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Poltava State Medical University

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Collection of test tasks

Fundamentals of internal medicine (rheumatology)

textbook

Poltava - 2022

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The collection of test tasks has a theoretical and practical orientation and is designed for students of higher medical educational institutions of the Ministry of Health of Ukraine. In the study guide, in the form of test tasks of various levels of complexity, the modern methodology of conducting practical classes is revealed, tasks are outlined for the independent work of students of higher education during preparation for practical classes in such a section of internal medicine as rheumatology.

CONTENT

List of abbreviations

ALT	alanine aminotransferase
ANA	antinuclear factor
ANCA	antineutrophil cytoplasmic antibodies
AP	alkaline phosphatase
AST	aspartate aminotransferase
ASH	antistreptohyaluronidase
ASK	antistreptokinase
ASL-O	antistreptolysin O
ACCP	antibodies to cyclic citrulline peptide
BMA	basement membrane of alveoli
CD	leukocyte marker
CKD	chronic kidney disease
CRP	C-reactive protein
DNA	deoxyribonucleic acid
ECG	electrocardiogram
ECHO	echocardioscopy
FEGDS	fibroesophagogastroduodenoscopy
FJI	functional joints insufficiency
GGTP	gamma glutamyl transpeptidase
Hb	hemoglobin
MPO 3	myeloperoxidase 3
NSAIDs	non-steroidal anti-inflammatory drugs
RNA	ribonucleic acid
RF	rheumatoid factor
SLE	systemic lupus erythematosus
ESR	erythrocyte sedimentation rate
COX	cyclooxygenase

Acute rheumatic fever

Level 1 test tasks:

- Locations of annular erythema:
- **shoulders, torso, legs**
- shins, thighs
- face
- around the eyes
- back

- What are the antigens of the human tissue compatibility system determine the presence of a hereditary predisposition to the development of acute rheumatic fever:
- **HLA A_{11}, B_5, DR_2**
- HLA A_{14}
- HLA B_{40}
- HLA B_{27}
- HLA D_{35}

- Acute rheumatic fever is caused by:
- **ß-hemolytic streptococcus of group A.**
- cytomegalovirus (CMV infection)
- Escherichia coli
- hepatitis B virus (HBV)
- Chlamydia

- The leading pathogenetic theory of acute rheumatic fever is:
- **toxico-immunological**
- allergic
- infectious
- toxic
- immunological

- What gender distribution is most characteristic for acute rheumatic fever:
- **women get sick more often**
- men get sick more often
- there is no gender division
- males and females to the same extent
- –

- Indicate the symptom belonging to the group of small diagnostic criteria for acute rheumatic fever:

- **fever**
- lesions of the joint
- lesions of the nervous system
- lesions of the heart
- rheumatic nodules

- Indicate the symptom belonging to the group of small diagnostic criteria for acute rheumatic fever:
- **increase ESR**
- lesions of the joint
- lesions of the nervous system
- lesions of the heart
- annular erythema

- What are the major diagnostic criteria for acute rheumatic fever:
- **carditis, polyarthritis, chorea, annular erythema, subcutaneous nodules**
- carditis, arthralgia, fever, erythema annulus, rheumatoid nodules
- increase in the titer of antistreptococcal antibodies (ASL-O, ASG, ASK), chorea, arthralgia, recent sore throat
- myalgia, fever, arthralgia, bone pain, heart disease
- pneumonitis, hepatitis, polyserositis, pericarditis, fever

- Lesions of the pulmonary system in acute rheumatic fever is manifested in:
- **pneumonitis**
- asthma attacks
- bronchiolitis
- pleurisy
- pulmonary embolism

- Which symptom is not related to the manifestations of the syndrome of joint damage:
- **morning stiffness**
- volatile arthritis
- symmetry of the lesion великих суглобів
- lesions of large joints
- pain syndrome

- What age period is typical for the first manifestation of acute rheumatic fever:
- **late childhood and adolescence**
- early childhood
- mature age
- old age
- regardless of age

- Manifestation of nervous system damage in acute rheumatic fever is:
- **chorea**
- miosis
- tetanus
- tetraparesis
- epileptic seizures

- Cutaneous manifestation of acute rheumatic fever is:
- **annular erythema**
- nodular erythema
- enanthema
- exanthema
- vitiligo

- What is not a sign of myocardial damage in acute rheumatic fever:
- **distension of the jugular veins**
- cardialgia
- shortness of breath
- occurrence of arrhythmia
- changes in percussion boundaries

- What are the clinical manifestations of chorea?
- **fast, intense, sweeping, arrhythmic involuntary movements in different muscle groups**
- slow movements in the distal extremities
- rapid movements of the head and shoulders
- sudden movements in different muscle groups
- convulsive contractions of facial muscles

- Manifestations of myocardial damage:
- **weakening of the sonority of the I tone, lengthening of the interval PQ**
- amplification of the sonority of the second tone, reduction of the PQ interval
- attenuation of the sonority of the second tone, reduction of the PQ interval
- the presence of diastolic murmur over the pulmonary artery, reduction of the PQ interval
- the presence of systolic murmur over the pulmonary artery, reduction of the PQ interval

- What is the most often result of endocarditis in acute rheumatic fever?
- **mitral valve stenosis**
- tricuspid valve stenosis
- pulmonary artery valve insufficiency
- aortic valve stenosis

- aortic valve insufficiency

- Endocardial damage in acute rheumatic fever is manifested by the formation of a defect:
- **mitral valve**
- pulmonary artery valve
- tricuspid valve
- aortic valve
- rupture of the left ventricular chord

- What kind of skin lesion is in acute rheumatic fever?
- **pale pink rash on the skin in the form of a thin annular rim with a clear outer and less clear inner edge**
- spotty-papular rash on the skin
- rash on the skin in the form of a butterfly
- skin rash in the form of telangiectasia
- rash on the skin in the form of desquamation of the epithelium

- Define the term "acute rheumatic fever":
- **it is an acute inflammatory disease of the connective tissue with a predominant lesion of the cardiovascular system**
- it is an acute polysyndromic autoimmune disease characterized by the presence of an acquired heart defect
- it is a chronic inflammatory disease of the connective tissue with a predominant lesion of the cardiovascular system and joints
- it is an acute infectious disease with predominant lesions of the cardiovascular system, joints and skin
- SARS

- What is a rheumatic nodule:
- **dense, sedentary, painless formations, ranging in size from millet grains to beans**
- multiple seals of subcutaneous tissue that merge with each other
- painful formations, the size of beans to beans
- formation of a dense-elastic consistency, soldered to the periosteum, which may increase or decrease
- bumpy, painless formations of various sizes

- An increase in the blood of which indicator is important in the diagnosis of acute rheumatic fever:
- **ASL-O**
- C-reactive protein
- GGTP

- ALAT
- antibodies to native DNA

- The degree of activity of acute rheumatic fever is not determined by:
- **the fact of sowing from the throat of group A streptococci**
- the severity of clinical symptoms
- values of non-specific manifestations of inflammation in the general blood test
- the degree of increase in the titer of ASL-O
- increasing the level of sialic acids, C-reactive protein, seromucoid

- What is the degree of activity of acute rheumatic fever corresponds to an increase in the level of C reactive protein to 12 mg/l:
- **I**
- II
- III
- IV
- V

- Indicate a symptom that does not belong to the group of small diagnostic criteria for acute rheumatic feverъ:
- **rheumatic nodules**
- joint pain
- fever
- increase ESR
- positive culture from the throat of group A streptococcus

- The most characteristic features of the third degree of activity of acute rheumatic fever are all listed, except:
- **ESR up to 20 mm/h.**
- titer of ASL-O to 1 : 600 U/l
- level of CRP > +++
- exudative component of inflammation
- leukocytosis > 12 x 10^9/л

- Rheumatoid arthritis II-III degree of activity in acute rheumatic fever is an indication for:
- **glucocorticoids**
- antibiotics
- NSAIDs
- cytostatics
- biogenic amines

- Pathogenetic therapy of acute rheumatic fever is using of:

- **NSAIDs**
- antibiotics
- glucocorticoids
- cytostatics
- biogenic amines

- At what stage of treatment is prescribed metabolic therapy:
- **immediately after diagnosis**
- after normalization of changes in the blood test
- after normalization of body temperature
- in the absence of systemic lesions
- after treatment with antibiotics

- For the etiological therapy of patients with acute rheumatic fever, it is advisable to use:
- **antibiotics**
- glucocorticoids
- NSAIDs
- cytostatics
- biogenic amines

- Benzylpenicillin therapy continues for:
- **10–14 days**
- 30 days
- 14–21 days
- 7 days
- 5 days

- Doses of Bicillin-5 for adults.
- **1,500,000 IU once every 4 weeks**
- 1,500,000 IU once every 3 weeks
- 1,500,000 IU once every 2 weeks
- 1,500,000 IU once every week
- 2 000 000 IU once every 2 weeks

- At what age is secondary prevention in patients with acute rheumatic fever with heart disease:
- **up to 25 years of age and older**
- up to 18 years of age
- up to 40 years of age
- 6 months.
- up to 50 years of age

- When secondary prevention begins:

- **immediately after the end of the course of benzylpenicillin**
- 1 month after a course of benzylpenicillin
- after diagnosis
- 21 days after the end of the course of benzylpenicillin
- not prescribed at all

- What is the secondary prevention of acute rheumatic fever:
- **administration of prolonged penicillins**
- healthy nutrition
- organization of a healthy lifestyle
- normalization of work and rest
- avoid hypothermia

- What drugs are prescribed to patients with penicillin intolerance?
- **macrolides**
- glucocorticoids
- NSAIDs
- cytostatics
- biogenic amines

- At what age is the secondary prevention of patients with acute rheumatic fever without damage of the heart membranes?
- **up to 18 years of age**
- up to 40 years of age
- up to 25 years of age
- up to 21 years of age
- up to 50 years of age

Level 2 test tasks:

- Links of acute rheumatic fever:
- **formation of immune complexes**
- **microcirculation disorders**
- **molecular mimicry**
- **inflammation**
- a large number of leukocytes

- What is the basis for the development of acute rheumatic fever?
- **infection with ß-hemolytic streptococcus group A**
- **predominance of antigens of the main histocompatibility complex A_{11}, B_5, B_{35}, DR5, DR_7**
- **the presence of B-lymphocytic alloantigen 883**
- sex of the patient

- HLA B_{27}

- What links does the toxico-immunological theory of the pathogenesis of acute rheumatic fever contain?
- **toxic mechanism**
- **formation of immune complexes**
- **mechanism of cellular mimicry**
- **autoimmune mechanism**
- degeneration of cartilage tissue

- Risk groups for acute rheumatic fever:
- **children and adolescents**
- **persons aged 16 to 29 years**
- persons aged 30 to 59 years
- persons aged 60 to 69 years
- at any age

- The main syndromes of acute rheumatic fever:
- **clinical and epidemiological**
- **immunological**
- **cardiovascular**
- gastric
- pulmonary

- Acute rheumatic fever most often affects people belonging to blood groups:
- **A (II)**
- **B (III)**
- O (I)
- AB (IV)
- there is no clear association with patients' blood type

- The small diagnostic criteria of acute rheumatic fever include:
- arthritis
- **history of streptococcal infection**
- **fever**
- **arthralgia**
- carditis

- The major diagnostic criteria for acute rheumatic fever include:
- **carditis**
- **arthritis**
- **chorea**
- fever
- sweating

- The main clinical manifestations of acute rheumatic fever are:
- **arthritis**
- **carditis**
- **chorea**
- **rheumatic nodules**
- gastritis

- Symptoms of acute rheumatic fever:
- **acute onset, rapid increase in symptoms and their reversal within 2-3 months**
- **multisyndrome manifestations**
- **fever**
- **nonspecific inflammatory changes in laboratory parameters**
- slow-progressive increase of clinical manifestations with the development of irreversible changes in the internal organs

- The main diagnostic signs of acute rheumatic fever:
- **anamnestic association with streptococcal infection**
- **increasing the titer of specific antistreptococcal antibodies**
- **positive result of bacteriological examination of the pharynx with detection of group A streptococcus**
- increasing the level of sialic acids
- swelling in the legs

- Which does not apply to the major criteria of acute rheumatic fever?
- **arthralgia**
- **serositis**
- **intoxication**
- **fever**
- arthritis

- What indicators need to be determined to establish the activity of the process:
- **titer ASL-O, ASG, ASK**
- **ESR, level of leukocytes**
- **level of SRP, seromucoid**
- **fibrinogen level**
- level of sialic acids

- Components of the clinical classification of acute rheumatic fever:
- **clinical manifestations**
- **degree of activity**
- **consequences of the disease**

- **stages of chronic heart failure**
- variants of the disease

- Clinical variants of acute rheumatic fever:
- **acute**
- **recurrent**
- subacute
- chronic rheumatic fever
- malignant rheumatic fever

- What phases of activity are characteristic of acute rheumatic fever?
- **active**
- **inactive**
- convalescence
- remission
- latent

- The clinical symptoms of rheumatoid arthritis are:
- **inflammation of large joints**
- **symmetry of involvement of periarticular tissues in the pathological process**
- **reversibility of the inflammatory process**
- **“volatile” arthritis**
- persistent deformation of the joints

- Manifestations of pericarditis in acute rheumatic fever are:
- **increase in the size of the heart**
- **disappearance of the apical impulse**
- **triangular or rounded heart shape on the radiograph**
- **appearance of pericardial friction noise along the left edge of the sternum during auscultation**
- inflammation of the heart valves

- Manifestations of small chorea in acute rheumatic fever are:
- **“limp shoulder” symptom**
- **Cherny's symptom**
- **Filatov's symptom**
- **“choreic hand” symptom**
- Felty's symptom

- Clinical manifestations of small chorea are:
- **speech disorders**
- **handwriting violation**
- **grimacing**

- **uncoordinated chaotic movements of the muscles of the extremities, neck, face, torso**
- paresthesia

- What does the concept of "carditis" include:
- **endocarditis**
- **myocarditis**
- **pericarditis**
- coarctation of the aorta
- transposition of the main vessels

- Manifestations of endocarditis include:
- **inflammation of the heart valves**
- **the appearance of heart murmurs**
- **decreasing the volume of the first tone**
- arrhythmias
- spherical shape of the heart shadow

- Manifestations of myocarditis include:
- **cardiomegaly**
- **arrhythmias**
- **fever**
- **signs of circulatory failure**
- mitral valve stenosis

- The most common manifestation of heart disease in acute rheumatic fever?
- **rheumatic endocarditis**
- **rheumatic myocarditis**
- rheumatic pancarditis
- rheumatic pericarditis
- all answers are correct

- What indirect diagnostic criteria indicate the presence of acute rheumatic fever?
- **increase of acute phase indicators**
- **acceleration of ESR, increase in neutrophils**
- **prolongation of the P-R interval on the ECG**
- thrombocytopenia
- anemia

- What heart valve defects most often occur in rheumatic endocarditis:
- **mitral valve insufficiency**
- **mitral valve stenosis**
- pulmonary artery valve insufficiency

- pulmonary artery valve stenosis
- aortic valve stenosis

- The diagnostic criteria of rheumatic heart disease include:
- **disappearance of the apical heartbeat**
- **increase in the size of the heart**
- **arrhythmias**
- symptoms of circulatory failure
- splitting of the first tone of the heart

- Typical site of rheumatic nodules:
- **on extensor surfaces of elbow, knee, metacarpophalangeal joints, spinous processes of vertebrae**
- **in aponeuroses, fascia, along the periosteum, in joint bags and subcutaneous tissue**
- in the interstitial tissue of the lungs
- in the cortical layer of the adrenal glands
- over the joints

- The diagnosis of acute rheumatic fever should be taken into account:
- **the severity of primary and recurrent carditis without heart valve defect**
- **the number of reliable rheumatic attacks**
- **type of rheumatic heart disease**
- sex of the patient
- age of the patient

- Immunological changes in acute rheumatic fever include:
- **increase in nonspecific Ig M, G, A, E in serum**
- **reduction of CD 8 content**
- **the presence of circulating immune complexes in the blood**
- reducing the content of CD 19
- lymphopenia

- Laboratory signs of rheumatic process of the I degree of activity are:
- **the number of neutrophils up to $10x10^9/l$**
- **ESR up to 20 mm/h**
- **CRP up to 0,4 mg/l**
- fibrinogen level up to 6 g/l
- titer of ASL-O – 1: 800 U/l

- What changes in the general analysis of blood are most characteristic of acute rheumatic fever?
- **increase in the number of neutrophils**
- **ESR acceleration**

- monocytosis
- anisocytosis
- poikilocytosis

- Laboratory signs of rheumatic process of the II degree of activity are:
- **ESR up to 40 mm/h.**
- **CRP more than 12 mg/l**
- the number of neutrophils more than $14x10^9/l$
- fibrinogen more than 8 g/l
- titer of ASL-O – 1 : 600 U/l

- Signs of rheumatic process of the III degree of activity are:
- **polyarthritis**
- **pancarditis**
- **3-fold increase in the titer of ASL-O, ASG, ASK**
- **fever**
- annular erythema

- Differential diagnosis of acute rheumatic fever is performed with:
- **Lyme disease**
- **juvenile rheumatoid arthritis**
- **Reiter's disease**
- **Whistler-Fanconi sepsis**
- nodular periarteritis

- What groups of antibiotics are used to treat acute rheumatic fever:
- **beta-lactam antibiotics**
- **macrolides**
- cephalosporins
- fluoroquinolones
- biseptol

- Convalescents after acute rheumatic fever are prescribed antibacterial therapy if:
- **other infectious diseases are present**
- **when planning surgical interventions**
- every 2 weeks.
- every year for 14 days.
- 2 times a year

- Pathogenetic therapy of acute rheumatic fever includes prescribing:
- **NSAIDs**
- **glucocorticosteroids**
- **aminoquinoline drugs**

- antibiotics
- gold preparations

- In the treatment of uncomplicated variants of acute rheumatic fever is used:
- **antibiotics**
- **NSAIDs**
- immunosuppressants
- glucocorticosteroids
- aminoquinoline drugs

- In order to prevent acute rheumatic fever, patients are prescribed:
- **phenoxymethylpenicillin 250 mg 2 times a day, orally**
- **benzathine benzylpenicillin, at a dose of 2.4 million IU 1 time in 3 weeks**
- retarpene 2.5 million IU once every 3 weeks
- benzylpenicillin 250,000 IU after 8 hours
- bicillin-5, at a dose of 5 million IU 1 time in 3 weeks

Level 3 test tasks:

- The teenager went to the doctor with complaints of fever up to 39 °C, shortness of breath, which occurs during normal exercise, as well as pain in both knee joints, their swelling and redness of the skin over them. Periodically feels aching pain in the heart. From the anamnesis: 3 weeks ago he was treated for tonsillitis. Objectively: on the extensor surfaces of the elbow and knee joints - painless subcutaneous nodules. Heart rate – 110 beats/min, blood pressure – 135/85 mm Hg. Art. Auscultation of the heart revealed a prolonged, tone-related, systolic murmur. In blood: leukocytes – 12,5 x 10^9/l, rod-shaped leukocytes – 7 %, ESR – 33 mm/h; CRP – ++, fibrinogen – 6,4 g/l, ASL-O – 340 IU/ml; on the ECG – prolongation of the PQ interval; during ECHO – thickening of the mitral valve leaflets. What preliminary diagnosis can be established on the basis of the above?
- **acute rheumatic fever**
- SARS
- rheumatoid arthritis
- Reiter's disease
- juvenile rheumatoid arthritis

- An 18-year-old patient who suffered from acute rheumatic fever 3 years ago was diagnosed with cyanotic blush on the cheeks, cyanosis of the mucous membranes of the mouth. During auscultation of the heart – clapping I tone, roaring presystolic noise, mitral clicking. During palpation – presystolic tremor. The ECG shows signs of left atrial and ventricular hypertrophy. On the radiograph – enlargement of the left atrium. During ECHO – dilation of the left atrium, increase in the rate of transmitral blood flow, decrease in diastolic divergence with

signs of early diastolic cover of the mitral valve leaflets. This indicates the formation of:

- **mitral valve stenosis**
- mitral valve insufficiency of the I degree
- pericarditis
- infectious myocarditis
- acute endocarditis

- A 21-year-old patient is concerned about progressive shortness of breath, constant heartbeat, pain in the shoulder and knee joints, fever up to 37.4 °C. 2 years ago he suffered from acute rheumatic fever. During the examination: swelling of the shoulder and knee joints, pain on palpation and during active and passive movements. The skin over the joints is hyperemic and hot. Expansion of the left border of cardiac dullness to the left, tones are weakened, systolic murmur over the projection of the apex. On the ECG: signs of hypertrophy of the left atrium and left ventricle. This indicates the formation:

- **mitral valve insufficiency of the I degree**
- mitral valve stenosis of the first degree
- aortic valve insufficiency
- aortic valve stenosis
- tricuspid valve stenosis

- The patient complains of the appearance of ring-shaped rashes on the skin, migrating pain in the shoulder and knee joints, fever up to 39.3 °C. Blood pressure 110/60 mm Hg. Art. Art., pale pink ring-shaped rash on the skin of the lateral parts of the torso, forearms and legs, which do not rise above the level of the skin, fade when pressed. Swelling of the knee joints. Subcutaneous nodules of dense-elastic consistency are palpated on the extensor surfaces of the joints. Expansion of the limits of relative dullness of the heart to the left, tachycardia, muffled and tone over the projection of the apex. On the ECG: prolongation of the interval QT, PQ – to 0.22 sec. Which of the following tests is of the greatest diagnostic value for the verification of the diagnosis?

