduce infection risk in HFRS?
227. What pathogen causes meningococcal infection?
228. What serogroups are most clinically important in meningococcal infection?
229. What are early signs of meningococemia?
230. What is Waterhouse–Friderichsen syndrome?
231. What clinical features indicate meningococcal meningitis?
232. What laboratory tests confirm diagnosis of meningococcal infection?
233. What antibiotics are used for treatment of meningococcal infection?
234. What are the principles of chemoprophylaxis in meningococcal infection?
235. Who should receive vaccination against meningococcal infection?
236. What complications of meningococcal infection may occur?
237. What causes primary serous meningitis?
238. What infections commonly lead to secondary serous meningitis?
239. What are key clinical symptoms of serous meningitis?
240. What CSF findings characterize serous meningitis?
241. How does viral meningitis differ from bacterial meningitis?
242. What complications of serous meningitis can occur?
243. What supportive treatments are recommended in serous meningitis?
244. When are antiviral therapies indicated in serous meningitis?
245. What imaging methods are used in diagnosis of serous meningitis?
246. What preventive measures reduce incidence of serous meningitis?
247. What virus causes tick-borne encephalitis (TBE)?
248. How is TBE transmitted?
249. What are typical biphasic clinical features of TBE?
250. What neurological symptoms indicate CNS involvement in TBE?
251. How is TBE diagnosed?
252. What complications can develop in TBE?
253. What supportive therapies of TBE are recommended?
254. Who is at highest risk in TBE?
255. What is the role of TBE vaccination?
256. How can tick bites be prevented?
257. What virus causes poliomyelitis?
258. What are the routes of transmission of poliomyelitis?
259. What clinical forms of polio exist?
260. What are symptoms of paralytic polio?
261. What is the pathogenesis of motor neuron damage in poliomyelitis?
262. What tests confirm diagnosis of poliomyelitis?
263. How is paralytic polio managed?
264. What is post-polio syndrome?
265. What vaccines are used for polio prevention?
266. What factors influence eradication of poliomyelitis efforts?
267. What bacterium produces botulinum toxin?
268. What foods are typically associated with botulism?
269. What is the mechanism of botulinum toxin?
270. What are early neurological symptoms of botulism?