- **titer ASL-O, ASG, ASK**
- arthroscopy
- dermatoscopy
- urine analysis
- Ultrasound

- A 17-year-old patient 2 weeks after sore throat began to complain of fever, pain and swelling of the knee joints, the appearance of a rash on the skin of the legs in the form of red rings, transient pain in the ankles and elbows. Which of the following diseases is characterized by the following symptoms?

- **acute rheumatic fever**
- Reiter's disease

- juvenile rheumatoid arthritis
- psoriatic arthritis
- osteoarthritis

- Parents of a 9-year-old child. complain of her daughter's erratic hand movements, mood swings, irritability, tearfulness and constant low-grade fever. During the examination: hyperkinetic syndrome, muscular hypotension, static and coordination disorders, signs of vascular dystonia. Positive symptoms: Cherny, Filatov, Gordon, "sluggish shoulders", "choreic hand"; increased tendon reflexes, clonus of both feet. What is the clinical manifestation of acute rheumatic fever in this case?
- **chorea**
- tic disorder
- epilepsy
- athetosis
- hemiparesis

- Adolescent S., 13 years old, developed migratory pain in the shoulder, elbow and knee joints 2 weeks after the sore throat, and his body temperature rose to 38.9 °C. On examination: a ring-shaped rash of pale pink color is visualized on the skin of the extensor surfaces of the elbow and knee joints. Body temperature – 38.6 °C. Ps – 110/min. Mild systolic murmur above the apex of the heart. In the blood: leukocytes – 13.0 x 10^9/l, ESR – 32 mm/h, CRP – +++. On the ECG: PQ 0.25 sec. What disease is it about?
- **acute rheumatic fever**
- rheumatoid arthritis
- Reiter's disease
- juvenile rheumatoid arthritis
- Whistler-Fanconi sepsis

- The patient has aching heart pain, palpitations, pain in the large joints of the arms and legs, progressive shortness of breath, general weakness. 7 weeks suffering from chronic rheumatic heart disease. 3 weeks ago, a manipulation of abortion was performed. She was not treated. On examination: temperature 38.6 °C. Joints are not changed, there is no shortness of breath at rest. The skin is pale, cyanosis of the lips. The pharynx is hyperemic, the tonsils are enlarged. Submandibular lymph nodes are slightly enlarged, painful on palpation. Pulse 100 /min, arrhythmic. Blood pressure 105/75 mm Hg. Art. Heart rate – 130/min., Extrasystole. In the blood: ESR – 52 mm/h, fibrinogen – 8.2 g/l, CRP – +++, titer of ASL-O – 1500 U/l. What is the degree of activity of the rheumatic process?
- **III**
- 0
- I
- II

- IV

- The 17-year-old patient was admitted to the clinic with complaints of migratory pain in the ankle joints, fever up to 38.8 °C. She fell ill 2 days ago. During the inspection: temperature 38.6 °C. Swelling of the ankle joints, pain and restriction of movement in them. On the front surface of the legs are defined by dense painful red spots, hot to the touch. The pharynx is hyperemic, the tonsils are enlarged. Pulse 110/min, rhythmic. Blood pressure 120/70 mm Hg. Art. Heart tones are weakened, a soft systolic murmur above the apex. Acute rheumatic fever is suspected. This clinical situation is often differentiated from all the following diseases, except:
- **lupus arthritis**
- Lyme disease
- juvenile arthritis
- Whistler-Fanconi sepsis
- reactive arthritis

- A young man was taken to the hospital with complaints of morning stiffness, which disappears after some exercise, and later on severe pain in both knees, ankles, fever, shortness of breath, general weakness. According to the patient, even a light touch to the joints causes him unbearable pain. From the anamnesis it is known that the young man fell ill with a sore throat a month ago. He took benzylpenicillin sodium at a daily dose of 3 million IU/day and diclofenac 150 mg/day, intravenously for 7 days. Objectively: knee and ankle joints are symmetrically enlarged, painful. The skin over them turned red. Suspected rheumatic polyarthritis. Assign further treatment to the patient:
- **continue administration of benzylpenicillin-sodium salt**
- prescribe methotrexate
- prescribe hydrocortisone
- prescribe aspirin
- prescribe benzathine benzylpenicillin

- A 16-year-old adolescent was hospitalized with complaints of pain in the ankle joints, ring-shaped rash on the shoulders, torso, legs, fever up to 38.7 °C. He suffered from scarlet fever 2 weeks ago. Considers himself ill for 3 days, when there was pain and swelling of the knee joints, body temperature rose to 38.9 °C. During the examination: body temperature 38.7 °C, swelling of the ankle joints with limited active and passive movements, redness of the skin over the projection of the above joints. In addition, pale pink rashes on the skin in the form of a thin annular rim with a clear outer and less clear inner edge are visualized on the shoulders, lateral surfaces of the torso and front surfaces of the legs. Diagnosis: acute rheumatic fever, active phase, activity II. How to interpret skin manifestations in this patient?
- **annular erythema**

- Rosenberg's infectious erythema
- X-ray erythema
- desquamative erythema
- erythema nodosum

- The teenager, 4 weeks after tonsillitis, developed a sharp pain in the knee joints, pale pink rash on the skin of the extensor surfaces of the elbow and knee joints, body temperature rose to 38.9 °C. Pale pink rashes in the form of thin rings with a clear outer and less clear inner edge are found on the extensor surfaces of the elbow, knee, and metacarpophalangeal joints. Pain on palpation and change in the shape of the elbow and knee joints. Which of the following laboratory parameters will be most specific for diagnosis?
- **titer of ASL-O**
- CRP
- ESR
- leukocytes
- fibrinogen

- A 9-year-old boy complains of pain in the knee, shoulder and elbow joints, aching pain in the heart, palpitations, fever up to 38.4 °C. From the anamnesis: ill for 3 weeks, when there was a sore throat and a rise in body temperature to 39 °C. After 2 weeks, the body temperature rose again to febrile figures, there was pain and swelling of the shoulder, elbow and knee joints. In the blood: Hb – 100 g/l, leukocytes – 14 x 10^9/l, ESR – 60 mm/h. Seromucoid – 0.300 U/l, CRP – ++++, ASL-0 – 550 U/l. During Echo – the phenomenon of regurgitation on the mitral valve. Diagnosis: Acute rheumatic fever. Prescribe etiotropic therapy:
- **benzylpenicillin up to 4,000,000 IU/day**
- benzylpenicillin up to 12,000,000 IU/day
- benzylpenicillin up to 80,000,000 IU/day
- benzylpenicillin up to 120,000,000 IU/day
- benzylpenicillin up to 14,000,000 IU/day

- A 7-year-old child developed migratory pain in the elbow and knee joints on day 21 after scarlet fever. On examination: on the skin of the extensor surfaces of these joints – ring-shaped rash of pale pink color. Body temperature – 38.9 °C. Pulse – 130/min. Mild systolic murmur above the apex of the heart. In the blood: leukocytes – 14,1 x 10^9/l, ESR – 40 mm/h, CRP – +++. On the ECG: PQ – 0.24 sec. Which of these drugs is most appropriate to prescribe to a child in this case?
- **benzylpenicillin in a daily dose of 1,500,000 IU**
- benzylpenicillin up to 12,000,000 IU/day
- benzylpenicillin up to 24,000,000 IU/day
- benzylpenicillin up to 14,000,000 IU/day
- benzylpenicillin up to 50,000,000 IU/day

• The patient, 12 years old, was admitted with complaints of wet cough with sputum, hemoptysis, shortness of breath with moderate exercise, fever up to 40 °C. He suffered from sore throat 3 weeks ago. On examination: body temperature 38.7 °C. Above the lungs – a clear lung sound, wet rales. The pharynx is hyperemic, the tonsils are slightly enlarged. Pulse 100/min., rhythmic. Blood pressure 110/65 mm Hg. Art. On the radiograph – diffuse enhancement of the pulmonary pattern. Diagnosis: acute rheumatic fever, active phase, activity II. Rheumatic pulmonary vasculitis. LI Ist. What drugs should be preferred in the treatment of this patient?

• **glucocorticosteroids**
• NSAIDs
• antibiotics
• cytostatics
• colchicine

• The pregnant woman, at the 6th week of pregnancy, consulted a family doctor in order to prescribe measures for secondary prevention of recurrence of rheumatic disease. In the anamnesis: at the age of 14 she suffered from acute rheumatic fever with carditis. From which stage of pregnancy it is advisable to prescribe her prolonged penicillins?

• **from 8 to 10 weeks**
• up to 14 weeks
• from 14 to 30 weeks
• from 22 to 29 weeks
• does not require treatment

• 9-year-old patient developed pain in the elbow and knee joints, skin rash, and body temperature up to 39 °C on day 14 after the sore throat. On examination: Body temperature – 39.0 °C. Swelling of the elbow and knee joints with the presence of pale pink ring-shaped rashes on their extensor surfaces. Pulse – 125/min. Systolic murmur over the projection of the apex of the heart. In the blood: leukocytes – 14.1 x 10^9/l, ESR – 42 mm/h, CRP – +++. On the ECG: PQ interval – 0.23 sec. Etiotropic therapy with benzylpenicillin has been started. After how many days it is advisable to prescribe durable forms of the drug – bicillin-5?

• **after 10–14 days**
• after 5 days
• after 30 days
• after 1 day
• after 25 days

• A 22-year-old patient developed pulpitis. From the anamnesis: 4 years ago he suffered from acute rheumatic fever without carditis. The causal tooth was removed at the dentist's appointment. What treatment tactics should be used before and after tooth extraction?

- **10–day course of antibacterial drugs**
- 21–day course of antibacterial drugs
- 10–day course of NSAIDs
- 21–day course of NSAIDs
- does not require treatment

• Systemic connective tissue diseases

• Systemic lupus erythematosus

Level 1 test tasks:

- The study showed the following indicators: LE-cells 9 : 1000 leukocytes, ANA titer – 1 : 240, high titers of antibodies to native DNA. What disease can be thought of in this case?
- **systemic lupus erythematosus**
- acute rheumatic fever
- dermatopolymyositis
- systemic scleroderma
- aortoarteritis

- Not related to the triad of symptoms in SLE:
- **fever**
- skin syndrome
- serositis
- joint syndrome
- all answers are correct

- Dermatological manifestations of SLE include:
- **erythema on the skin of the face in the form of a butterfly**
- heliotropic rash
- nodular formations
- exfoliative manifestations
- bullous rash

- Manifestations of nervous system damage in SLE:
- **meningo-encephalo-polyradiculoneuritis**
- epileptiform syndrome
- танцювальна хвороба
- funicular myelosis
- paretic syndrome

- Which heart valve is most often affected by SLE endocarditis:
- **mitral valve**
- tricuspid valve
- pulmonary artery valves
- aortic valve
- all answers are correct
- What kidney damage is typical fo SLE:
- **lupus nephritis**
- tubulointerstitial nephritis
- pyelonephritis
- urolithiasis
- nephropathy

- Which is not typical for the discoid type of SLE:
- **coarse-grained peeling of the skin**
- cicatricial atrophy
- telangiectasias
- erythema
- follicular hyperkeratosis

- Antiphospholipid syndrome can manifest itself as:
- **spontaneous abortions**
- leukocytosis
- leukopenia
- thrombocytopenia
- anemia

- At SLE rashes are most often localized on the:
- **face**
- neck
- shoulders
- back
- legs

- Diagnostic value in SLE is the detection of antibodies to:
- **native DNA**
- RNA
- cardiomyocytes
- mitochondria
- erythrocytes

- Which is not typical for SLE:
- **swelling and compaction of the skin in the lesions**

- erythema
- telangiectasias
- cicatricial atrophy
- reticulated livedo

- To confirm the presence of systemic lupus erythematosus must be determined:
- **titer ANA**
- ALT activity
- AST activity
- RF
- titer of ASL-O

- Diagnostic value in SLE has:
- **detection of antibodies to native DNA**
- detection of rheumatoid factor
- high titer of ASL-O
- antiphospholipid antibodies
- anticitrulline cyclic polypeptide

- Which is not a typical sign of SLE:
- **vasospasm of peripheral vessels**
- fever
- skin lesion syndrome
- syndrome of joint damage
- lesions of the blood system

- What does not matter in the pathogenesis of SLE:
- **disorders of fibrous tissue formation**
- formation of antibodies to the native DNA
- connective tissue lesions
- lesions of the basement membranes
- formation of circulating immune complexes

- What is the manifestation of nephrological lesions in SLE?
- **glomerulonephritis**
- pyelonephritis
- amyloidosis
- tubulointerstitial nephritis3
- minimal changes disease

- Which is not typical for SLE:
- **hyperproduction of connective tissue**
- positive antibodies to native DNA

- ESR acceleration
- the presence of antibodies to erythrocytes
- the presence of antibodies to leukocytes

- What is prescribed for the pathogenetic treatment of SLE?
- **prednisolone**
- methylprednisolone
- dexketoprofen
- dexamethasone
- midokalm

- Used to correct secondary hypertension in SLE
- **ACE inhibitors**
- diuretics
- β-blockers
- imidazole receptor blockers
- angiotensin receptor blockers II

- At what manifestations of SLE cytostatics are not used?
- **severe anemia**
- glomerulonephritis
- pneumonitis
- secondary hypertension
- encephalomyeloneuritis

- Plasmapheresis in patients with SLE is contraindicated in:
- **hypoproteinemia**
- pneumonitis
- glomerulonephritis
- vasculitis
- polyneuritis

- Approximate daily doses of prednisolone for the treatment of systemic lupus erythematosus I degree of activity:
- **15–20 mg**
- 5–15 mg
- 25–30 mg
- 35–40 mg
- 45–50 mg

- Approximate daily doses of prednisolone for the treatment of systemic lupus erythematosus II degree of activityi:
- **30–40 mg**
- 5–15 mg

- 15–20 mg
- 20–25 mg
- 60–80 mg

Level 2 test tasks:

- Complications of pulmonary lesions in SLE:
- **spontaneous pneumothorax**
- **emphysema**
- **atelectasis**
- **pneumofibrosis**
- bronchitis

- Pulmonological lesions in SLE:
- **pulmonary vasculitis**
- **pulmonitis**
- bronchitis
- bronchiectasis
- sarcoidosis

- The diagnostic criteria for SLE include:
- **discoid lupus**
- **photosensitization**
- Gottron syndrome
- telangiectasia
- rheumatoid nodules

- Mandatory administration of glucocorticoids in SLE is required:
- **lesions of the renal apparatus**
- **lesions of the central nervous system**
- arthralgia
- skin lesions
- hypertension

- Blood changes in SLE:
- **leukopenia**
- **hemolytic anemia with reticulocytosis**
- **lymphopenia**
- leukocytosis
- erythrocytosis

- Blood changes in SLE:
- **leukopenia**
- **thrombocytopenia**

- leukocytosis
- erythrocytosis
- thrombocytosis
- A 29-year-old woman complains of general weakness, fatigue, fever up to 40 °C, facial rash, pain in the small joints of the hands. She has been ill for 4 years. On the face – erythematous rash, in the form of a "butterfly". Small joints of both hands are swollen; above the lungs – the noise of friction of the pleura. In the blood: anemia, leukopenia, lymphopenia. In urine: proteinuria and cylindruria, moderate erythrocyturia. The formation of which antibodies is the most informative in the mechanism of disease development?
- **antibodies to native DNA**
- **antinuclear antibodies**
- antibodies to the erythrocyte membrane
- antibodies to platelets
- antibodies to leukocytes

- What immunological disorders are observed in SLE:
- **antiphospholipid antibodies**
- **antibodies to Sm nuclear antigen**
- anticitrulline antibodies
- ASL-O
- RF

- What immunological disorders are observed in SLE:
- **antibodies to native DNA**
- **antibodies to Sm nuclear antigen**
- anticitrulline antibodies
- RF
- ASL-O

- What groups of drugs are used in the treatment of SLE:
- **plasmapheresis**
- **aminoquinolone drugs**
- antibiotics
- neurotropics
- NSAIDs

- What groups of drugs are used in the treatment of SLE:
- **glucocorticosteroids**
- **immunosuppressants**
- NSADs
- antibiotics
- neurotropics

- Therapy of cerebral crisis in SLE is carried out using:
- **plasmapheresis**
- **combination pulse glucocorticosteroid therapy**
- chondroprotectors
- antibiotics
- NSAIDs

- Therapy of hematological crisis in SLE is carried out using:
- **immunoglobulin**
- **high doses of glucocorticosteroids**
- erythropoietin
- vitamin B_{12}
- folic acid

- Therapy of autoimmune crisis in SLE is carried out by appointment of:
- **plasmapheresis**
- **high doses of glucocorticosteroids**
- antibiotics
- chondroprotectors
- NSAIDs

Level 3 test tasks:

- A 19-year-old patient complains of shortness of breath, fever up to 40 ° C, chest pain on the left, pain in the wrists, areas of redness on both cheeks, fatigue, general weakness. She has been ill for 7 years and has been treated with glucocorticoids more than once on an outpatient basis. Deterioration - within two weeks. Objectively: erythema on both cheeks, pulse – 110/min., Systolic murmur at the apex, the noise of friction of the pleura on the left, the wrist joints are defigured. In the blood: leukocytes – 2.6 x 10^9/l, ESR-80mm/h., fibrinogen – 8 g/l, CRP – ++; antibodies to native DNA; in urine protein – 0,3 g/l. Which diagnosis is most likely?
- **SLE**
- rheumatoid arthritis
- reactive arthritis
- dermatomyositis
- polymyositis

- A 32-year-old patient complains of shortness of breath, fever, chest pain on the left, stiffness in the wrist joints, erythema on both cheeks. The above complaints have been going on for two weeks. Initially, only recurrent attacks of polyarthritis of the small joints of the hands were noted. During the examination: widening of the boundaries of relative cardiac dullness to the left, systolic murmur

at the apex of the heart. Blood pressure – 135/100 mm Hg. Art. At X-ray examination – pleurodiaphragmatic joints, left ventricular hypertrophy. Blood test: Hb – 75 g/l, er. – 2.7 x 10^{12}/l, lake. – 4,0x10^{9}/l, SHZE – 45 mm/h. In urine: protein – 1.2 g/l, er. – 7–9 in f./v., Cylinders (hyaline) – 2–4 in f./v. Antibodies to antigens Ro SS – A, La/SS – B, Sm, native DNA, ribonucleoprotein, histones H1, H2B, phospholipids were detected. The most likely diagnosis?