271. How is botulism diagnosed?
272. What is the role of antitoxin therapy in botulism?
273. What complications of botulism may develop?
274. How is mechanical ventilation used in severe cases of botulism?
275. How can botulism be prevented?
276. What organism causes tetanus?
277. What is the mechanism of tetanospasmin?
278. What are characteristic symptoms of generalized tetanus?
279. What is trismus and why does it occur in tetanus?
280. How is tetanus diagnosed clinically?
281. What is the role of human tetanus immune globulin?
282. What antibiotics are used for treatment of tetanus?
283. What supportive care is required in tetanus?
284. What complications of tetanus threaten life?
285. How is tetanus prevented?
286. What virus causes rabies?
287. How is rabies transmitted?
288. What are early clinical manifestations of rabies?
289. What is hydrophobia and why does it occur in rabies?
290. How is rabies diagnosed?
291. Why is rabies almost always fatal once symptoms appear?
292. What is the protocol for post-exposure prophylaxis of rabies?
293. What is the role of rabies immunoglobulin?
294. How are animals monitored after bites in rabies?
295. What strategies prevent rabies in endemic regions?
296. What viruses cause influenza?
297. What is antigenic drift of influenza virus?
298. What is antigenic shift influenza virus?
299. How does influenza typically present?
300. What complications of influenza occur in high-risk groups?
301. What laboratory tests are used in diagnosis of influenza?
302. What antivirals treat influenza?
303. Who should be vaccinated annually against influenza virus?
304. How does influenza pneumonia differ from secondary bacterial pneumonia?
305. What public health measures reduce transmission of influenza?
306. What viruses cause parainfluenza infection?
307. What are common clinical presentations of parainfluenza infection?
308. What is croup and how is it treated?
309. What age groups are most affected by croup?
310. What lab methods confirm diagnosis of parainfluenza infection?
311. What complications can arise in parainfluenza infection?
312. How is parainfluenza managed?
313. Are vaccines available in parainfluenza infection?
314. What is the mechanism of airway obstruction in parainfluenza infection?
315. How is transmission of parainfluenza infection prevented?
316. What viruses belong to the coronavirus family?

317. What are the main transmission routes of coronavirus?
318. What are common symptoms of coronavirus infection?
319. What complications of coronavirus infection occur in severe cases?
320. How is diagnosis of coronavirus infection confirmed?
321. What treatments are recommended in coronavirus infection?
322. What preventive measures reduce spread of coronavirus infection?
323. What groups are at highest risk in coronavirus infection?
324. What viruses cause adenoviral disease?
325. What clinical syndromes are associated with adenoviruses?
326. How is adenovirus transmitted?
327. What lab tests confirm diagnosis of adenoviral infection?
328. What are features of adenoviral pharyngoconjunctival fever?
329. What complications of adenoviral infection can occur?
330. What treatments are recommended in adenoviral infection?
331. Who is most susceptible to adenoviral infection?
332. Are vaccines available in adenoviral infection?
333. How is transmission of adenoviral infection prevented?
334. What viruses cause the Rhinovirus Infection (common cold)?
335. What are typical symptoms of common cold?
336. Why are rhinoviruses so highly transmissible?
337. What complications of common cold may occur?
338. How is diagnosis of common cold made?
339. What treatments relieve symptoms of Rhinovirus Infection?
340. Why is no vaccine available in Rhinovirus Infection?
341. How long is a person contagious in Rhinovirus Infection?
342. What preventive measures reduce risk of Rhinovirus Infection?
343. What pathogen causes Respiratory Syncytial infection?
344. What age group is most affected by RSV?
345. What are clinical signs of bronchiolitis in RS-infection?
346. How is RS-infection diagnosed?
347. What complications of RS-infection can develop?
348. What supportive treatment is recommended in RS-infection?
349. What drugs or antibodies are used for prevention of RS-infection?
350. How is RSV transmitted?
351. What infection-control measures reduce spread of RS-infection?
352. What organism causes pertussis?
353. What are the catarrhal, paroxysmal, and convalescent stages in pertussis?
354. What is the characteristic "whoop" in pertussis?
355. What complications of pertussis may occur?
356. How is pertussis diagnosed?
357. What antibiotics are used in pertussis?
358. What groups are at highest risk for severe pertussis?
359. What are typical lab findings in pertussis?
360. How is pertussis prevented?
361. What is preventive strategy in pertussis?
362. What viruses belong to the enterovirus group?