- **SLE**
- systemic scleroderma
- rheumatoid arthritis
- acute rheumatic fever
- dermatomyositis

- A 36-year-old patient complains of fever up to 39.9 °C, pain in the lumbar region and joints, swelling of the face. From the anamnesis: the above complaints appeared after prolonged insolation. Objectively: erythema on the cheeks and nose, enlarged submandibular and axillary lymph nodes, swollen joints of the extremities. Auscultatory: I tone above the apex of the heart is weakened, accent II tone over the aorta, blood pressure – 220/120 mm Hg. Art. In the blood – normochromic anemia, leukopenia, ESR – 70 mm/h, detected antinuclear factor, antibodies to native DNA in the diagnostic titer. In the urine – severe proteinuria, microhematuria, cylindruria. Your diagnosis?

- **SLE, lupus nephritis**
- chronic glomerulonephritis
- rheumatoid arthritis, amyloidosis
- disease of “minimal changes”
- idiopathic nephropathy

- The 30-year-old patient was admitted to the hospital with complaints of a rash on the face and neck, pain in the wrists, redness of the urine, difficulty breathing, chest pain during exercise, fever up to 38.8 °C. From the anamnesis: she considers herself ill for about 7 years. Deterioration after sunbathing the day before. Objective: BP 135/85 mm Hg. Art. After measuring blood pressure, a petechial rash appeared on the shoulder. Pulse 110 beats/min. BR 23 in 1 minute In the blood: hemolytic anemia, thrombocytopenia, lymphopenia, ESR-76 mm/h; creatinine – 85 μmol/l, CRP positive, in the urine – erythrocyturia, proteinuria – 1.3 g/l. What diagnosis can be made by the patient?

- **systemic lupus erythematosus: chronic course, active phase, activity of III degree, with lesions of the skin "butterfly", joints (polyarthritis of the wrist joints). Functional insufficiency of joints (FJI), kidneys (CKD I: lupus nephritis, urinary syndrome), Werlhof's syndrome**
- systemic lupus erythematosus: chronic course, active phase, activity of the II degree, with skin lesions "butterfly", joints (polyarthritis of the wrist joints), kidneys (CKD I: lupus nephritis, urinary syndrome), antiphospholipid syndrome

• systemic lupus erythematosus: chronic course, active phase, activity of the II degree, with lesions of the skin "butterfly", joints (polyarthritis of the wrist joints), kidneys (CKD I: lupus nephritis, nephrotic syndrome), Werlhof syndrome
• Takayasu's disease
• microangiitis
• A 27-year-old patient complains of shortness of breath while walking, fever up to 39.4 °C. For 7 days, there is pain and stiffness in the wrists. Objective: erythema over the cheekbones and nose. Ps – 115/min., Systolic-diastolic murmur over the area of absolute cardiac dullness, pleural friction murmur on the left. The joints of the hands are swollen, the skin over them has normal color. In the blood: leukocytes – 2.9 x 10^9/l, ESR – 48 mm/h. In urine: proteinuria up to 0.6 g/l. Suggest a diagnosis:
• **SLE**
• dermatomyositis
• polymyositis
• reactive arthritis
• psoriatic arthriti

• A 30-year-old patient complains of pain in the heart, shortness of breath with light exercise, fever up to 38.0 °C, pain in the joints of the feet, general weakness. From the anamnesis: 5 years suffering from systemic lupus erythematosus. Objectively: on the background of pale skin, areas of erythema were found, which rise above the level of the skin with close-fitting horny scales and areas of scar atrophy, up to 5 cm in size on the torso and upper extremities. Swelling of the legs, face. Heart rate – 110/min, blood pressure 140/90 mm Hg. Art. Auscultatory: noise of friction of the pericardium. In the blood: erythrocytes 2.6 x 10^{12}/l, Hb – 80 g/l, leukocytes – 2.7 x 10^9/l, thrombocytes – 100 x 10^9/l, ESR – 50 mm/h, antibodies to ANA – 1 : 128, antiSm positive, daily proteinuria – 6 g/day, GFR – 90ml/min, on the radiograph of the feet – periarticular osteoporosis of the metatarsophalangeal joints, on the ECG – diffuse depression of the PR segment and the rise of the ST segment. Specify the correct diagnosis:
• **systemic lupus erythematosus, chronic course, active phase, activity III with heart disease (dry pericarditis), with kidney disease (lupus nephritis, nephrotic syndrome), with joint damage (polyarthritis of the metatarsophalangeal joints. FJI I. Ro-stage I), with skin lesions (discoid erythema)**
• systemic lupus erythematosus, chronic course, active phase, activity II with heart disease (dry pericarditis), kidney damage (lupus nephritis, nephrotic syndrome), lesions of the metatarsophalangeal joints. (FJI I. Ro-stage I), with skin lesions (discoid erythema).
• acute pericarditis, cardiac tamponade
• acute pyelonephritis with urinary syndrome
• Werlhof's disease

• A 30-year-old woman complains of fever up to 38.7 °C, pain in small joints of the hands, muscles, shortness of breath and cough, chest pain, mouth ulcers, swelling and erythema on the face, increased hair loss. In the blood: erythrocytes – 2.7 x 10^{12}/l, Hb – 75 g/l; leukocytes – 2.7x10^9/l, ESR – 65 mm/year. In urine: protein – 4.5 g/l; erythrocytes – 16–18 in f./v. What disease can it be in this case?

• **SLE**
• reactive arthritis
• polymyositis
• psoriatic arthritis
• Behcet's disease

• A 29-year-old patient after SARS has fever, pain, swelling, and stiffness in the radial wrist, metacarpophalangeal, and proximal interphalangeal joints. Objective: erythema over the cheekbones and nose. Heart rate – 112/min Pericardial friction noise. In the blood: leukocytes – 2.7 x 10^9/l, ESR – 56 mm/h. Positive reaction of Wasserman. Urine analysis: erythrocytes – 18–20 in f./v, protein – 1.4 g/l. What additional examinations should be scheduled in this case?

• **blood test for antinuclear antibodies to double-stranded DNA**
• anticentromeric antibodies
• citrulline test
• repeat Wasserman's reaction
• myeloperoxidase reaction

• A 27-year-old woman complains of pain, numbness of the fingers in the cold, swelling and pain in the small joints of the hands, morning stiffness for up to 10 minutes, fever up to 40 °C, weight loss. Objective: temperature – 39.5 °C. Erythema on the face. Ps – 115/min, Blood pressure – 145/85 mm Hg. Art. In the lungs – small-bubble rales. Liver – + 4 cm in the blood: erythrocytes 2,4 x 10^{12}/l, Hb – 120 g/l, leukocytes – 3.9x10^9/l, ESR – 60 mm/h., gamma globulins – 30 %. In urine: protein – 1.3 g/l, leukocytes – 1–2 in f./v., erythrocytes – 12–17 in f./v. What is the most likely diagnosis?

• **SLE**
• acute rheumatic fever
• dermatomyositis
• polymyositis
• scleroderma

• The 25-year-old patient developed intense pain in the large joints of the hands, aching pain in the heart, palpitations, and swelling of the legs after a summer vacation. On examination: body temperature – 40 °C, pale skin, over the affected joints – erythematous rash, erosions on the mucous membrane of the oral cavity, alopecia. Ps – 125/min, blood pressure – 170/100 mm Hg. Art. In the blood: normochromic anemia, ESR – 68 mm/h. CRP – +++. Positive reaction of Wasserman. Which of the additional studies will be the most informative for the diagnosis of this disease?

- **blood test for antinuclear antibodies**
- hemagglutination reaction
- Gregersen's reaction
- myeloperoxidase reaction
- blood iron content

- A 32-year-old patient complains of a rise in body temperature to 39 ºC, the appearance of a rash on the skin in the form of a "butterfly", headache, weight loss, muscle pain, swelling and pain in the ankle joints, weakness that appeared after hyperinsolation. In the blood: leukopenia, ESR up to 40 mm/h. The family doctor made a preliminary diagnosis: Systemic lupus erythematosus. Which of the following studies will confirm the diagnosis?
- **blood test for antinuclear antibodies**
- IFA
- blood test for ASL-O
- blood test for RF
- blood test for ACCP

- A 27-year-old patient complains of pain in the muscles and joints of the hands, low-grade fever, and a rash on the face. On the cheeks there is an erythematous rash in the form of a "butterfly". The joints of the hands are swollen. In the lungs – the noise of friction of the pleura on both sides. In the analysis of urine: proteinuria, cylindruria. What changes are expected in blood testsi?
- **pancytopenia**
- erythrocytosis
- lymphocytosis
- thrombocytosis
- leukocytosis

- The 29-year-old patient, after prolonged insolation, developed sharp pain in the knee joints, a rash on the skin, and a fever of up to 40 °C. Objectively: erythema on the face, in the form of a "butterfly", radial wrist, knee and ankle joints swollen, painful during movement. In the blood: signs of anemia, leukopenia, lymphopenia. Which of the following immune tests is most specific for diagnosis?
- **antibodies to native DNA**
- ACCP antibodies
- ANCA antibodies
- ASL-O antibodies
- antibodies to the FC fragment of immunoglobulins G
-
- A 25-year-old patient complains of fever up to 37.8 °C, shortness of breath with light exercise, constant heartbeat, swelling in the lower third of the legs, pain in the wrists and ankles. Ill for 1 month after vaccination. On the cheeks -

erythema; tachycardia, systolic murmur at the apex of the heart, moderate hepatosplenomegaly. In the blood: pancytopenia, ESR – 60 mm/h. In urine: proteinuria – 6.6 g/l, erythrocyturia – 25–40 f./v, cylindruria – hyaline cylinders – up to 15 f./v. Which test method is most reliable for diagnosis?

- **blood test for antinuclear antibodies**
- blood test for RF
- blood test for ANCA
- blood test for ACCP
- blood test for ASL-O

- A 29-year-old patient was admitted to the hospital in critical condition. Complaints of fever, dizziness, convulsions, massive edema. She suffers from systemic lupus erythematosus. The examination revealed lupus nephritis with nephrotic syndrome, cerebrovasculitis, high activity of the inflammatory process. What is most appropriate to prescribe to the patient in this case?

- **pulse therapy with methylethylprednisolone**
- NSAIDs
- vincristine
- vinblastine
- plakvenil

- The patient after resting at sea developed migratory joint pain, skin rash, sharp general weakness. Body temperature – 40 °C. On the skin of the neck, chest, knee joints – erythematous rash, on the mucous membrane of the cheeks – enanthematous spots. In the blood: signs of anemia, accelerated ESR, positive Wasserman reaction. What additional tests should be performed to clarify the diagnosis?

- **blood test for antinuclear factor (ANA)**
- ANCA antibodies
- ACCP antibodies
- RF
- ASL-O antibodies

- A 28-year-old patient with a diagnosis of systemic lupus erythematosus showed signs of photosensitization in the spring and summer. Which of these drugs should be prescribed to the patient during this period?

- **delagil**
- plakvenil
- vinblastine
- cyclophosphamide
- prednisolone

- The patient is 25 years old, complains of dry cough, shortness of breath, pain in small joints, low-grade fever, weight loss, hair loss. Objectively: rash on the

face, swelling of the proximal interphalangeal joints, heart sounds are weakened, intermittent systolic-diastolic murmur over the area of absolute cardiac dullness. In the blood: anemia, leukopenia, ESR – 60 mm/h. In urine: protein – 1.7 g/l, erythrocytes – 14–18 in f./v., cylinders (hyaline) – 8–10 in f./v. The drug of choice in the treatment of the patient will be:

- **methylprednisolone**
- cisplatin
- midokalm
- amiodarone
- amoxil

• Systemic scleroderma

Level 1 test tasks:

- What is Bushke's scleredema?
- **isolated skin lesion**
- rhupus syndrome
- combination of scleroderma with anemia
- combination of scleroderma with rheumatoid arthritis
- combination of scleroderma with nephrotic syndrome

- Manifestation of systemic scleroderma is:
- **progressive fibrosis**
- bilateral sacroiliitis
- antiphospholipid syndrome
- nephrotic syndrome
- spondyloarthropathy

- The trigger factors of scleroderma include everything but:
- **hypothermia**
- hyperinsolation
- stress
- infectious diseases
- surgical interventions

- Risk group for scleroderma symptoms:
- **young women**
- young men
- old women
- old men

- there is no gender difference

- Manifestation of fibroblast dysfunction is:
- **increase collagen production**
- reduction of collagen production
- changes in glucuronic acid content
- collagen swelling
- pathology of phospholipid systems

- It does not matter in the development of scleroderma:
- **phagocytosis in long bones**
- fibrosis
- violation of collagen formation
- dysfunction of fibroblasts
- obliteration of small vessels

- What is not a form of scleroderma:
- **discoid**
- white spot disease
- system
- linear
- plaque

- What caliber vessels are most often affected by scleroderma:
- **small**
- medium
- large
- of any caliber
- vessels are not affected

- An additional sign of scleroderma:
- **telangiectasia**
- pericarditis
- pulmonitis
- hepatitis
- nephritis

- The main diagnostic signs of scleroderma:
- **Raynaud's syndrome**
- Sharpe's syndrome
- glomerulonephritis
- meningitis
- arthritis

- For latent scleroderma is not typical:
- **skin redness**
- chills
- cold skin
- pale skin
- muscle pain

- Small criteria of scleroderma:
- **pulmonary fibrosis**
- arthrosis
- photodermatitis
- cholecystitis
- polyneuritis

- Articular syndrome in systemic sclerosis is manifested:
- **polyarthritis, with hyperexudation**
- gonarthrosis
- coxarthrosis
- sacroiliitis
- osteolysis

- Articular syndrome in systemic sclerosis is manifested:
- **polyarthralgia**
- active arthritis
- crunch in the joints
- osteolysis
- lesions of large joints

- A typical sign of scleroderma:
- **hypertrophy and muscle atrophy**
- dyspnea
- dysphagia
- arrhythmia
- anury

- On the radiograph in scleroderma characteristic changes is:
- **deforming pseudoarthritis without radiological signs of joint damage**
- osteolysis
- formation of osteophytes
- sacroiliitis
- coxarthrosis

- For the skin syndrome in systemic sclerosis is not typical:
- **exfoliative dermatitis**

- skin compaction
- pale skin
- redness of the skin
- hyperpigmentation of the skin

- For systemic sclerosis is not typical:
- **appearance of erythema on the face**
- telangiectasia formation
- sclerodactyly
- swallowing disorders
- speech disorders
- What is not typical fo scleroderma:
- **itching of the skin, which worsens at night**
- numbness
- telangiectasia formation
- skin tightening sensation
- swelling of the skin

- For physiotherapeutic treatment of scleroderma is not used:
- **UFO in suberethymic doses**
- magnetic therapy
- balneotherapy
- paraffin therapy
- acupuncture

- For systemic sclerosis is not typical:
- **the appearance of nodules**
- sclerodactyly
- capillary obliteration
- swallowing disorders
- pseudoarthritis

- At limited scleroderma for treatment used:
- **D-penicillamine**
- aspirin
- midokalm
- piroxicam
- penicillin

- Not used for application therapy of scleroderma:
- **ointments based on snake venom**
- heparin ointment
- dimexid
- ointments are contraindicated

- trypsin

Level 2 test tasks:

- In the development of systemic scleroderma are most important:
- **proliferation of myofibroblasts**
- **vascular endothelial damage**
- hypoactivity of fibroblasts
- hypoimmune response
- hyporeactivity of fibroblasts

- Small criteria of scleroderma:
- **sclerodactyly**
- **basal pneumosclerosis**
- **scars on the pads of the fingers**
- sealing and induration of the skin of the toes
- lesions of the skin, face, neck, torso

- Lesions of the cardiovascular system in systemic sclerosis:
- **myocardial fibrosis**
- **heart failure**
- **pericarditis**
- hypertension
- endocarditis

- The major criteria for scleroderma are:
- **compaction and induration of the skin of the fingers and metatarsophalangeal joints**
- **lesions of the skin, face, neck, torso**
- basal pneumosclerosis
- heliotropic rash
- photodermatitis

- In the development of systemic scleroderma are most important:
- **imbalance of immune system**
- **hyperactivity of fibroblasts**
- **hyperimmune response**
- hypoactivity of fibroblasts
- hypoimmune response

- The joint syndrome is manifested in the form:
- **pseudoarthritis**
- **isolated polyarthralgia**

- gonarthrosis
- coxarthrosis
- osteophytosis

- Lung lesions in scleroderma:
- **pleurisy**
- **fibrosing alveolitis**
- **pulmonary hypertension**
- **peribronchial fibrosis**
- bronchiectasis

- Kidney damage is characterized by:
- **glomerulosclerosis**
- **acute renal crisis**
- kidney stones
- tubulointerstitial nephritis
- tubular necrosis

- Kidney damage is characterized by:
- **changes in the vessels of the kidneys with the development of mucoid swelling of the intima**
- **focal necrosis of the renal cortex**
- deposition of immune complexes
- lesions of the renal pelvis
- kidney stones

- Antifibrotic drugs include:
- **D-penicillamine**
- **dapsone**
- hydrocortisone
- diazoline
- mercaptopurine

- Enzyme agents used in the treatment of patients with scleroderma:
- **lidase**
- **ronidase**
- D-penicillamine
- dapsone
- hydrocortisone

- To improve the function of the gastrointestinal tract in scleroderma is used:
- **PPI**
- **prokinetics**
- **antacids**

- NSAIDs
- Antibiotics

- For the treatment of systemic scleroderma is not used:
- **Piroxicam**
- **antibiotics**
- glucocorticoids
- D-penicillamine
- NSAIDs

Level 3 test tasks:

- A 48-year-old woman complains of joint and muscle pain, loss of appetite, constipation, fatigue and low-grade fever. Objectively: dysphagia, symmetrical arthritis and thickening of the skin on the hands and feet, atrophy of the fingertips, Raynaud's syndrome, telangiectasia. Antibodies to antigens jo – 1, Pm – 1, Scl-70, ribonucleoprotein, RNA polymerase I and fibrillin were detected. What disease causes such changes?
- **systemic scleroderma**
- rheumatoid arthritis
- polymyositis
- HIV
- SLE

- A 46-year-old patient complains of numbness, sharp pallor of the fingers, a feeling of muscle stiffness, arrhythmia, polyarthralgia, dysphagia, constipation. The patient's face is "mask-like", dense swelling of the hands. The size of the heart is increased, dry rales are heard in the lungs. In the blood: ESR – 34 mm/h., total. protein – 96 g/l, gamma globulin – 30 %. Which diagnosis is most likely in this case?
- **systemic scleroderma**
- SLE
- acute rheumatic fever
- dermatomyositis
- polymyositis

- A 43-year-old patient complains of numbness, sharp pallor of the second and third fingers, a feeling of muscle stiffness, heart failure, polyarthralgia, dysphagia, and a tendency to constipation. Objectively: face "mask-like", dense swelling of the hands. The size of the heart is increased, dry rales are heard in the lungs. In the blood: ESR – 30 mm/h, total protein – 90 g/l, gamma globulins – 28 %. Which diagnosis is most likely in this case?
- **systemic scleroderma**
- rheumatoid arthritis
- SLE

- dermatomyositis
- polymyositis

- A 38-year-old patient complains of muscle weakness, numbness of the fingers, shortness of breath with light exercise, difficulty passing solid food through the esophagus, dense swelling in the legs. At outpatient examination in the analysis of blood: ESR – 42 mm/h., CRP – ++, on the radiograph – basal pneumosclerosis, FEGDS – dilatation of the decrease in motor activity of the esophagus. What is a preliminary diagnosis?
- **systemic scleroderma**
- SLE
- dermatomyositis
- polymyositis
- GERD

- A 36-year-old patient complains of muscle weakness, numbness of the fingers, shortness of breath during light exercise, difficulty passing solid foods through the esophagus, dense swelling of the legs. At FGDS – dilatation and hypomobility of the esophagus. What a preliminary diagnosis?
- **systemic scleroderma**
- GERD
- SLE
- HIV
- AIDS

- A 29-year-old man has been suffering from Raynaud's disease for 5 years. He is currently complaining of joint and muscle pain, loss of appetite, constipation, fatigue and low-grade fever. Antibodies to Pm – 1 antigens, DNA topoisomerase I, histidyl – t RNA synthetase, ribonucleoprotein, RNA polymerase I, and fibrillin were examined and detected. What disease is evidenced by the above data?
- **systemic scleroderma**
- SLE
- dermatomyositis
- AIDS
- HIV

- A 39-year-old woman has been ill for 8 years. The disease is characterized by a gradual progressive course. There are complaints of pain in the small joints of the hands, paresthesias in the fingertips, weakness, difficulty swallowing. On the radiograph – basal pneumosclerosis. At FEGDS – narrowing of a gleam of esophagus in cardiac department. In the blood: leukocytes – 10 x 10^9/l, ESR – 32 mm/h, gamma globulin – 28 %. What preliminary diagnosis should you make in this case?
- **systemic scleroderma**

- SLE
- HIV
- Takayasu's disease
- reactive arthritis

- A 43-year-old man has been suffering from Raynaud's syndrome for 6 years. He has recently developed pain in the small joints of his hands and dysphagia. What disease can be thought of in this case?
- **systemic scleroderma**
- SLE
- Sjogren's syndrome
- Sharpe's syndrome
- Takayasu's disease

- The 43-year-old patient, a grinder, complains of chills, cold and blue fingertips, stiffness in the wrist joints, a feeling of tightness of the skin of the hands and face. On examination: the face is amimic, the narrowing of the mouth slit like a "purse", the skin on the cheeks and hands is thickened, the fingertips are pale, cold. In the blood: erythrocytes – 4.2 x 10^{12}/l, leukocytes – 5x10^9/l, ESR – 30 mm/h. CRP (++). What is the most likely diagnosis?
- **systemic scleroderma**
- Parkinson's disease
- cryoglobulinemia
- Raynaud's disease
- vibration disease

- A 38-year-old patient complains of morning stiffness in the wrists, a feeling of tightness of the facial skin, difficulty swallowing. Objectively: amimic face, purse-like narrowing of the mouth, fingertips pale, cold to the touch. Heart tones are arrhythmic, weakened, systolic murmur at the apex. In the blood: erythrocytes – 4.2 x 10^{12}/l, leukocytes – 7.4 x 10^9/l, ESR – 40mm/h. Which diagnosis is most likely?
- **systemic scleroderma**
- Raynaud's disease
- Parkinson's disease
- SLE
- Psoriasis

- A 47-year-old patient complains of pain in the small joints of the hands, paresthesias in the fingertips, weakness, difficulty swallowing. She has been ill for 10 years. Objective: amimic face, shortening of nail phalanges. In the lungs on X ray – basal pneumosclerosis. When FEGDS – narrowing of the esophagus in the cardiac department. In the blood: leukocytes – 9.4 x 10^9/l, ESR – 36 mm/h., gamma globulin – 27 %. Which diagnosis is most likely?

- **systemic scleroderma**
- SLE
- dermatomyositis
- polymyositis
- anasarca

- A 42-year-old patient complains of yellowish skin on the abdomen with a pinkish-bluish corolla and a feeling of skin tightness in this area. The complaints appeared two months ago. Objectively: two foci of oval skin lesions measuring 13 x 16 cm and 4 x 9 cm are visualized on the abdomen. The skin is dry, shiny, has a yellowish tinge with a pinkish-bluish corolla. Palpation determines the dense skin. There is no hair in the lesions. Make a clinical diagnosis:
- **plaque scleroderma**
- psoriasis
- exfoliative dermatitis
- eczema
- ectopic dermatitis

- The 38-year-old patient has recently begun to experience severe dry mouth, a feeling of "sand in the eyes", hyperemia of the sclera, impaired swallowing of solid foods. She has been suffering from scleroderma for 8 years. Objectively: parotid salivary glands are enlarged, compacted on palpation. Manifestation of which complication was the above?
- **Sjogren's syndrome**
- Sharpe's syndrome
- Raynaud's syndrome
- Reiter's syndrome
- Felty's syndrome

- A patient with a local form of systemic sclerosis has CREST syndrome. Criteria not included in CREST syndrome:
- **rheumatic nodules**
- calcification
- changes in the esophagus
- Raynaud's syndrome
- sclerodactyly

- A 48-year-old woman complains on swollen hands, discoloration of the skin on the face and chest, difficulty passing food after swallowing. She has been ill for 5 years. On examination: pointed nose, symmetrical thickening of the fingers, with signs of tension and induration of the skin of the fingers. Above the lungs: dry rales. Heart tones are weakened, arrhythmic rhythm, accent II tone over the pulmonary artery, heart rate – 120/min. In the blood: ESR acceleration,

hypergammaglobulinemia. What is the most likely main mechanism of disease development?

- **disorders of fibrosis and microcirculation**
- formation of antibodies to erythrocytes
- formation of antibodies to cardiac cells
- formation of antibodies to glucosaminoglycans
- formation of antibodies to native DNA

- The patient complains of morning stiffness in the hands, a feeling of tightness of the skin. Objectively: the face is amimic, the narrowing of the mouth slit like a "purse", the fingertips are pale, cold to the touch. In the blood: ESR acceleration. Which diagnosis is most likely?

- **systemic scleroderma**
- SLE
- Sharpe's syndrome
- Reiter's syndrome
- polymyositis

- A 60-year-old patient was admitted to the rheumatology department on suspicion of scleroderma in a very serious condition. Low nutrition, "mask-like" face, osteolysis of the nail phalanges of the fingers. In the blood: erythrocytes – 2.7 x 10^9/l, ESR – 52 mm/h. In the urine – an increase in free oxyproline. One of the most likely links in the pathogenesis is:

- **the appearance of antibodies to collagen**
- formation of antibodies to native DNA
- formation of antibodies to erythrocytes
- formation of antibodies to cardiac cells
- the appearance of antibodies to muscles

- A 50-year-old patient complains of dry mouth, swallowing disorders, “sand” in the eyes, and joint pain. Objectively: enlargement of the parotid salivary glands, blepharoconjunctivitis, hypolacrhythmia, hepatosplenomegaly. The development of which syndrome is observed in the patient?

- **Sjogren**
- Sharpe
- Reuters
- Raynaud
- Felty

- A patient with suspected systemic scleroderma was admitted to the clinic. The skin of the lower extremities and abdomen has foci of compaction, the left leg is thinned due to atrophy of the subcutaneous tissue and muscles. Capillaroscopy revealed severe vascular spasm. Indicate the main pathogenetic mechanism of disease development:

- **increased collagen production by fibroblasts**
- hyperproduction of immune complexes
- hyperproduction of inflammatory factors
- imbalance between immunocompetent cells
- complement hyperactivity

- A 35-year-old patient suffers from systemic sclerosis with lesions of the skin, joints, heart and lungs. Raynaud's syndrome was detected. Which of the following heart lesions is most often in systemic sclerosis:
- **cardiosclerosis**
- STEMI
- tamponade of the heart
- left ventricular aneurysm
- aortic aneurysm

- The patient was admitted to the pulmonology department with complaints on shortness of breath, unproductive cough during exercise. From the anamnesis: suffers from scleroderma. During the examination: crepitation during inspiration. The development of which complication of scleroderma occurred in the patient?
- **interstitial lung damage**
- acute biventricular insufficiency
- acute left ventricular failure
- bronchiectasis
- pneumonia

- A 37-year-old patient complains of general weakness, low-grade fever, joint pain, weight loss, cyanotic skin tone of the hands in the cold. After the examination, systemic sclerosis was diagnosed. Which of the following skin lesions is a characteristic feature of this disease:
- **dense swelling and induration of the skin on the face, hands, legs**
- erythema in open areas on the type of "décolleté"
- persistent erythema of the face in the area of the chin arches and nose
- blistering rash on the skin of the torso
- erythema and periorbital edema in the form of glasses

- The patient was admitted to the rheumatology department with suspected scleroderma. The course of the disease is characterized by a poor clinical picture, so the establishment of a clinical diagnosis is difficult. What laboratory indicator will confirm scleroderma?
- **detection of antibodies to collagen**
- detection of antibodies to leukocytes
- detection of antibodies to native DNA
- detection of antibodies to erythrocytes
- detection of antibodies to RNA

• The 29-year-old patient has been suffering from systemic scleroderma for 10 years. She was repeatedly treated in hospital. Complains of intermittent dull pain in the heart, palpitations, shortness of breath, headache, eyelid swelling, weight loss, pain and deformity of the joints. Which organ pathology worsens the prognosis in the first place?

• **kidney**
• stomach
• hearts
• lungs
• liver

• Skin and muscle biopsy was performed in a patient with Raynaud's syndrome, edema, induration and atrophy of the skin, hands. The result is: microcirculation disorders with endothelial proliferation, wall thickening with narrowing of the vascular lumen, deformation and reduction of the capillary network. Which of the systemic connective tissue diseases is most characterized by the following symptoms?

• **systemic scleroderma**
• SLE
• rheumatoid arthritis
• polymyositis
• dermatomyositis

• During the examination of the patient's skin and subcutaneous tissue biopsy, the histologist found signs of impaired microcirculation with endothelial proliferation, wall thickening with narrowing of the vascular lumen, deformation and reduction of the capillary network. Which of the systemic connective tissue diseases is most characterized by the following symptoms?

• **systemic scleroderma**
• SLE
• dermatomyositis
• polymyositis
• rheumatoid arthritis

• The 42-year-old patient complains of morning stiffness in the wrist joints, a feeling of tightness of the facial skin, difficulty swallowing food. On examination: facial amygdala, narrowing of the mouth like a "purse", the fingertips are pale, cold to the touch. Heart tones are arrhythmic, weakened, systolic murmur at the apex. Blood: erythrocytes – 4.2 x 10^{12}/l, leukocytes – 4.7 x 10^{9}/l, ESR – 40 mm/h. Which marker of systemic scleroderma needs to be determined?

• **the presence of anti-Ssl-70 and anticentromeric antibodies**
• the presence of antinuclear antibodies
• detection of antibodies to native DNA

- the presence of antierythrocyte antibodies
- the presence of antibodies to RNA

- A 37-year-old patient with scleroderma for 3 years achieved sustained remission after taking D-penicillamine for 1 year. What is the mechanism of action of the drug determines the pathogenetic effect?
- **inhibition of collagen synthesis**
- inhibition of immune reactions
- hyperproduction of catecholamines
- inhibition of fibroblast migration
- inhibition of leukocyte activity

- A 32-year-old patient with Raynaud's syndrome for 8 years developed pain in the small joints of her hands and a feeling of difficulty passing food through the esophagus during the last month. What disease should be considered in this case?
- **systemic scleroderma**
- dermatomyositis
- rheumatoid arthritis
- SLE
- Polymyositis

- A 29-year-old woman complains of a feeling of tightness of the skin of the face and hands, difficulty swallowing solid foods, heartburn behind the chest, a feeling of paresthesias in the hands, brittle nails. Objectively: a symptom of "purse", tightness of the skin on the hands. The appointment of which drug is appropriate for pathogenetic therapy?
- **D-penicillamine**
- dipyridamole
- nalbuphine
- colchicine
- enterosgel

- A 34-year-old patient complains of pale fingertips that occur during cooling. Indicates that when heated, the fingers become bluish first, and then red. The drug of choice for the treatment of this syndrome is:
- **nifedipine**
- colchicine
- diprilif
- lisinopril
- isosorbide dinitrate

- **Dermatomyositis. Dermatopolymyositis**

Level 1 test tasks:

- Morphological signs of dermatomyositis:
- **skeletal muscle infiltration and degeneration or necrosis of muscle fibrils**
- smooth muscle infiltration and degeneration or necrosis of muscle fibrils
- inflammatory infiltration of interstitial tissue
- vascular wall compaction
- all listed

- The main diagnostic criteria of dermatopolymyositis:
- **Gottron's symptom**
- osteolysis of the nail phalanges
- telangiectasia
- sclerodactyly
- erythema on the face

- Signs of dermatomyositis:
- **severe muscle weakness and atrophy**
- nodules on the body
- alopecia
- enanthema
- lesions of the mucous membranes

- The most typical diagnostic criterion for dermatomyositis:
- **paraorbital edema and erythema**
- Reiter's syndrome
- Raynaud's syndrome
- Sjogren's syndrome
- CREST syndrome

- Dysphonia and dysphagia in dermatomyositis are a sign of damage:
- **pharynx and larynx**
- nerve plexuses
- bronchi
- tongue
- jaw joints

- The main diagnostic criteria of dermatopolymyositis:
- **typical electromyographic examination data**
- typical ECG data
- typical ECHO data
- typical FEGDS data

- typical bronchoscopy data

- Diagnostic value in dermatomyositis has:
- **high creatine phosphokinase activity**
- high aspartate aminotransferase activity
- high amylase activity
- anemia
- hypertriglyceridemia

- Diagnostic value in dermatomyositis has:
- **high aldolase activity**
- high amylase activity
- anemia
- thrombocytosis
- thrombocytopenia

- Additional diagnostic criteria for dermatopolymyositis include:
- **calcification**
- trichophytia
- photosensitization
- typical ECG data
- typical FEGDS data

- Criteria of polymyositis:
- **positive test for anti Jo1 antibodies**
- heliotropic rash
- Bouchard's nodules
- Heberden's nodules
- skin enanthema

- Criteria of polymyositis:
- **increase in serum creatine kinase or aldolase**
- erythema of the skin
- skin exanthema
- skin enanthema
- heliotropic rash

- The main diagnostic criteria of dermatopolymyositis:
- **pathomorphology of muscle biopsy**
- Bouchard's nodules
- Heberden's nodules
- ankylosis
- osteophytosis

- Diagnostic value in dermatomyositis has:
- **the presence of myoglobin in the urine**
- hypoproteinemia
- leukocyturia
- hypertriglyceridemia
- lymphopenia

- The main diagnostic criteria of dermatopolymyositis:
- **erythema of the skin of the extensor surfaces of the joints**
- erythema on the face
- telangiectasia
- sclerodactyly
- osteolysis of the nail phalanges

- Additional diagnostic criteria for dermatopolymyositis include:
- **dysphagia**
- dyspepsia
- heartburn
- neutropenia
- hypoproteinemia

Level 2 test tasks:

- For cutaneous manifestations of dermatopolymyositis is characterized by all of the above, except:
- **nodular formations**
- “holster” symptom
- “scarf” symptom
- erythema of the “décolleté” type
- heliotropic rash

- Diagnostic criteria for dermatopolymyositis:
- **non-destructive arthritis and arthralgia**
- **spontaneous muscle pain**
- **heliotropic rash**
- anemia
- leukopenia

- Diagnostic criteria for dermatopolymyositis:
- **heliotropic rash**
- **Gottron's sign**
- **spontaneous muscle pain**
- kidney damage

- anemia

- The greatest diagnostic value at a dermatopolymiosis have all listed below examinations, except:
- **AT Scl-70**
- **HLA B_{27}**
- ANA
- increasing levels of creatine phosphokinase, myoglobin
- antibodies to aminoacyl tRNA synthetase

- If pain and joint syndromes dominate, there is a chronic course of the disease with a low degree of activity, the means of choice are:
- **diclofenac sodium**
- **ibuprofen**
- hydrocortisone
- methotrexate
- nalbuphine

- In order to improve the metabolism of damaged muscles in dermatopolymyositis is prescribed:
- **carnitine (riboxin)**
- **B vitamins**
- **mildronate**
- **retabolil**
- prednisolone

- In order to improve the metabolism of damaged muscles in dermatopolymyositis is prescribed:
- **riboxin**
- **retabolil**
- methotrexate
- hydrocortisone
- NSAIDs

- Patients with dermatopolymyositis with severe calcifications are recommended for treatment:
- **EDTA**
- **lidase**
- **vobenzim**
- methotrexate
- methypred

- In cases of subacute dermatopolymyositis, or exacerbation of chronic dermatopolymyositis, prednisolone is prescribed in doses:

- **30–40 mg/d**
- **60 mg/d**
- 5–25 mg/d
- 150–100 mg/d
- 75-80 mg/d

- The most effective treatments for dermatopolymyositis are:
- **glucocorticoids**
- **complexes**
- anticoagulants
- cytostatics
- anticonvulsants

- Urgent treatment of respiratory disorders in dermatomyositis:
- **pulse therapy with methylprednisolone 1000 mg of cyclophosphan for the first 3 days**
- methylprednisolone 1000 mg per day
- hemosorption
- plasmapheresis
- NSAIDs

Level 3 test tasks:

- A 42-year-old patient complains of fever up to 39 ^{o}C, weight loss, severe pain and weakness in the muscles of the upper extremities, inability to raise her arms, swallowing disorders. Considers himself ill for 5 months. On examination: paraorbital edema with erythema in the form of "glasses", telangiectasia on the hands and torso. Laboratory: ESR increased to 60 mm/h., increase in creatine phosphokinase, aldolase, CRP – +++, antinuclear factor in the titer of 1 : 40. Muscle biopsy revealed: lymphocytic infiltration of muscle fibers, edema, loss of striation. Indicate the most probable diagnosis:
- **dermatomyositis**
- SLE
- rheumatoid arthritis
- polymyositis
- Sharpe's disease

- A 43-year-old man complains of weakness in the muscles of the arms and legs, difficulty swallowing food, cough. He has been ill for 8 years. The disease began with pain and swelling of the joints of both hands. Laboratory data: creatinuria, increase in blood levels of transaminases, myoglobin, creatine phosphokinase, lactate dehydrogenase. Your diagnosis?
- **polymyositis**

- dermatomyositis
- SLE
- rheumatoid arthritis
- Behcet's disease

- A 42-year-old man complains of weakness of the proximal muscle groups of the lower and upper extremities, shoulder muscles, torso, which is accompanied by spontaneous myalgias, fever. In the blood – an increase in serum creatine kinase and aldolase, the level of CRP, ESR – 53 mm/h. Biopsy of the thigh muscle with histological examination of the material – signs of inflammatory infiltration of skeletal muscle with degeneration and necrosis of muscle fibrils. Which diagnosis is most likely?
- **polymyositis**
- dermatomyositis
- rheumatoid arthritis
- acute rheumatic fever
- PAN

- A 28-year-old woman was examined in the rheumatology department for anorexia, abdominal and shoulder pain, difficulty swallowing, and polyarthralgia. The disease began after a cold with severe polyarthralgia and sharp pain in the hands. Erythematous rash is visualized on the face and neck, whitening and cooling of the upper and lower extremities are noted. Myasthenic syndrome does not decrease after proserine injections. In the blood test: leukocytosis, eosinophils – 12 %, ESR – 50 mm/h, ALT – 1.4 mmol/l, creatine phosphokinase – 1.8 mmol/l/h. What is the most likely diagnosis?
- **dermatomyositis**
- SLE
- PAN
- polymyositis
- acute rheumatic fever

- A 42-year-old woman complains of severe weakness and pain in the shoulder and thigh muscles, swelling of the face, redness of the skin over the knees and ankles, pain and restriction of movement in them. In the anamnesis – 4 weeks ago there was a sore throat. Objectively: light purple erythema on the face with swelling of the upper eyelids, colloidal spots on the skin around the joints, swelling of the knees, ankles, pain on palpation in the shoulder and thigh muscles, t – 38.7 ºC. In the blood: Hb – 72 g/l, erythrocytes – 2.4 x 10^{12}/l, leukocytes – 6.5 x 10^{9}/l, ESR – 62 mm/h., CRP – +++. Calf muscle biopsy – infiltration with focal degeneration of muscle fibers. Your diagnosis?
- **dermatomyositis**
- SLE
- PAN

- acute rheumatic fever
- polymyositis

- The 23-year-old patient was hospitalized due to hyperthermia, myalgia and dysphagia. Objectively: paraorbital edema with a pinkish-purple tinge; pain, muscle hypotension, inflammation of the capillaries in the pads of the fingers, dilation of the heart. In the blood and urine: increased creatinine. Preliminary diagnosis is?
- **dermatomyositis**
- PAN
- SLE
- Felty's disease
- Steele's disease