363. What diseases do enteroviruses cause?
364. What routes of transmission are common enteroviral infection?
365. What are key features of herpangina?
366. What is hand-foot-and-mouth disease?
367. What neurological complications of enteroviral infection may develop?
368. How is diagnosis of enteroviral infection confirmed?
369. What treatments are recommended in enteroviral infection?
370. What complications of enteroviral infection occur in neonates?
371. How is transmission of enteroviruses prevented?
372. What organism causes diphtheria?
373. What is the mechanism of diphtheria toxin?
374. What are characteristic symptoms of respiratory diphtheria?
375. What are pseudomembranes and how are they formed in diphtheria?
376. What complications may develop in diphtheria?
377. How is diagnosis of diphtheria confirmed?
378. What is the role of antitoxin therapy on diphtheria?
379. What antibiotics are used in diphtheria?
380. How are contacts managed in diphtheria?
381. How is diphtheria prevented?
382. What virus causes mumps?
383. What are typical clinical signs of mumps?
384. What complications are associated with mumps?
385. How is mumps diagnosed?
386. How is orchitis managed in mumps?
387. What neurologic complications may occur?
388. How is mumps treated?
389. What is the role of MMR vaccine in mumps?
390. How does mumps spread?
391. What preventive measures reduce transmission of mumps?
392. What pathogen most commonly causes Mycoplasma pneumoniae?
393. What are typical symptoms of atypical pneumonia?
394. How is Mycoplasma transmitted?
395. What laboratory methods confirm Mycoplasma infection?
396. What complications of Mycoplasma infection may develop?
397. What antibiotics are effective in Mycoplasma infection?
398. Why are  $\beta$ -lactams ineffective in Mycoplasma infection?
399. What extrapulmonary manifestations of Mycoplasma infection occur?
400. What age groups are most affected by Mycoplasma infection?
401. What preventive strategies of Mycoplasma infection exist?
402. What virus causes measles, and to which family does it belong?
403. How is measles transmitted?
404. What are the characteristic early symptoms of measles?
405. What are Koplik spots, and when do they appear in measles?
406. What is the typical progression of the measles rash?
407. What laboratory findings help confirm measles infection?
408. What complications are associated with measles?

409. What is subacute sclerosing panencephalitis (SSPE) in measles?
410. What supportive treatment measures are recommended for measles?
411. How can measles be prevented?
412. What virus causes rubella, and how is it transmitted?
413. What are the common clinical features of rubella?
414. What is the significance of postauricular and occipital lymphadenopathy in rubella?
415. How does the rash of rubella differ from that of measles?
416. What tests are used to confirm rubella infection?
417. What are the risks of rubella infection during pregnancy?
418. What congenital anomalies are associated with congenital rubella syndrome?
419. How long is a patient with rubella usually contagious?
420. What preventive measures reduce rubella transmission?
421. What role does vaccination play in rubella control?
422. What virus causes erythema infectiosum (fifth disease)?
423. What is the characteristic rash associated with parvovirus B19?
424. How is parvovirus B19 transmitted?
425. How does parvovirus B19 affect erythropoiesis?
426. What clinical complications occur in patients with hemolytic anemia in parvovirus infection?
427. What risks does infection pose by parvovirus B19 during pregnancy?
428. How is parvovirus B19 diagnosed?
429. What is the typical course of parvovirus infection in immunocompromised individuals?
430. What treatment options exist for severe or chronic parvovirus infection?
431. What preventive measures can reduce transmission of parvovirus?
432. What virus causes varicella and herpes zoster?
433. What are the characteristic stages of the varicella rash?
434. How is varicella transmitted?
435. What complications can occur in varicella infection?
436. What triggers reactivation of latent varicella-zoster virus?
437. What clinical features are typical of herpes zoster?
438. How is the diagnosis of varicella or herpes zoster confirmed?
439. What antiviral medications are used in treatment of varicella-zoster virus?
440. What is postherpetic neuralgia?
441. How can varicella and zoster infections be prevented?
442. What pathogen causes scarlet fever?
443. What is the role of erythrogenic toxins in scarlet fever manifestation?
444. What are the typical clinical features of scarlet fever?
445. What is "strawberry tongue," and in which stage does it appear in scarlet fever?
446. How does the rash of scarlet fever differ from viral exanthems?
447. What laboratory findings confirm streptococcal infection?
448. What complications can arise from untreated scarlet fever?
449. What antibiotics are recommended for treatment of scarlet fever?
450. How long is a patient with scarlet fever contagious?
451. What preventive measures can reduce transmission of streptococcal infection?
452. What microorganism causes pseudotuberculosis?
453. How is pseudotuberculosis transmitted?
454. What are the main clinical manifestations of pseudotuberculosis?