- A 62-year-old patient complains of weakness in the muscles of the arms and legs, progressive difficulty swallowing, and a dry, paroxysmal cough. He was ill for 8 years, the disease began with pain and swelling of the wrists of both hands. Laboratory data: creatinuria, increased blood levels of transaminases, myoglobin, creatine phosphokinase, lactate dehydrogenase. Your diagnosis?
- **polymyositis**
- dermatomyositis
- myxedema
- Addison's disease
- myasthenia gravis

- A 28-year-old woman complains of pain in the muscles of the shoulders, back and legs, severe stiffness in the morning, weight loss, general weakness. Objective: upper eyelids swollen, hyperpigmented, systolic murmur at the apex of the heart. In the biochemical analysis of blood: a pronounced increase in the activity of transaminases. Which disease is most likely?
- **dermatomyositis**
- polymyositis
- SLE
- PAN
- Takayasu's disease

- The 28-year-old patient complains of pain in the muscles of the shoulders, back and legs, severe stiffness in the morning, weight loss, general weakness. Objectively: the upper eyelids are swollen, hyperpigmented, the borders of the heart are expanded to the left, systolic murmur at the apex. The biochemical analysis of blood revealed an increase in the activity of transaminases. For which disease this clinical situation is typical?
- **dermatomyositis**
- Takayasu's disease

- myxedema
- SLE
- Gout

- The 36-year-old patient complains of pain in the muscles of the legs and back, stiffness in the morning, general weakness, weight loss. On examination: edema of the upper eyelids, their pigmentation, dilation of the heart to the left, systolic murmur above the apex. In the biochemical analysis of blood the increase of transaminases is expressed. Make a preliminary diagnosis?
- **dermatomyositis**
- SLE
- systemic scleroderma
- goiter
- psoriasis

- A 36-year-old woman complains of joint and muscle pain, headache, palpitations, fever, sweating, and fatigue. Objectively: dysphagia, red rash on the skin around the eyes, on the cheekbones, above the interphalangeal joints; swelling of the upper eyelids, tachycardia, symmetrical arthritis of the wrists, Gottron's sign, atrophy on the fingertips, telangiectasia. Antibodies to Pm – 1, jo – 1 antigens, ribonucleoprotein, RNA polymerase I and fibrillin, increased ESR and CRP were detected. What disease causes such a clinical picture?
- **dermatomyositis**
- exfoliative dermatitis
- myasthenia gravis
- polymyositis
- SLE

- A 50-year-old man complains of joint and muscle pain, headache, fatigue, sweating, palpitations, fever, and dysphagia. On examination: rash on the skin around the eyes, which have a purple tinge and protrude slightly above its surface; the presence of pink, with signs of peeling, nodules and plaques on the extensor surfaces of the joints, atrophy of the skin on the fingertips, telangiectasia; swelling of the upper eyelids; tachycardia; symmetrical arthritis of the wrist joints. In the blood: detected antibodies to antigens Pm–1, jo–1, ribonucleoprotein, RNA polymerase I and fibrillin, acceleration of ESR and C-reactive protein. Which of the above signs is a sign of Gottron?
- **nodules and plaques on the extensor surfaces of the joints**
- rash on the skin around the eyes
- dysphagia
- symmetrical arthritis of the wrist joints
- tachycardia

- Patient 38 years old, complains of weakness in the muscles of the arms and legs, slight pain in the muscles of the shoulder and pelvis, difficulty swallowing,

intermittent cough. The disease began with pain and swelling of the wrists of both hands. Laboratory data: increase in blood transaminases, myoglobin, aldolase, CRP. Your diagnosis?

- **polymyositis**
- SLE
- PAN
- IHD
- Goiter

- A 45-year-old patient complains of pain in the muscles of the shoulders, back and legs, stiffness in the morning, weight loss, and general weakness. Objectively: the upper eyelids are swollen, pigmented, the borders of the heart are expanded to the left, systolic murmur at the apex. In the biochemical analysis of blood – increased activity of transaminases. What is the increased activity of transaminases in dermatopolymyositis ?

- **process activity**
- occurrence of pulmonitis
- occurrence of hepatitis
- occurrence of nephritis
- occurrence of neuritis

- A 27-year-old patient complains of fever up to 39.2 °C, marked weakness in the proximal muscles of the arms and legs. In the blood – increased activity of creatine phosphokinase-MM fraction, aminotransferases, proteins of the acute phase of inflammation, acceleration of ESR. According to muscle biopsy – loss of striation of muscle fibers, their fragmentation, granular and waxy degeneration, necrosis and macrophage infiltration. Which diagnosis is most likely?

- **polymyositis**
- acute rheumatic fever
- myxedema
- anasarca
- Felty's disease

- A 35-year-old man complained of difficulty swallowing, swelling of the face and hands, fatigue, and general weakness. These symptoms appeared 14 days after a vacation at sea. Objective: erythema of the face, swelling of the leg muscles. Blood pressure – 110/60 mm Hg. Art. In the blood: the activity of AST – 0.85 mmol/l, ALT – 1.9 mmol/l, aldolase level – 10.4 IU/l, creatine phosphokinase – 300 U/l. Which method of examination is the most specific?

- **muscle biopsy**
- capillaroscopy
- algesimetry
- thermometry
- bronchoscopy

• A 30-year-old man suddenly had a fever of up to 40 °C, and a dark purple rash appeared on the skin around his eyes, neck and front of his chest. Notes difficulty swallowing, getting out of bed and moving up stairs. Objectively: skeletal muscle hypotension, tenderness on palpation, decreased muscle strength. In the blood: ESR – 50 mm/h, erythrocytes – 4.2 x 10^{12}/l, Hb – 126 g/l; CRP – 12 mg/l. Which enzyme level in the blood will be crucial to verify the diagnosis?

• **CPK**
• ALT
• AST
• AP
• GGTP

• A 42-year-old man complains of low-intensity pain and growing, in the last 4 weeks, weakness in the muscles of the shoulders and pelvis, back, difficulty getting out of bed, moving up stairs, shaving. Suspected dermatomyositis. In the blood: Hb – 109 g/l, leukocytes – 11.2 x 10^9/l, eosinophils – 7 %, ESR – 34 mm/h, CRP – ++. Changes in which laboratory indicator will be of crucial diagnostic value?

• **creatine phosphokinase**
• ALT
• AST
• GGTP
• Myoglobin

• High titer of antibodies to antigens Pm–1, jo–1, ribonucleoprotein, RNA polymerase I and fibrillin, acceleration of ESR and CRP. Which diagnosis is most likely?

• **dermatomyositis**
• SLE
• PAN
• psoriasis
• diffuse toxic goiter

• The doctor diagnosed the patient with "Dermatomyositis". Which laboratory indicator should be examined to verify the diagnosis?

• **creatine phosphokinase**
• CRP
• GGTP
• AST
• ALT

• A 36-year-old woman complained of general weakness, swelling of the face and hands, fatigue, difficulty swallowing, and arrhythmia. These symptoms

appeared 10 days after a vacation at sea. Objectively: erythema of the face, symptom of "glasses", swelling of the leg muscles. Heart tones are muted, blood pressure – 90/60 mm Hg. Art. In the blood: the activity of AST – 0.86 mmol/l, ALT – 1.8 mmol/l, increased activity of aldolase and creatine phosphokinase. What test will help confirm the diagnosis?

- **muscle biopsy**
- ECG
- MRI
- bronchoscopy
- FEGDS

- A 45-year-old patient has a combination of polyneuritis, muscle atrophy, significant weight loss, fever, high blood pressure. In general clinical tests – signs of nonspecific inflammation. Which test is most indicated for diagnosis?
- **muscle biopsy with histological examination**
- kidney biopsy
- electromyography
- counting the number of immune complexes
- counting the number of ANA

- The 54-year-old man complains of mild pain and progressive weakness in the muscles of the shoulder and pelvis, back, significant difficulty getting out of bed, moving up stairs, especially down. Suspected dermatomyositis. In the blood: Hb – 90 g/l, leukocytes – 14.8 x 10^9/l, ESR – 52 mm/h, CRP – +++. Changes in which laboratory indicator will be crucial diagnostic value for diagnosis verification?
- **aldolase**
- AST
- ALT
- GGTP
- ASL-O

- A 34-year-old patient complains of pain in the joints, muscles, muscle weakness. Treatment with nonsteroidal anti-inflammatory drugs did not work. On examination: movements of the torso and limbs are difficult, in the paraorbital area – dark erythema. Palpation of the muscles of the shoulders and thighs is painful. Heart tones are weakened, systolic murmur over the apex of the heart. What is the most likely major pathogenetic mechanism of this disease?
- **synthesis of myosin-specific antibodies**
- synthesis of antinuclear antibodies
- synthesis of antibodies to native DNA
- synthesis of antibodies to erythrocytes
- synthesis of antibodies to vascular endothelium

• The 29-year-old patient complained of difficulty swallowing, swelling of the face, hands, fatigue, and general weakness. These symptoms appeared 12 days after excessive insolation. On examination: erythema of the face, swelling of the leg muscles. Heart tones are muffled, arrhythmic. BP 100/60 mm Hg. Art. In the blood: the activity of AST – 0.87 mmol/l, ALT – 1.9 mmol/l, aldolase – 1.8 IU/l, creatine phosphokinase – 3.5 mmol/l. Which method of examination is the most specific?

• **muscle biopsy**
• skin biopsy
• kidney biopsy
• liver biopsy
• mucosal biopsy

• A 25-year-old man went to the doctor with complaints of general weakness, swelling of the face and hands, fatigue, difficulty swallowing. Objectively: erythema of the face, symptom of "glasses", swelling of the leg muscles. Blood pressure – 110/65 mm Hg. Art. In the blood: AST – 0.88 mmol/l, ALT – 1.8 mmol/l, increased activity of aldolase and creatine phosphokinase. What treatment should be suggested to the patient?

• **Metipred**
• **PPIs**
• **riboxin**
• midokalm
• moxonidine
•

• Systemic vasculitis

Level 1 test tasks:

• Giant cell arteritis occurs in the background:
• **lesions of large vessels**
• small vessel damage
• lesions of vessels of medium caliber
• capillary damage
• lymph node damage

• The term "systemic vasculitis" means:
• **generalized vascular lesions of inflammatory-necrotic nature**
• vascular lesions of a toxic nature
• vascular lesions of an allergic nature
• vascular lesions of infectious nature
• violation of innervation

• The most characteristic of Takayasu's arteritis:

- **lesions of large vessels**
- lesions of medium vessels
- capillaritis
- lesions of lymphatic vessels
- lymph node involvement

- It is characteristic of polyarteritis nodosa:
- **necrotizing vasculitis with lesions of muscular arteries of medium and small caliber**
- capillaritis
- lesions of the aortic endothelium
- vascular lesions of only small caliber
- vascular lesions of only medium caliber

- Typical for hypersensitive vasculitis is:
- **lesions of small vessels with the deposition of immune complexes**
- small-caliber vascular lesions without deposition of immune complexes
- lesions of medium caliber vessels without the deposition of immune complexes
- lesions of large vessels without the deposition of immune complexes
- lesions of large vessels with the deposition of immune complexes

- The morphological variant of Kawasaki disease is:
- **lesions of medium caliber vessels**
- lesions of large vessels
- lesions of lymphatic vessels
- necrotizing vasculitis with lesions arteries of medium and small caliber
- capillaritis

- Vasculitis of Schonlein-Genoch occurs in the background of:
- **lesions of small vessels with the deposition of immune complexes**
- damage to small vessels without the deposition of immune complexes
- lesions of large vessels without the deposition of immune complexes
- lesions of large vessels with the deposition of immune complexes
- capillaritis

- Typical fo Charg-Strauss syndrome:
- **small vessel damage without deposition of immune complexes**
- lesions of small vessels with the deposition of immune complexes
- lesions of large vessels with the deposition of immune complexes
- lesions of large vessels without the deposition of immune complexes
- lesions of medium diameter vessels without the deposition of immune complexes

- Wegener's granulomatosis is manifested:
- **small vessel damage without deposition of immune complexes**
- lesions of medium diameter vessels without the deposition of immune complexes
- large vessels damage without the deposition of immune complexes
- lesions of large vessels with the deposition of immune complexes
- lesions of lymphatic vessels

- Hemorrhagic vasculitis is:
- **systemic vasculitis with lesions of capillaries, arterioles, venules of skin, joints, abdomen and kidneys**
- systemic vasculitis with lesions of large vessels
- systemic vasculitis with lesions of medium vessels
- systemic vasculitis with lesions of small vessels
- capillaritis

- What is the daily dose of cyclophosphamide recommended for induction therapy in patients with polyarteritis nodosa?
- **2 mg/kg**
- 6 mg/kg
- 60 mg/kg
- 18 mg/kg
- 150 mg/kg
- Hypersensitive vasculitis is:
- **isolated vasculitis of the skin without lesions of the internal organs**
- systemic vasculitis with lesions of capillaries, arterioles, venules of skin, joints, abdomen and kidneys
- systemic vasculitis of small respiratory vessels
- systemic vasculitis of small vessels of the kidneys
- systemic vasculitis of small vessels of the stomach

- Bronchoobstructive syndrome is often a manifestation of:
- **Charg-Strauss syndrome**
- aortoarteritis
- Goodpasture's syndrome
- Hypersensitive vasculitis
- Schonlein-Genoch vasculitis

- Goodpasture's syndrome is:
- **systemic vasculitis with capillary damage**
- systemic vasculitis with lesions of large vessels
- systemic vasculitis with lesions of medium vessels
- systemic vasculitis with lesions of small vessels
- systemic vasculitis of small vessels of the kidneys

- In the treatment of patients with Charg-Strauss syndrome is most often used:
- **prednisolone**
- hydrocortisone
- methotrexate
- metoprolol
- plakvenil

- Lesions of the respiratory system, which most often occurs in polyarteritis nodosa:
- **asthmatic syndrome**
- bronchiectasis
- fibrosis
- pulmonitis
- bronchitis

- At treatment of patients with a microscopic polyangiitis apply all listed means, except:
- **bone marrow transplantation**
- appointment of cytostatics
- appointment of glucocorticoids
- kidney transplantation
- renal replacement therapy

- For the treatment of patients with polyarteritis nodosa prescribe all of these drugs, except:
- **NSAIDs**
- antiplatelet agents
- anticoagulants
- glucocorticoids
- immunosuppressants

Level 2 test tasks

- The main etiological risk factors for systemic vasculitis:
- **HBV, HCV, HIV**
- **Streptococcus pneumoniae**
- **genetic predisposition**
- **toxic effect of drugs**
- age of the patient

- What are the pathogenetic features of the development of clinical symptoms in systemic vasculitis?

- **endothelial damage**
- **microcirculation disorders**
- **lesions of the vascular wall**
- **tissue ischemia**
- tissue fibrosis

- Systemic vasculitis includes:
- **polyarteritis nodosa**
- **Takayasu's disease**
- Charg-Strauss syndrome
- microscopic polyangiitis
- Addison's disease

- The main clinical signs of systemic vasculitis are:
- **progressing dysfunction of internal organs**
- **nonspecific inflammatory process in the blood**
- **general weakness**
- **fever**
- predominant lesion of one system

- Typical manifestations of polyarteritis nodosa are:
- **hypertension**
- **"livedo reticularis" on the skin**
- **osalgia**
- **emaciation**
- vision loss

- Lung and kidney damage is characteristic of:
- **Goodpasture's syndrome**
- **Charg-Strauss syndrome**
- **Wegener's granulomatosis**
- **microscopic arteritis**
- vasculitis of Schonlein-Genoch

- Which of the following symptoms is the most typical for polyarteritis nodosa?
- **polyneuropathy**
- **osalgia**
- **arthralgia**
- hepatitis
- gastritis

- Bronchoobstructive syndrome with eosinophilia is typical for:
- **polyarteritis nodosa**

- **Charg-Strauss syndrome**
- Schonlein-Genoch vasculitis
- Wegener's granulomatosis
- microscopic arteritis

- Nervous system damage is typical for:
- **Charg-Strauss syndrome**
- **polyarteritis nodosa**
- Wegener's granulomatosis
- microscopic arteritis
- Schonlein-Genoch vasculitis

- Typical clinical manifestations of polyarteritis nodosa are:
- **emaciation**
- **neuropathy**
- **"livedo reticularis "**
- **increase in diastolic blood pressure**
- pneumonia

- ANCA-dependent vasculitis includes:
- **microscopic arteritis**
- **Wegener's granulomatosis**
- **Charg-Strauss syndrome**
- Goodpasture's syndrome
- hyaline membrane disease

- Which of these signs are the criteria for kidney damage in polyarteritis nodosa?
- **microhematuria**
- **proteinuria**
- nephrotic syndrome
- leucocyturia
- nephritic syndrome

- Lung damage is characteristic of:
- **Charg-Strauss syndrome**
- **Goodpasture's syndrome**
- **microscopic arteritis**
- **Wegener's granulomatosis**
- vasculitis of Schonlein-Genoch

- For cutaneous manifestations of polyarteritis nodosa are the most typical:
- **"Marble" skin**
- **subcutaneous nodules**

- **skin necrosis**
- **"livedo reticularis "**
- Vitiligo

- Hemorrhages in the alveoli of the lungs are likely when:
- **microscopic arteritis**
- **Goodpasture's syndrome**
- **Wegener's granulomatosis**
- Schonlein-Genoch vasculitis
- polyarteritis nodosa

- It is typical for cutaneous manifestations of hypersensitive vasculitis:
- **papules with the formation of ulcers**
- **erythema with urticarial elements**
- **urticaria**
- **maculopapular rash**
- vitiligo

- It is typical for Charg-Strauss syndrome:
- **eosinophilia**
- **broncho obstructive syndrome**
- **lesions of the nervous system**
- arterial hypertension
- anury

- For the cutaneous variant of Schonlein-Genoch vasculitis is typical:
- **papular-hemorrhagic rash with urticarial elements**
- **hemorrhage with a symmetrical rash on the extremities, buttocks**
- skin necrosis
- telangiectasia
- papular-hemorrhagic rashes that are not palpable

- Abdominal syndrome in Schonlein-Henoch vasculitis:
- **peritonitis**
- **black stool**
- **pain**
- **hemorrhages on the gastrointestinal mucosa, mesentery, peritoneum**
- hepatitis

- Typical clinical manifestations of Schonlein-Genoch vasculitis:
- **abdominal syndrome**
- **joint syndrome**
- **skin syndrome**
- pulmonary syndrome

- nephrotic syndrome

- Which of the proposed options characterizes the lesions of the nervous system in polyarteritis nodosa?
- **meningoencephalitis**
- **stroke**
- **symmetrical multiple sensory and motor monopolyneurites**
- chorea
- epileptic syndrome

- Schonlein-Genoch vasculitis joint syndrome:
- **arthritis of large joints**
- **arthralgias in large joints**
- deformation of large joints
- arthritis of small joints
- ankylosis

- Kidney damage, which is most typical for polyarteritis nodosa:
- **glomerulonephritis**
- **nephropathy with urinary syndrome**
- nephrotic syndrome
- urolithiasis
- pyelonephritis

- Diagnosis of Schonlein-Genoch vasculitis is based on the presence:
- **abdominal syndrome**
- **papular-hemorrhagic rashes on the limbs, buttocks, palpable and do not disappear when pressed**
- **arthritis of large joints**
- ankylosis
- arthritis of small joints

- The patient is suspected of having antiphospholipid syndrome. The purpose of which study will confirm the diagnosis?
- **blood test for antibodies to cardiolipin Ig M and G**
- **blood test for antibodies to phospholipids Ig M and G**
- antibodies to the erythrocyte membrane
- antibodies to native DNA
- antibodies to RNA

- The main clinical forms of polyarteritis nodosa are:
- **monoorganic**
- skin thrombotic
- **asthmatic**

- classical
- multiorgan

- It is typical for polyarteritis nodosa:
- **formation of vascular aneurysms**
- **lesions of muscular arteries of medium and small caliber**
- **multiorgan lesion with the development of thromboembolic complications**
- pneumonia
- hemophthisis

- The major diagnostic criteria for polyarteritis nodosa include:
- **coronary symptoms**
- **kidney damage**
- **bronchial asthma with eosinophilia**
- fever
- emaciation

- Typical skin lesions in polyarteritis nodosa:
- **Raynaud's syndrome**
- **hemorrhagic and (or) urticarial rash**
- **erythematous and (or) maculopapular rash**
- telangiectasia
- petechiae and ecchymoses

- Abdominal syndrome in polyarteritis nodosa is most often manifested:
- **abdominal pain**
- **liver infarction**
- **intestinal infarction**
- **dyspeptic syndrome**
- **pancreatic infarction**

- The small diagnostic criteria for polyarteritis nodosa include:
- **emaciation**
- **схуднення fever**
- **myalgia**
- kidney damage
- bronchial asthma

- For laboratory and instrumental diagnostic criteria of nodular polyarteritis is typical:
- **increase in diastolic blood pressure > 90 mm Hg**
- **aneurysms or occlusions of visceral arteries at arteriography**
- **antibodies to HbsAg**

- **increase in creatinine and urea**
- increase troponin

- What immunological methods of blood research are most important for the diagnosis of microscopic polyangiitis?
- **antibodies to MPO**
- **antibodies to ANCA**
- antibodies to RNA
- antibodies to ANA
- antibodies to Scl-70

- To verify Goodpasture's syndrome is prescribed:
- **blood tests for antibodies to the basement membrane of the alveoli**
- **nephrobiopsy**
- **blood test for antibodies to the glomerular basement membrane**
- intestinal biopsy
- skin biopsy

- Clinical symptoms of the Meltzer triad:
- general weakness
- **purpura**
- **arthralgia**
- hypertension
- exophthalmos

- Purpura localized on the legs, thighs and buttocks is typical for:
- **SLE**
- **hemorrhagic vasculitis**
- allergic dermatitis
- Wegener's granulomatosis
- Takayasu's disease

- Hemorrhagic rash is typical for:
- **drug vasculopathy**
- **myeloma**
- **thrombocytopenic purpura**
- SLE
- Takayasu's disease

- What pathogenetic treatment should be prescribed to patients with antiphospholipid syndrome first?
- **antiplatelet agents**
- **anticoagulants**
- **glucocorticosteroids**

- NSAIDs
- antiviral drugs

- For leukocytoclastic vasculitis is typical:
- **the presence of pustules**
- **skin elements of different sizes**
- **palpable purple of bright red color**
- **skin lesions of the lower extremities**
- telangiectasia

- It is not typical for leukocytoclastic vasculitis:
- **lesions of the skin of the neck**
- **facial skin lesions**
- the presence of pustular elements
- skin lesions of the lower third of the legs and ankles
- the presence of ecchymoses of different sizes

- Which of the proposed groups of drugs are most often used to treat patients with leukocytoclastic vasculitis of the skin?
- **NSAIDs**
- **antihistamines**
- antibiotics
- antiviral drugs
- vitamins

- Treatment of patients with vasculitis Schonlein–Genoch includes appointment:
- **glucocorticosteroids**
- **anticoagulants**
- NSAIDs
- antiplatelet agents
- muscle relaxation agents

Level 3 test tasks

- A 42-year-old man came to see a family doctor with complaints of rashes on the skin of the torso and extremities. Body temperature 37.2 °C. Spotted papular erythema with urticarial elements, single papules with ulcer formation and erythematous urticarial rash are visualized on the skin of the trunk and extremities. Lymph nodes are not enlarged. Blood and urine tests – without pathological changes. Which of the following diagnoses is the most likely?
- **hypersensitive vasculitis**
- polyarteritis nodosa

- SLE
- exfoliative dermatitis
- psoriasis

- The patient complains of malaise, fever up to 37.9 °C, shortness of breath, cough with blood, swelling of the face. Notes clouding and discoloration of urine to red. The above symptoms appeared a week after the flu vaccine. Small-bubble rales in the middle and lower parts of the pulmonary fields. BP 175/115 mm Hg. Art. In the blood: anemia (Hb – 98 g/l), ESR acceleration to 43 mm/h, leukocytosis (18 x 10^9/l); in urine: proteinuria (3.7 g/d), microhematuria (erythrocytes – 26 in f./v.); on X-ray: in the middle-lower parts of both lungs cloud-like infiltrates. What is the most likely diagnosis?
- **Goodpasture's syndrome**
- polyarteritis nodosa
- pneumonia
- pneumoconiosis
- pulmonary tuberculosis

- A 16-year-old girl, 2 weeks after the sore throat, complained of pain in the knee, hip and elbow joints, fever up to 39.4 °C, reddish skin rash. Body temperature 38.2 °C. On the skin of both extremities and buttocks – papular-hemorrhagic rash with urticarial elements that are palpable and do not disappear when pressed. In the blood: leukocytes – 8.4 x 10^9/l, platelets – 178 x 10^9/l, ESR – 23 mm/h., ASLO – 350 U/l, IgG and IgA antibodies. Your previous diagnosis?
- **Schonlein - Genoch vasculitis**
- polyarteritis nodosa
- Takayasu's disease
- SLE
- antiphospholipid syndrome

- A 19-year-old patient was admitted to the pulmonology department with complaints of shortness of breath during moderate exercise, cough with intermittent hemoptysis, unexplained bruising on the lower extremities, intermittent dizziness, and general weakness. 5 years ago - spontaneous termination of the first pregnancy at an early stage. Since then - the periodic spontaneous appearance of bruises on the lower extremities. Objectively: the skin and mucous membranes are pale, "livedo reticularis", yellow-green bruises on the lower extremities, phlebitis of superficial veins. Body temperature 36.3 °C. BR – 22/min. Heart rate – 125/min at rest. Blood pressure – 125/85 mm Hg. Art. The abdomen is soft and painless. In the blood: – platelets 160 x 10^9/l, Hb – 107 g/l, ESR – 62 mm/h; antibodies to Ig G phospholipids – 2.5 U/ml, antibodies to cardiolipin Ig G – 50.6 IU/ml, What preliminary diagnosis can be established in this case?
- **antiphospholipid syndrome**

- Goodpasture's syndrome
- Takayasu syndrome
- polyarteritis nodosa
- SLE

- A 38-year-old man went to the family doctor with complaints of pain in the joints of the legs, muscles, testicles, periodic attacks of asthma, nausea, pain in the bowel, skin rash, fever up to 39.2 °C, weight loss . From the anamnesis: the above complaints appeared a month ago, after suffering from viral hepatitis B. Objectively: body temperature 39.7 f./v. On the skin of the torso and extremities - erythematous, maculopapular, hemorrhagic rash with urticarial elements. Subcutaneous nodules along the vessels. In the lungs – hard breathing, dry rales. Heart tones are muffled, rhythmic. AT 135/110 mm Hg. Art. The abdomen is soft, painful on palpation. In the blood: erythrocytes – 2.7 x 10^{12}/l, Hb – 110 g/l, leukocytes – 14.4 x 10^{9}/l, eosinophils – 18 %, ESR – 40 mm/h., hypergammaglobulinemia, azotemia. In urine: proteinuria, erythrocyturia, cylindruria. Make a diagnosis?
- **polyarteritis nodosa**
- Goodpasture's syndrome
- Takayasu syndrome
- HIV
- antiphospholipid syndrome

- A 33-year-old patient complains of weakness, fever up to 39 °C, headache, impaired vision, weakness in the muscles of the upper and lower extremities during exercise, which disappears after rest. Considers himself ill for about six months. Blood pressure on the right arm 185/110 mm Hg, on the left 170/80 mm Hg, the pulse on the radial arteries is asymmetric, much weaker on the left, over the left common carotid artery and the abdominal aorta is heard a rough systolic murmur. In the blood: ESR – 40 m/h. SRP – +++. Indicate the most probable diagnosis:
- **Takayasu syndrome**
- Goodpasture's syndrome
- Hypersensitive vasculitis
- Polyarteritis nodosa
- Antiphospholipid syndrome

- The patient is 42 years old, complains of rashes on the skin of the feet and buttocks, accompanied by a burning sensation and itching. From the anamnesis: the disease started suddenly, for no apparent reason, with fever, joint and muscle pain, and malaise. The skin rash appeared after 3 days. Body temperature 37.2 °C. On the skin of the lower extremities, buttocks visualized papular rash, in some places – erythema, which protrudes above the skin, blisters with signs of

ulceration. Lymph nodes are not enlarged. AT 135/85 mm Hg. Art. There are no pathological changes in the blood and urine. Your previous diagnosis?

- **hypersensitive polyangiitis**
- thrombocytopenic purpura
- allergic dermatitis
- SLE
- Goodpasture's syndrome

- A 47-year-old man was diagnosed with polyarteritis nodosa. Diagnosis of this disease is based on the presence of the following manifestations, except:

- **detection of antibodies to native DNA**
- testicular pain
- neuropathy
- "livedo reticularis" on the skin
- secondary hypertension

- The 21-year-old patient complained of nausea, vomiting, abdominal pain, diarrhea with blood, pain in the knee and elbow joints, fever up to 40.1 °C, rash 2 weeks after administration of the vaccine. on reddish skin. Body temperature 39.7 °C. On the skin of both extremities and buttocks – papular-hemorrhagic rash with urticarial elements that are palpable and do not disappear when pressed. Lymph nodes are not enlarged. The knee and elbow joints of the extremities are defigured, painful on palpation, the skin over them is hyperemic, warm to the touch. In the blood: leukocytes – 11 x 10^9/l, ESR – 30 mm/h, CRP – 27 mg/l. In urine: insignificant proteinuria, microhematuria. Preliminary diagnosis: Schonlein-Genoch vasculitis. Diagnosis of this disease is often based on the manifestations:

- **joint syndrome**
- **skin syndrome**
- renal syndrome
- anemia
- abdominal syndrome

- An 11-year-old boy was taken to the waiting room. Complains of acute abdominal pain, discoloration of urine to red. He suffered from SARS a week ago. Objectively: on the extensor surfaces of the extremities – small papular hemorrhagic rash. At superficial palpation – moderate pain in the epi- and mesogastric region of the abdomen. Red urine. What is the most likely diagnosis?

- **vasculitis of Schonlein-Genoch**
- pyelonephritis
- urolithiasis
- bladder cancer
- prostatitis

• A 44-year-old woman was diagnosed with leukocytoclastic vasculitis of the skin. Nonsteroidal anti-inflammatory drugs are prescribed. What drugs should be added for the pathogenetic treatment of the patient?
• **antihistamines**
• glucocorticoids
• antiplatelet agents
• glucocorticoids
• anticoagulants

• The 34-year-old patient developed a reddish skin rash 3 weeks after hypothermia. Body temperature 37.2 °C. On the skin of both extremities and buttocks there are papular-hemorrhagic rashes with urticarial elements that are palpable and do not disappear when pressed. Joints without features. No changes were detected in the pulmonary and cardiovascular systems. The abdomen is soft, painful on palpation along the bowel. In the blood: leukocytes – 8.2 x 10^9/l, platelets – 343 x 10^9/l, ESR – 24 mm/h, CRP – 32 mg/l. In urine: proteinuria, microhematuria. Which of the following will be the most appropriate initial step in treatment?
• **heparin**
• hydrocortisone
• diclofenac
• diazolin
• cisplatin

• A 47-year-old man, 3 weeks after tonsillitis, complained of acute pain in the bowel, accompanied by vomiting and diarrhea with blood inclusions, skin rash, fever up to 39.2 °C. Body temperature – 38.7 °C. On the skin of both extremities and buttocks there are papular-hemorrhagic rashes with urticarial elements that are palpable and do not disappear when pressed. The abdomen is soft, painful on palpation along the bowel. In the blood: leukocytes – 14.2 x 10^9/l, ESR – 60 mm/h., platelets – 354 x 10^9/l, CRP – 62 mg/l. In urine: proteinuria, microhematuria. At a colonoscopy: hemorrhagic rashes on a mucous membrane of a large intestine. The patient takes heparin. Which of the proposed options offers the most successful combination of pharmacotherapy?
• **methylprednisolone**
• aspirin
• trimetazidine
• diazolin
• aktemra

• The 52-year-old patient complains of periodic asthma attacks, frequent urination, swelling of the upper eyelids and legs, pain in the muscles, joints of the legs, and testicular pain. For the last 1 month. lose 3 kg. Within 1 month there is a constant increase in blood pressure to 150/110 mm Hg. Art. In the blood: anemia,

leukocytosis, accelerated ESR, hypergammaglobulinemia; in urine: signs of urinary syndrome. The diagnosis of polyarteritis nodosa. Treatment in this case is carried out by all the following means, except:

- **NSAIDs**
- immunosuppressants
- glucocorticoids
- plasmapheresis
- anticoagulants

-

- **Rheumatoid arthritis**

Level 1 test tasks:

- Rheumatoid arthritis is:
- **chronic systemic connective tissue disease with predominant joint damage of the type of erosive-destructive polyarthritis**
- acute joint disease of infectious etiology
- acute degenerative joint disease
- chronic infectious disease
- chronic degenerative joint disease

- For cutaneous manifestations of rheumatoid arthritis are typical:
- **rheumatoid nodules**
- rheumatic nodules
- tophus
- livedo reticularis
- Bouchard's nodules

- The leading symptoms of rheumatoid arthritis are all but one:
- **no joint deformation**
- symmetry of the lesion
- ankylosis
- systemic manifestations
- morning stiffness

- Subcutaneous nodules in rheumatoid arthritis are often localized:
- **in areas of natural bone thickening, extensor surfaces of joints or periarticularly**
- on the ears, elbows, knees, fingers
- in the area of the proximal interphalangeal joints of the upper extremities
- in the area of the distal interphalangeal joints of the upper extremities

- on the buttocks, ligaments, joints and internal organs

- Joint pain in rheumatoid arthritis occurs:
- **at night and in the morning**
- after the start of the movement
- during the day
- in the evening
- starting pain

- Radiological signs of stage I rheumatoid arthritis are:
- **osteoporosis of the epiphyses**
- bone lysis
- formation of osteophytes
- cartilage exfoliation
- narrowing of the joint space

- For the second radiological stage of rheumatoid arthritis is typical:
- **osteoporosis of bone epiphyses, slight destruction of cartilage and bone, narrowing of the joint space, single usures**
- narrowing of the joint space
- cartilage exfoliation
- formation of osteophytes
- inflammation of the yellow ligaments

- Typical manifestations of Still's disease in adults are:
- **fever, skin rash, lymphadenopathy, splenomegaly, serositis and multiorgan damage**
- systemic damage of the kidneys, lungs and intestinal vessels
- seronegative chronic polyarthritis in combination with systemic inflammatory process
- fever, skin rash
- bilateral sacroiliitis

- Heart pathology, which is most typical for rheumatoid arthritis:
- **pericarditis**
- endocarditis
- myocarditis
- pancarditis
- mitral valve prolapse

- Typical signs of the third radiological stage of rheumatoid arthritis are:
- **osteoporosis, significant destruction of cartilage and bone, severe narrowing of the joint space, multiple bone lesions, subluxations, ulnar deviation of the hands**

- inflammation of the yellow ligaments
- formation of osteophytes
- osteoporosis of bone epiphyses, slight destruction of cartilage and bone, narrowing of the joint space, single usures
- osteoporosis of the epiphyses

- Juvenile rheumatoid arthritis is manifested:
- **seronegative chronic polyarthritis in combination with systemic inflammatory process that develops in children under 16 years**
- systemic inflammatory process with fever, skin rash, lymphadenopathy and splenomegaly
- decreased function of the endocrine glands
- systemic damage of the kidneys, lungs and intestinal vessels
- bilateral sacroiliitis

- Felty's syndrome is a combination of signs of rheumatoid arthritis:
- **with splenomegaly and neutropenia**
- with fever, rash
- with progressive generalized weight loss
- with scleroderma
- with SLE

- For the use of basic biological products it is necessary to conduct all of the following screening tests, except:
- **stress test**
- ECG
- tuberculin tests
- determination of markers for viral hepatitis
- chest radiography

- Basic therapy for rheumatoid arthritis includes all of these drugs, except:
- **NSAIDs**
- biological agents
- cytostatic
- 4-aminoquinoline compounds
- sulfasalazine

Level 2 test tasks:

- The diagnostic criteria for rheumatoid arthritis include:
- **symmetry of joint damage**
- **subcutaneous nodules**
- **lesions of small joints**

- **the presence of stable deformations**
- lesions of large joints

- A feature of the articular syndrome in rheumatoid arthritis is:
- **symmetry of joint damage**
- **morning stiffness > 1 hour**
- **the appearance of pain in the second half of the night and in the morning**
- lesions of large joints
- morning stiffness = 1 hour
- pain at the beginning of movements

- Typical joint deformity in rheumatoid arthritis is:
- **deformation of the joints on the type of "swan neck"**
- **Z-similar deformation of joints**
- **ulnar deviation of the hands**
- **deformation of joints by the type of "boutonniere"**
- nails in the form of "watch glass"

- Typical localization of joint damage in rheumatoid arthritis:
- **II, III metacarpophalangeal and proximal interphalangeal joints of hands**
- thigh joints
- joints of the spine
- proximal interphalangeal joints of the 5th finger of the hands
- I and V metacarpophalangeal joints of the hands

- Typical clinical manifestations of lung damage in rheumatoid arthritis are:
- **pulmonitis**
- **pulmonary rheumatoid nodules**
- **pleuritis**
- **interstitial fibrosis**
- bronchitis

- Which of the following extra-articular manifestations are typical for rheumatoid arthritis?
- **rheumatoid vasculitis**
- **rheumatoid nodules**
- **lesions of the lungs and pleura**
- **kidney damage**
- anemia

- A typical clinical manifestation of kidney damage in rheumatoid arthritis is:
- **amyloidosis**

- **glomerulonephritis**
- **tubulointerstitial nephritis**
- kidney cysts
- urolithiasis

- The diagnosis of rheumatoid arthritis is based on:
- **symmetrical arthritis of 3 or more joints of the hand in combination with morning stiffness lasting more than 1 hour**
- **rheumatoid nodules**
- **increase in the level of RF, ACCP in the blood**
- lesions of large joints
- lesions of the esophagus

- An eye lesion that is typical for rheumatoid arthritis:
- **scleritis**
- **episcleritis**
- optic nerve atrophy
- conjunctivitis
- uveitis

- Possible variants of rheumatoid arthritis:
- **Still's syndrome**
- **Felty's syndrome**
- Reiter's syndrome
- Lyell's syndrome
- antiphospholipid syndrome
- Typical signs that allow to differentiate rheumatoid arthritis from osteoarthritis:
- **nocturnal nature of pain**
- **symptom of "tight gloves" lasting more than 1 hour**
- Voskresensky's symptom
- "tight corset" symptom
- Cherny's symptom

- Typical radiological signs of stage IV rheumatoid arthritis:
- **ankylosis of the joint**
- **subluxations, ulnar deviation of the hand**
- **significant destruction of cartilage and bone with a pronounced narrowing of the joint space**
- **multiple usurpation of bones**
- osteophytosis

- Determination of the activity of the pathological process in rheumatoid arthritis according to the DAS scale includes:

- **the degree of increase in ESR and ACCP**
- **the number of painful and swollen joints**
- **general assessment of pain using a visual analog scale**
- the number of painful joints
- the number of swollen joints

- Determination of the degree of activity of rheumatoid arthritis includes assessment:
- **the level of increase in CRP**
- **the level of acceleration of the ESR**
- **pain on a visual analog scale**
- **duration of morning stiffness**
- lesions of large joints

- The differential diagnosis of rheumatoid arthritis is most often made on the basis of:
- **data of X-ray research methods**
- **diagnostic titer of the RF and ACCP**
- **extraarticular manifestations**
- **joint syndrome**
- duration of the disease

- What radiological signs are typical for rheumatoid arthritis?
- **ankylosis**
- **osteoporosis of the epiphyses**
- **multiple usurpation of bones**
- cyst formation
- osteophytosis

- Rheumatoid arthritis must be differentiated from:
- **gout**
- **paraneoplastic arthritis**
- **reactive arthritis**
- **osteoarthritis**
- **acute rheumatic fever**