455. What is mesenteric adenitis, and why is it commonly associated with pseudotuberculosis?
456. What laboratory tests assist in diagnosis of pseudotuberculosis?
457. What features differentiate pseudotuberculosis from appendicitis?
458. What complications of pseudotuberculosis may develop?
459. What antibiotics are used in treatment of pseudotuberculosis?
460. What food products are commonly associated with outbreaks of pseudotuberculosis?
461. What preventive measures help reduce pseudotuberculosis transmission?
462. What pathogen most commonly causes erysipelas?
463. What are the typical clinical signs of erysipelas?
464. What risk factors predispose individuals to erysipelas?
465. How does erysipelas differ from cellulitis?
466. What laboratory findings may support the diagnosis of erysipelas?
467. What complications of erysipelas can occur?
468. What antibiotics are recommended for treatment of erysipelas?
469. How does recurrence of erysipelas occur?
470. What preventive strategies reduce the risk of erysipelas recurrence?
471. What are the key principles of patient care for erysipelas?
472. What species of *Brucella* most commonly cause human brucellosis?
473. What are the main routes of transmission of brucellosis?
474. What occupational groups are at highest risk in brucellosis?
475. What are the common acute symptoms of brucellosis?
476. What is undulant fever, and why is it characteristic of brucellosis?
477. What laboratory methods are used to diagnose brucellosis?
478. What complications can develop in chronic brucellosis?
479. What antibiotics are used in combination therapy for brucellosis?
480. Why is monotherapy for brucellosis not recommended?
481. What preventive measures reduce transmission of brucellosis from animals?
482. What parasite causes toxoplasmosis?
483. What are the primary sources of *Toxoplasma gondii* of human infection?
484. How does toxoplasmosis affect pregnant women and fetuses?
485. What clinical manifestations of toxoplasmosis occur in immunocompetent individuals?
486. What symptoms indicate reactivation of toxoplasmosis in immunocompromised patients?
487. How is toxoplasmosis diagnosed serologically?
488. What imaging findings are typical in cerebral toxoplasmosis?
489. What drugs are used for treatment of toxoplasmosis?
490. What preventive measures of toxoplasmosis are recommended for pregnant women?
491. Why should immunocompromised patients avoid undercooked meat?
492. What pathogen causes leptospirosis?
493. How is leptospirosis transmitted to humans? What occupational and environmental risk factors exist in leptospirosis?
494. What are the early clinical symptoms of leptospirosis?
495. What is Weil's disease, and what organs does it affect?
496. What laboratory tests confirm leptospirosis?
497. What complications of leptospirosis may develop in severe cases?
498. What antibiotics are recommended for treatment of leptospirosis?
499. How is renal involvement managed in leptospirosis?

500. What preventive strategies reduce the risk of infection by leptospirosis?
501. What virus causes CMV infection, and to which family does it belong?
502. What are the main routes of CMV transmission?
503. What clinical manifestations of CMV-infection occur in immunocompetent adults?
504. What symptoms indicate congenital CMV infection?
505. What complications of CMV-infection arise in immunocompromised patients?
506. What laboratory methods confirm CMV infection?
507. What is the significance of CMV IgM and IgG antibodies?
508. What antiviral drugs are used to treat severe CMV infection?
509. How can CMV be prevented in transplant recipients?
510. What measures reduce the risk of congenital CMV?
511. What virus causes infectious mononucleosis?
512. What are common clinical symptoms of infectious mononucleosis?
513. What is the role of atypical lymphocytes in diagnosis of infectious mononucleosis?
514. What laboratory tests help confirm infectious mononucleosis?
515. What complications of infectious mononucleosis can occur, particularly involving spleen?
516. How long does lymphadenopathy typically persist in infectious mononucleosis?
517. Why are antibiotics like ampicillin not recommended in infectious mononucleosis?
518. What supportive treatments are used in infectious mononucleosis?
519. How is EBV transmitted?
520. What preventive measures help reduce transmission of EBV?
521. What virus causes HIV infection, and what cells do it primarily target?
522. What are the main modes of HIV transmission?
523. What clinical features characterize acute HIV infection?
524. What laboratory tests are used for HIV screening and confirmation?
525. What is the significance of CD4 cell counts in management?
526. How is the viral load used to monitor treatment effectiveness in HIV infection?
527. What are the main classes of antiretroviral drugs in HIV infection?
528. What opportunistic infections are common in advanced HIV?
529. What strategies help prevent HIV transmission?
530. What is pre-exposure prophylaxis (PrEP), and who should receive it in HIV infection?
531. Which parasites are intestinal nematodes?
532. Routes of infection with ascariasis and enterobiasis.
533. Clinical manifestations of enterobiasis in children.
534. Characteristics of the migratory stage of ascariasis.
535. Laboratory diagnosis of nematodosis.
536. Pathogenesis of anemia in ancylostomiasis.
537. Complications of severe ascariasis.
538. Principles of treatment of nematodosis.
539. Routes of infection with trematodes. Pathogenesis of liver damage in trematodes.
540. Clinical forms of opisthorchiasis.
541. Diagnosis of opisthorchiasis: microscopy of stool and duodenal contents.
542. The role of ultrasound in the diagnosis of trematodiasis.
543. Complications of chronic trematodiasis.
544. Drugs of choice for the treatment of trematodiasis (praziquantel, etc.).
545. Prevention of opisthorchiasis and other trematodiasis.