- Pharmacotherapy of rheumatoid arthritis includes prescribing:
- **basic therapy**
- **glucocorticosteroids**
- **NSAIDs**
- antibiotics
- thrombolytics

Level 3 test tasks:

- A 12-year-old patient suffers from periodic exacerbations of arthritis with lesions of the knee and ankle joints, accompanied by fever, lacrimation, scleral hyperemia. Concerned about the unexplained weight loss, the appearance of subcutaneous nodules on the back of the hands. Objectively: muscle wasting, muffled heart sounds, splenomegaly. In the blood – ESR – 36 mm/h, leukocytes – 10.6 x 10^9/l, erythrocytes – 3.4 x 10^{12}/l, Hb – 110 g/l, platelets – 137 x 10^9/l; ACCP – 19 IU/ml; rheumatoid factor – negative. Name the probable diagnosis?
- **Felty's syndrome**
- Reuters disease
- gout
- infectious arthritis
- osteoarthritis

- A 76-year-old patient was admitted to the rheumatology department with complaints of pain in the second and third metacarpophalangeal joints, proximal interphalangeal joints of both hands and radial wrist joints, which intensify in the second half of the night and in the morning and are accompanied by morning sickness. On examination: painless formations of dense-elastic consistency are palpated on the extensor surfaces of the joints. Fingers spindle-shaped. Swelling and pain on palpation of II, III metacarpophalangeal, proximal interphalangeal joints of the hands of both hands and wrists, with limited active and passive movements. Your previous diagnosis?
- **rheumatoid arthritis**
- Reuters disease
- gout
- infectious arthritis
- osteoarthritis

- The 57-year-old patient was examined by a family doctor. He notes pain and sharp restriction of movements in the radial-carpal, metacarpophalangeal and proximal interphalangeal joints of the II and III fingers of both hands, constant stiffness in them, fever to subfebrile figures. From the anamnesis: 5 years suffering from rheumatoid arthritis, taking methotrexate for a long time. On examination: deformation of the fingers in the form of a "swan neck", ulnar deviation of the hands, restriction of active and passive movements in the affected joints. In the analysis of blood: ESR – 52 mm/h, rheumatoid factor is positive. Your previous diagnosis?
- **rheumatoid arthritis, seropositive, activity III, polyarthritis with lesions of the radial-carpal, metacarpophalangeal, proximal interphalangeal joints of II and III fingers of both hands. FJI – III**

- rheumatoid arthritis, seronegative, activity III, polyarthritis with lesions of the radial-carpal, metacarpophalangeal, proximal interphalangeal joints of II and III fingers of both hands. FJI – III
- rheumatoid arthritis, seronegative, activity III, polyarthritis with lesions of the radial-carpal, metacarpophalangeal, proximal interphalangeal joints of II and III fingers of both hands. FTS – II
- rheumatoid arthritis, seropositive, activity I, polyarthritis with lesions of the radial-carpal, metacarpophalangeal, proximal interphalangeal joints of II and III fingers of both hands. FJI – I
- rheumatoid arthritis, seronegative, activity II, polyarthritis with lesions of the radial-carpal, metacarpophalangeal, proximal interphalangeal joints of II and III fingers of both hands. FJI – I

- A 52-year-old patient complains of pain in the knee and wrist joints, morning stiffness for up to 1 hour, redness of the sclera of the right eye. Ill for 6 years. Objectively: thickening and soreness of the interphalangeal joints, pain and restriction of movement in the knee joints. In the blood: leukocytes – 9.2 x 10^9/l, ESR – 23 mm/h. On the radiograph of the knee joints – narrowing of the joint space, osteoporosis. What is the most likely diagnosis?
- **rheumatoid arthritis**
- SLE
- Reuters disease
- infectious arthritis
- gout

- A 9-year-old girl has been bothered by intermittent fever with chills for 3 weeks. During periods of fever, spotty-papular rashes appear on the skin of the torso and face, and polyarthralgia is a concern. During the examination: body temperature 38.2 °C, tachycardia, hepato-splenomegaly. In the blood: leukocytes – 10.2 x 10^9/l, erythrocytes – 3.9 x 10^{12}/l, Hb – 125 g/l, ESR – 30 mm/h. What is the most probable pathology determines the described picture?
- **juvenile rheumatoid arthritis**
- osteoarthritis
- psoriatic arthritis
- pseudogout
- acute rheumatic fever

- A 54-year-old patient completed treatment for rheumatoid arthritis. After the treatment, the patient's condition significantly improved: joint pain is almost not disturbing, and morning stiffness lasts about 10 minutes. On examination: joints - without features. In the blood: ESR – 20 mm/h. This indicates:
- **remission**
- exacerbation of the disease
- transition to a chronic form

- reducing the activity of the process
- recovery

- The 48-year-old patient went to the clinic to see an ophthalmologist with complaints of redness of the sclera of the eyes. From the anamnesis: 3 months of pain in the proximal interphalangeal joints of the second and third fingers of the hands, radial-carpal joints, morning stiffness – up to 2 hours. 4 days ago scleritis was first diagnosed. In the blood: erythrocytes 3.2 x 10^{12}/l, Hb – 98 g/l. In urine: moderate proteinuria, erythrocyturia. What pathology could lead to this condition of the patient?
- **rheumatoid arthritis**
- reactive arthritis
- osteoarthritis
- psoriatic arthritis
- pseudogout

- A 38-year-old patient has been suffering from rheumatoid arthritis for 7 years. Worsening of the condition for about 2 months, when there were complaints of hyperpigmentation around the left eye, swelling of the face, neck, shoulders and lower extremities, enlargement of the tongue. Periorbital purpura on the left "raccoon symptom", puffiness of the face, swelling of the upper and lower eyelids, swelling of the neck, shoulders, both legs, feet. BP 110/70 mm Hg. Art. Macroglossia with imprints of teeth on the edges. Ulnar deviation of both hands, the first finger of the left hand is deformed in the form of a "swan neck". In blood: leukocytes – 9,8x10^{9}/l, ESR– 60 mm/h; total protein – 65 g/l, albumin – 25 g/l, cholesterol – 6.4 mmol/l. In urine: protein 9.3 g/d, leukocytes – 2–3 in f./v, erythrocytes – 1–2 in f./v. The appointment of any of the following studies requires a woman first?
- **kidney biopsy**
- Ultrasound of the kidneys
- MRI
- CT
- excretory urography

- Patient with rheumatoid arthritis pain in the small joints of the arms and legs, morning stiffness lasting up to 6 hours. Evaluation of pain on a visual analog scale is 6 cm in the blood: ESR – 50 mm/h., CRP> 3 conventional units. No changes were detected in urine tests. What is the degree of activity of rheumatoid arthritis?
- **II**
- 0
- III
- V
- I

• In a 82-year-old patient, persistent polyarthritis with symmetrical lesions of the metacarpophalangeal, proximal interphalangeal joints of the second and third fingers of both hands and metatarsophalangeal joints is observed for 4 years. Diagnosed with: Rheumatoid arthritis, seropositive, activity II, polyarthritis with lesions of the metacarpophalangeal, proximal interphalangeal joints of the second and third fingers, metatarsophalangeal joints. Ro-stage II. FJI – I. What changes in Ro-gram prompted the doctor to establish this diagnosis?

• **osteoporosis of the epiphyses of the bones, slight destruction of cartilage and bone, narrowing of the joint space, single usuration**

• osteoporosis of the epiphyses of the bones
• narrowing of the joint space
• slight destruction of cartilage and bone
• single usuration

• A 37-year-old man who has been suffering from rheumatoid arthritis for a long time came to a pulmonologist with complaints of a constant dry cough, progressive shortness of breath. On CT – signs of interstitial pneumonitis. Which drug will be most effective in this case?

• **methylprednisolone**
• adalizumab
• aspirin
• cyclophosphamide
• mesalazine

• A 73-year-old patient was admitted to the rheumatology department with suspected rheumatoid arthritis. Which test will be most informative to verify the diagnosis in this case?

• **blood test for ACCP**
• CT
• MRI
• arthroscopy
• Ultrasound

• The 52-year-old patient was diagnosed with rheumatoid arthritis. Basic therapy with cytostatics has been started. The weekly dose of methotrexate is:

• **7,5 mg**
• 14 mg
• 80 mg
• 250 mg
• 1500 mg

• A 78-year-old patient suffering from rheumatoid arthritis is hospitalized in the rheumatology department. A 3-day course of pulse therapy with glucocorticosteroids is indicated. Specify the daily dose of prednisolone.
• **1000 мг**
• 25 мг
• 80 мг
• 5 мг
• 2500 мг
•

• Osteoarthritis

Level 1 test tasks:

• The pathological process in osteoarthritis begins primarily with:
• **cartilage tissue**
• bones
• joint capsules
• synovial membrane
• periarticular tissues

• Osteoarthritis is:
• **chronic progressive degenerative dystrophic disease with damage all components of the joint**
• inflammatory joint disease of non-purulent nature
• inflammatory joint disease of infectious etiology
• acute systemic cartilage disease
• cmetabolic joint disease associated with impaired purine metabolism and accumulation of uric acid in the body

• Typical localization of Bouchard's nodules:
• **in the area of the proximal interphalangeal joints of the fingers**
• on the buttocks, ligaments, joints and internal organs
• in areas of natural bone thickening
• on the skin of the elbows, knees
• on the anterolateral part of the distal interphalangeal joints of the upper extremities

• Typical symptoms of osteoarthritis are all but one:
• **nocturnal nature of pain**
• pain at the beginning of movement in the joint

- the presence of asymmetric narrowing of the joint space and osteophytes
- feeling of crunch in the joints
- nodules in the interphalangeal joints of the upper extremities

- Typical signs of the first radiological stage of osteoarthritis are:
- **doubtful narrowing of the joint space and possible marginal osteophytes**
- certain osteophytes and possible narrowing of the joint space
- multiple osteophytes, significant narrowing of the joint space, signs of sclerosis, possible deformation of the bone edges
- large osteophytes, severe narrowing of the joint space, severe sclerosis, certain deformation of the bone edges
- bone cysts
- Heberden's nodules are localized:
- **on the anterolateral part of the distal interphalangeal joints of the upper extremities**
- on the skin of the ears
- on the skin of the elbows, knees
- on the buttocks, ligaments, joints and internal organs
- in areas of natural bone thickening

- Typical signs of the second radiological stage of osteoarthritis are:
- **certain osteophytes and possible narrowing of the joint space**
- signs of sclerosis
- severe narrowing of the joint space
- deformation of the bone edges
- possible narrowing of the joint space

- Typical signs of III radiological stage of osteoarthritis are:
- **multiple osteophytes, significant narrowing of the joint space, signs of sclerosis, possible deformation of the bone edges**
- ligamentitis
- sclerosis of periarticular tissues
- narrowing of the joint space
- signs of bilateral sacroiliitis

- Osteoarthritis should be differentiated from the following diseases except:
- **Takayasu's disease**
- rheumatoid arthritis
- gout
- pseudogout
- SLE

- Typical signs of the IV radiological stage of osteoarthritis are:

• **large osteophytes, severe narrowing of the joint space, severe sclerosis, certain deformation of the bone edges**
• calcification of the yellow ligaments
• bilateral sacroiliitis
• ulnar deviation of the hands
• flexion contractures of the joints

• The "basic" drugs for the treatment of osteoarthritis are:
• **chondroprotectors**
• NSAIDs
• glucocorticoids
• cytostatics
• anticoagulants

• The recommended duration of treatment for a patient with osteoarthritis is:
• **16–20 days**
• 14–21 days
• 7–14 days
• 21–30 days
• 30–60 days

• For the treatment of a patient with osteoarthritis, the optimal daily dose of diclofenac is:
• **150 mg**
• 20 mg
• 60 mg
• 120 mg
• 80 mg

Level 2 test tasks:

• Clinical forms of osteoarthritis include:
• **monoarthritis**
• **oligoarthritis**
• **polyarthritis**
• sacroiliitis
• osteophytosis

• A typical triad of osteoarthritis symptoms is:
• **joint deformation**
• **narrowing of the joint space, osteosclerosis of the articular surfaces, osteophytosis on the radiograph**

- **“mechanical pain” in the joints**
- ligamentitis
- bilateral sacroiliitis

- Typical localization of the affected joints of the hand in osteoarthritis:
- **interphalangeal joints**
- **the carpometacarpal joint of the first finger of the hand**
- **proximal interphalangeal joints of the V finger of the hand**
- **first metacarpophalangeal joint of the hand**
- the joints of the hands are not affected

- Typical symptoms of osteoarthritis of the hands are:
- **erosive osteoarthritis**
- **Heberden's nodules**
- **Bouchard's nodules**
- joint contractures
- sclerodactyly

- Osteoarthritis most often affects the joints:
- **knees**
- **hip**
- elbow
- feet
- joints of the spine

- The diagnostic criteria of osteoarthritis include:
- **age over 50 years**
- **joint syndrome that occurs during exercise and disappears after its termination**
- **morning stiffness <60 minutes**
- morning stiffness ⩾60 minutes
- ankylosis

- Pain syndrome in osteoarthritis occurs:
- **when walking, especially when going down the stairs**
- **in the evening and intensifies under the influence of meteorological factors**
- **under load on the affected joint**
- in the afternoon
- at midnight

- Radiological signs of osteoarthritis are:
- **compaction and pseudocysts of subchondral bone**
- **bone remodeling and accumulation of effusion in the joint**

- **marginal osteophytes**
- **inhomogeneous or asymmetric narrowing of the joint space**
- ankylosis

- The most important differential diagnostic features that distinguish osteoarthritis from rheumatoid arthritis are:
- **feeling of crunch with active movements in the joints**
- **Heberden's nodules**
- **Bouchard's nodules**
- **"Mechanical" nature of pain**
- sclerodactyly
- The severity index of coxarthrosis includes an estimate:
- **functional activity**
- **duration of joint stiffness**
- **maximum walking distance without pain**
- **pain syndrome**
- age of the patient

- Which tests are most informative for the verification of osteoarthritis?
- **synovial fluid examination**
- **synovial membrane biopsy**
- **arthroscopy**
- **X-ray examination of the joints**
- urine analysis

- The most effective way to administer glucocorticosteroids for the treatment of patients with reactive synovitis of the joints is:
- **intraarticular**
- transdermal
- subcutaneous
- intravenous
- oral

- The reason for hip prosthesis in coxarthrosis are:
- **resistance of pain syndrome to drug therapy**
- **inability to climb stairs more than one floor**
- **lack of motility in the hip**
- soft tissue inflammation
- the patient's desire

- In the treatment plan for patients with primary osteoarthritis should be included:
- **unloading the joints, due to the movement of the patient with crutches**
- **chondroprotectors**

- **NSAIDs**
- cytostatics
- glucocorticosteroids

Level 3 test tasks:

- A 63-year-old patient complains of pain in the joints of the hands, a feeling of stiffness in these joints lasting more than 20 minutes, pain in the jaw joints when opening the mouth. He has been sick for 4 years. Swelling of the proximal interphalangeal joints of the hands, limitation of active movements and crunching in the joints of the hands. What examination should be prescribed to the patient?
- **X-ray of hands**
- biochemical blood analysis
- serological blood analysis
- ultrasound
- FEGDS

- A 62-year-old patient has marginal osteophytosis and narrowing of the joint space on X-ray of the joints of the hands and knees. The patient complains of "starting pain", a change in the shape and configuration of the knee joints, crunching during active movements in them. Pain increases in the afternoon. Which disease should be thought of first?
- **osteoarthritis**
- rheumatoid arthritis
- acute rheumatic fever
- Reiter's disease
- gout

- A 60-year-old patient complains of periodic pain in the inner and front side of the right knee joint while walking, especially when going down the stairs, a feeling of crunch in it during squats. On examination: the configuration of the joints has not changed, the skin above them is normal in color, warm to the touch. There is instability of the knee joint, slight crepitus during active and passive movements in the knee joints. The most informative methods of examination of the patient will be:
- **X-ray**
- **arthroscopy**
- puncture of the joint
- biopsy of the synovial membrane
- study of synovial fluid

- A 72-year-old female patient was admitted to the rheumatology department with complaints of pain in the hip and knee joints, which occurs during physical

exertion, intensifies in the evening, and morning stiffness lasts up to 30 minutes. Objectively: in the region of the proximal and distal interphalangeal joints of the II finger of the right hand, painless dense, nodular formations are palpable. There is slight crepitus during movements in the knee joints, limitation of active and passive movements due to pain. On the X-ray of the hip and knee joints, there are multiple osteophytes, significant narrowing of the joint space, signs of sclerosis and deformation of the bone edges. In the blood test: ESR – 12 mm/h. Which of the following diagnoses is the most likely?

- **osteoarthritis**
- rheumatoid arthritis
- pseudogout
- gout
- acute rheumatic fever

- A 61-year-old patient complains of pain in the groin area on the left side, with radiation to the left knee, lameness when walking for a long time, limitation of movements in the left hip joint, periodic "jamming" of the right hip joint. From the anamnesis: he has been suffering from osteoarthritis for 8 years. Objectively: "duck" gait. Restriction of hip rotation inward and outward, abduction and adduction, flexion and extension. What complications can occur in a patient with further progression of coxarthrosis?
- **shortening of the limb**
- **osteonecrosis**
- ankylosis
- osteolysis
- periostitis

- A patient with osteoarthritis developed the symptom of "joint blockage", which was manifested by a sudden severe pain syndrome in the right knee joint, which limited even minor active and passive movements. The development of this symptom is most likely associated with:
- **pinching of the "joint mouse"**
- swelling
- synovitis
- bone fracture
- osteophytosis

- If osteoarthritis is suspected, it is advisable to start the examination with:
- **radiographs of the affected joints**
- study of active movements
- study of passive movements
- arthroscopy
- ultrasound examination of joints

• A patient with primary osteoarthritis complains of constant pain in the hip joints that occurs with any movement. Most likely it is connected with:
• **reflex spasm of periarticular muscles**
• ankylosis
• edema of periarticular tissues
• synovitis
• osteophytosis

• A 62-year-old patient came to the doctor for a consultation with complaints on periodic pain in the hip joints, crunching when moving. It indicates that the pain occurs during her first steps, then gradually decreases and temporarily disappears, but appears again if physical activity continues. The starting nature of pain in patients with osteoarthritis develops in presence:
• **friction of the affected cartilages with each other**
• bone fracture
• osteophytosis
• swelling
• synovitis

• A 71-year-old patient was admitted to the rheumatology department for inpatient treatment with complaints of constant pain in the knee joints, the intensity of which increases with physical exertion, especially stiffness at the beginning of movement of the knee joints, especially when squatting. Objectively: disfigurement of the knee joints due to swelling, the skin over them is hyperemic, hot to the touch. There is palpable tenderness along the joint space, slight crepitus during movements in the knee joints, limitation of active and passive movements due to pain. During the examination: on the Ro-gram of the knee joints - heterogeneous narrowing of the joint space, isolated marginal osteophytes, signs of effusion into the joint cavity. When examining the synovial fluid, its non-inflammatory character was established with a satisfactory viscosity and a small number of cells. The pain syndrome in this case is most likely associated with:
• **development of reactive synovitis**
• spasm of periarticular muscles
• subchondral fibrosis
• ankylosis
• bone lysis

• A patient with osteoarthritis is bothered by pain in the hip joints, morning stiffness for up to 20 minutes. The index of severity of coxarthrosis in this case must be evaluated according to:
• **the Lid scale for the assessment of neuropathic pain**
• **algofunctional Leken index**
• **WOMAC index**
• questionnaire

- analog pain scale

- A 74-year-old patient was diagnosed with secondary gonarthrosis after a history of traumatic injury to the left knee. An X-ray of the knee joints revealed stretching of the intercondylar elevation, narrowing of the joint space, and a large number of marginal osteophytes. What complications can arise in this case?
- **reactive synovitis**
- **"joint block" symptom**
- **Baker's cyst**
- periostitis
- osteolysis

- In a 78-year-old patient, gonarthrosis was complicated by the development of reactive synovitis of both knee joints. The most expedient combination of therapeutic agents in this case will be:
- **NSAIDs**
- **chondroprotectors**
- **calcium preparations**
- cytostatics
- glucocorticoids

- A 58-year-old patient complains of pain in the knee joints during prolonged standing and walking, which worsens in the evening. This is explained:
- **a decrease in the ability to load articular surfaces due to cartilage degeneration**
- spasm of periarticular muscles
- development of reactive synovitis
- subchondral fibrosis
- friction of the affected cartilages

• Gout

Level 1 test tasks:

- Gout is:
- **systemic pathology associated with purine metabolism disorders**
- chronic degenerative joint disease
- acute systemic disease of connective tissue
- joint diseases of infectious etiology
- inflammatory joint disease of a non-purulent nature

- Tophus are mainly localized:

- **on the auricle, in the areas of the elbow and knee joints, on the fingers**
- on the buttocks, in the ligaments, over the joints and in the internal organs
- in areas of natural bone thickening
- in subcutaneous tissue, skeletal muscles
- on the extensor surface of the forearm

- Skin manifestations of gout are:
- **tophus**
- heliotropic rash
- rheumatic nodules
- Heberden's nodules
- Bouchard nodes

- Typical X-ray signs of the 1st stage of gout are:
- **large cysts in the subchondral bone with compaction of periarticular muscles**
- osteosclerosis
- narrowing of the joint space and possible marginal osteophytes
- osteolysis
- narrowing of the joint space, isolated areas of bone destruction

- Typical X-ray signs of the III stage of gout are::
- **large erosions near the joints and small erosions of the joint surfaces with compaction of the periarticular muscles**
- large cysts near the joints and small erosions of the joint surfaces with compression of the periarticular muscles
- large cysts in the subchondral bone with compaction of periarticular muscles
- narrowing of sacroiliac joints
- large osteophytes, pronounced narrowing of the joint space

- Typical X-ray signs of the II stage of gout are:
- **large cysts near the joints and small erosions of the joint surfaces with compression of the periarticular muscles**
- osteosclerosis
- osteolysis
- narrowing of the joint space and possible marginal osteophytes
- narrowing of the joint space, isolated areas of bone destruction

- Gout should most often be differentiated from:
- **arthritis of various origins**
- acute leukemia
- hepatitis
- osteochondrosis
- fractures

- Primary gout occurs as a result:
- **genetically determined defects in enzymes**
- increased intake of fructose
- excessive consumption of alcohol, products enriched with purines
- increased breakdown of nucleotides in the body
- decreased renal excretion of uric acid

- The most important differential diagnostic signs of gout include all of the above, except:
- **monoarthritis with damage to the knee or elbow joints**
- nocturnal nature of the primary attack
- tophus
- sodium urate crystals in synovial fluid
- hyperuricemia

Level 2 test tasks:

- Asymptomatic hyperuricemia is:
- **increase in the level of uric acid in the blood of women more than 360 μmol/l**
- **increase in the level of uric acid in the blood of men more than 420 μmol/l**
- increase in creatinine level
- increasing the level of sialic acids
- increase in albumin level

- Typical clinical manifestations of an attack of acute gouty arthritis:
- **asymmetric arthritis of the metatarsophalangeal joint**
- **signs of local and systemic inflammation**
- **sudden onset**
- tophus
- urolithiasis

- Manifestations included in the classic triad of gout symptoms:
- **joint damage**
- **kidney damage**
- **the formation of tophi**
- pancreatitis
- glomerulonephritis

- The first phase of the pathogenesis of gout is characterized:
- **reduction of urate excretion**

- **accumulation of urates in the body**
- **hyperuricemia**
- deposition of sodium monourate in tissues
- acute arthritis

- Diseases of the kidneys that most often develop with gout?
- **urolithiasis**
- **chronic renal failure**
- **tubulointerstitial nephritis**
- **pyelonephritis**
- glomerulonephritis

- The pathogenesis of gout is based on:
- **decreased renal excretion of uric acid**
- **increase in urate synthesis**
- increasing the synthesis of arachidonic acid
- increasing the synthesis of catecholamines
- increase in creatinine synthesis

- The fourth phase of the pathogenesis of gout is characterized:
- **signs of gouty nephropathy**
- **chronic gouty inflammation**
- deposition of sodium monourate in tissues
- acute arthritis
- hyperuricemia

- Specify the types of disorders of purine metabolism.
- **renal**
- **metabolic**
- **mixed**
- circulatory
- respiratory

- There are clinical stages of gout:
- **acute gouty arthritis**
- **chronic gouty arthritis**
- **gout between attacks**
- **chronic tophous arthritis**
- subacute arthritis

- The most effective drugs used to stop an attack of acute gouty arthritis are:
- **dexamethasone**
- **colchicine**
- ibuprofen

- diclofenac
- adenuric

- Pathogenetic methods of gout treatment are:
- **NSAIDs**
- **uricosuric drugs**
- **uricodepressive medications**
- **dietary therapy**
- glucocorticoids

- For the treatment of patients with gout, the basic drugs listed below are most often used:
- **adenuric**
- **ethamide**
- **allopurinol**
- ibuprofen
- diclofenac

- Uricodepressants include:
- **adenuric**
- **miluritis**
- **allopurinol**
- furosemide
- milrenone

- During acute gout arthritis should not be used:
- **Allopurinol**
- **Methotrexate**
- Dexamethasone
- Colchicine
- Xefokam

Level 3 test tasks:

- A 45-year-old patient was admitted to the rheumatology department with complaints of severe pain in the carpal joint of the left hand, an increase in body temperature to subfebrile levels. From the anamnesis: she fell ill suddenly, at night, when there was a sharp pain in the joints, the body temperature rose to 37.6 °C, chills. During examination: body temperature – 37.9 °C. The skin over the carpal joint of the left hand is swollen, hyperemic, hot to the touch. Movements in the specified joints are sharply limited due to pain. What is the most likely diagnosis?
- **acute gouty arthritis**
- Reiter's disease

- septic arthritis
- rheumatoid arthritis
- pseudogouty arthritis

- A 48-year-old patient was admitted to the rheumatology department with complaints on sharp pain in the 1st metatarsal-phalangeal joint of the right foot, radiating to the forefoot, accompanied by a feeling of pressure and swelling in the foot, an increase in body temperature to 38.2 °C. From the anamnesis: he fell ill suddenly, at 3 o'clock in the morning, when there was a sharp pain in the 1st toe of the right foot, chills, and the body temperature rose to 39.0 °C. Objectively: body temperature is 38.3 °C. The skin over the first metatarsal-phalangeal joint is hyperemic, hot to the touch. Sharp pain in the 1st metatarsophalangeal joint, which limits active and passive movements. What disease can you think of first?
- **acute gouty arthritis of the metatarsal-phalangeal joint of the right foot**
- chronic gouty arthritis
- Reiter's disease
- rheumatoid arthritis
- septic arthritis

- A 58-year-old man was admitted to the clinic due to an attack of renal colic. From the anamnesis: attacks of renal colic occurred earlier. Objectively: in the area of the auricles and the left elbow joint there are nodular formations covered with thin shiny skin. Ps – 76/min, BP – 165/100 mm Hg. Art. The tapping symptom is positive on both sides. The study of which laboratory indicator will be the most appropriate for establishing a diagnosis?
- **uric acid**
- protein
- hemoglobin
- transaminases
- leukocytes

- A 64-year-old patient complains of pain in the first metatarsal-phalangeal joint of the right foot, periodic pain in the lumbar region. The first attack of acute gouty arthritis occurred 2 years ago. Objectively: multiple tophus on the auricles, on the fingers of the hands, in the area of the ulnar process of the left hand and the first metatarsal-phalangeal joint of the right foot. Deformation of the first metatarsal-phalangeal joint of the right foot. In the blood: ESR – 27 mm/h; creatinine – 110 μmol/l, uric acid – 652 μmol/l; in urine: specific gravity – 1002, erythrocytes – 0–1 in f./v., leukocytes – 7–9 in f./v., salts – urates; ultrasound – urate deposits in the kidney parenchyma, urate stones in the right kidney. What complications of gout are we talking about?
- **kidney stone disease**
- pyelonephritis
- glomerulonephritis

- tubulointerstitial nephritis
- kidney cysts

- After excessive alcohol consumption, a 65-year-old patient developed acute gouty arthritis of the first toe of the left foot. What changes as a result of a blood test are most expected:
- **leukocytosis, acceleration of ESR, increase in the level of uric acid, sialic acids, seromucoid, CRP**
- increase in the level of sialic acids, seromucoid, CRP, the presence of antibodies to native DNA
- leukocytosis, anemia, acceleration of ESR, presence of ANA, ANCA
- leukocytosis, anemia
- leukocytosis, anemia, acceleration of erythrocyte sedimentation rate, increase in the level of uric acid, creatinine, urea, potassium, CRP, ACCP

- A 49-year-old patient complains of aching pain in the 1st metatarsophalangeal joint, metatarsal bones, arch of the foot, and heel bone of the left foot. On examination: the configuration of the above-mentioned joints has changed – "gouty foot". Tophus are palpable on the back surface of the elbow joints, on the auricles, in the area of the metatarsal-phalangeal joint and the toe of the left foot. The most informative methods of examination in this case will be:
- **the level of uric acid in the blood**
- **X-ray examination of joints**
- urine analysis
- biochemical blood analysis
- joint biopsy

- A 72-year-old patient was admitted to the cardiology department with complaints of palpitations, shortness of breath with slight physical exertion, swelling and pain in the lower extremities. Took carvedilol, furosemide, digoxin, atorvastatin, magnikor. A month after the start of treatment, the patient developed an acute gout attack, which was accompanied by pain and swelling of the first toe of the right foot, and an increase in body temperature to 38.5 °C. Objectively: pain in the first metatarsal-phalangeal joint of the left foot, multiple tophus in the area of both hands and feet. In the blood: ESR – 35 mm/h, uric acid – 523 μmol/l. The prescription of which drugs provoked the development of acute gouty arthritis in the patient?
- **furosemide**
- digoxin
- carvedilol
- magnikor
- atorvastatin

• During the examination of a patient with diabetes, asymptomatic hyperuricemia was detected for the first time. Based on the results of the test with a seven-day restriction on the use of purines and the exclusion of alcohol, a metabolic type of purine metabolism disorder was established. What treatment tactics should be offered to the patient in this case?

• **diet, with restriction of purines, allopurinol**
• diet, colchicine
• diet, methotrexate
• diet, aspirin
• diet, dexamethasone

• A 57-year-old patient complains of pain and redness in the metatarsal-phalangeal and tibial-foot joints of the right foot. From the anamnesis: he has been suffering from gout for 7 years, with exacerbations 3–4 times a year. In the blood: uric acid – 500 μmol/l, on the X-ray of the first metatarsal-phalangeal and tibial-foot joints of the right foot there are changes in the form of a "punch-hole" phenomenon. What treatment tactics will be the most effective?

• **NSAIDs**
• **uricodepressive medications**
• **dietary therapy**
• glucocorticoids
• cytostatics

• A 71-year-old patient, who has been taking nonsteroidal anti-inflammatory drugs for a long time to treat gouty arthritis, is bothered by nausea and general weakness. Objectively: multiple tophus on the auricles, on the fingers of both hands and feet, and on the knee joints. In the blood: ESR – 40 mm/h, creatinine – 190 μmol/l, uric acid – 523 μmol/l, GFR according to CKD EPI – 67 ml/min/1.73 m^2. The patient is prescribed febucostat. From what dose of the drug should the treatment be started?

• **40 mg/day**
• 10 mg/day
• 20 mg/day
• 30 mg/day
• 50 mg/day

• A 52-year-old patient was prescribed allopurinol for the treatment of gout. The criteria for allopurinol dose correction are:

• **decrease in the level of uric acid to 360 μmol/l**
• decrease in the level of uric acid to 560 μmol/l
• decrease in body temperature
• reduction of pain syndrome
• improvement of well-being

• A 52-year-old patient developed an attack of acute gouty arthritis. The scheme of prescribing colchicine on the 1st day of treatment:
• **1 mg every 2 hours, but no more than 4 mg per day**
• 4 mg every hour or 2 mg every hour
• 6 mg every hour or 3 mg every hour
• 0.5 mg every hour or 1 mg every hour
• 2 mg every hour or 1 mg every hour

• A 63-year-old patient was hospitalized in the rheumatology department with complaints of constant pain in the metatarsal-phalangeal joint of the first toe of the right foot. From the anamnesis: gout was diagnosed 2 years ago. Was not treated. Objectively: body temperature is 39.0 °C. Swelling of the metatarsal-phalangeal joint and toe of the right foot. Limitation of active movements in the joint due to pain. The skin over the affected joint is tense, hyperemic, hot to the touch. During the examination: the level of uric acid is 654 μmol/l. Prescribed allopurinol. The initial dose of allopurinol in this case will be:
• **100 mg per day**
• 200 mg per day
• 300 mg per day
• 600 mg per day
• 120 mg per day

• Seronegative arthritis

• Ankylosing spondylitis

Level 1 test tasks:

• Ankylosing spondylitis is:
• **chronic systemic disease of the connective tissue with predominant damage of the ilio-sacral joints, fibrous rings, ligaments and joints of the spine and peripheral joints**
• infectious joint damage
• joint disease associated with a violation of pyrimidine metabolism
• joint disease associated with purine metabolism disorder
• paraneoplastic joint damage

• Ancillary spondyloarthritis is more likely to meet in men:
• **20–40 years**
• 41–60 years
• 61–80 years
• 81–90 years

- 15–19 years

- The most typical lesions of the thoracic spine in ankylosing spondylitis include all except:
- **pain syndrome in the chest, which increases during breathing with irradiation to the spine**
- atrophy of paravertebral muscles
- pain syndrome in the chest, which increases during breathing and radiates from the spine forward, along the ribs
- restriction of chest mobility
- increased kyphosis

- The main criteria for the diagnosis of ankylosing spondylitis include the criteria listed below, except:
- **acute onset of the disease**
- gradual onset with bilateral damage of the sacroiliac joints, involving axial and peripheral joints
- restriction of movement
- eye injuries
- restriction of chest mobility

- Which of the following options indicates the development of functional insufficiency of the joints of the III degree?
- **loss of work capacity and ability to self-care against the background of ankylosis of all parts of the spine and hip joints**
- loss of working capacity against the background of significant limitation of mobility of the spine and axial joints of the limbs
- loss of working capacity against the background of smoothing of lordosis and increased kyphosis of the spine
- preservation of work capacity
- preservation of the ability to self-care

- Pathology of the bronchopulmonary system, which is typical for ankylosing spondylitis:
- **apical fibrosis of the lungs**
- bronchiectasis
- pneumonitis
- pneumofibrosis
- lung abscess

- Which of the following is a typical manifestation of eye damage in ankylosing spondylitis?
- **anterior uveitis**
- sclerite

- conjunctivitis
- episcleritis
- glaucoma

- It has the greatest diagnostic value in ankylosing spondylitis:
- **presence of HLA B_{27} antigen**
- positive RF
- antibodies to native DNA
- detection of ACCP antibodies
- detection of antibodies to RNA

- For ankylosing spondylitis, all the listed laboratory indicators are pathognomonic, except:
- **increasing the level of antibodies to native DNA**
- negative RF
- presence of HLA B_{27} antigen
- signs of inflammation in the blood
- increase in the level of globulins

- Symptoms that allow determining the mobility of the spine are all of the above, with the exception of:
- **Kerr's symptom**
- "chin-chest" symptom
- Forestier's symptom
- Thomayer's symptom
- Ott's symptom

- An external sign that makes it possible to suspect the presence of ankylosing spondylitis in a patient is:
- **"begging position"**
- ulnar deviation of the hand
- sclerodactyly
- "embryo position"
- "rooster walk"

- The most effective initial method of administration of nonsteroidal anti-inflammatory drugs for the treatment of ankylosing spondylitis is:
- **intramuscular**
- intravenous
- intra-articular
- intraosseous
- oral

• The most typical lesions of the cardiovascular system in ankylosing spondylitis are all, except:
• **endocarditis**
• myocarditis
• pericarditis
• arrhythmias
• aortitis

• In the treatment of ankylosing spondylitis, all drugs are used, except:
• **antibiotics**
• sulfosalazine
• NSAIDs
• methotrexate
• myorelaxants

• Drugs of choice for the treatment of patients with ankylosing spondylitis:
• **NSAIDs**
• glucocorticoids
• cytostatics
• immunomodulators
• antibiotics

Level 2 test tasks:

• The classification criteria of ankylosing spondylitis are:
• **joint damage**
• **spinal cord injury**
• **damage of the internal organs**
• decrease in the respiratory capacity of the lungs
• deformation of the spine

• Typical manifestations of the central form of ankylosing spondylitis are:
• **damage of the spine**
• **damage of the axial joints (shoulder and hip)**
• damage of the blood vessels
• damage of the peripheral joints
• damage to the central nervous system

• Typical manifestations of the peripheral form of ankylosing spondylitis are:
• **damage of the peripheral joints**
• **damage of the spine**
• damage of the blood vessels
• damage to the peripheral nervous system
• internal organs damage

• Typical manifestations of the visceral form of ankylosing spondylitis are a combination of:
• **internal organ damage**
• **damage of the spine, shoulder and hip joints**
• **damage of the peripheral joints**
• damage of the blood vessels
• damage to the peripheral nervous system

• The etiological factors of idiopathic ankylosing spondylitis include:
• **genetic predisposition**
• **hormonal imbalance**
• **spinal injuries**
• **infectious factors**
• excessive load on the joints

• Immunological disorders of ankylosing spondylitis include:
• **activation of the humoral link of immunity**
• **activation of antigens of HLA B_{27} factor**
• violation of lymphocytogenesis
• activation of cellular immunity
• activation of circulating immune complexes

• Joints most often affected by ankylosing spondylitis:
• **joints of the spine**
• **iliac, knee, ankle-foot**
• **temporomandibular**
• **shoulder, sternoclavicular**
• proximal interphalangeal

• Typical kidney lesions in ankylosing spondylitis:
• **Ig A-nephropathy**
• **amyloidosis of the kidneys**
• glomerulonephritis
• pyelonephritis
• kidney stone disease

• The most typical for ankylosing spondylitis enthesopathy:
• **plantar fasciitis**
• **pain in the Achilles tendon**
• enthesopathy of the shoulder
• elbow joint enthesopathy
• enthesopathy of the medial part of the knee

- Typical clinical manifestations of ankylosing spondylitis:
- **multiple organ damage**
- **the presence of acute iritis or iridocyclitis**
- **stiffness and limitation of mobility of the spine and excursions of the chest**
- **constant pain in various parts of the spine**
- sclerodactyly

- Eye involvement typical for ankylosing spondylitis:
- **iridocyclitis**
- **uveitis**
- **scleritis**
- atrophy of the optic nerve
- inflammation of the salivary glands

- Damage of the cardiovascular system, which is typical for ankylosing spondylitis:
- **pericarditis**
- **heart conduction disorders**
- **aortitis**
- endocarditis
- mitral stenosis

- The course of ankylosing spondylitis, which is not included in the classification criteria of the disease:
- **lingering**
- **fulminant**
- slowly progressive
- rapidly progressive
- latent

- Clinical manifestations of the nervous system damage in ankylosing spondylitis:
- **dysfunction of the pelvic organs**
- **"horse tail" syndrome**
- epilepsy
- tetraparesis
- chorea

- Which of the following options is the most likely method of assessing the degree of activity of ankylosing spondylitis?
- **assessment of pain syndrome and stiffness**
- **the level of CRP in the blood**
- **the level of ESR in the blood**

- the level of sialic acids
- creatinine level

- What X-ray data can indicate the presence of ankylosing spondylitis:
- **bone ankylosis of the sacroiliac joints**
- **intervertebral and costovertebral joints with the presence of ossification of the ligamentous apparatus**
- areas of subchondral osteosclerosis
- multiple ossification of pelvic bones
- osteolysis

- What is typical for the III radiological stage of ankylosing spondylitis?
- **ankylosis of intervertebral and costovertebral joints**
- **syndesmophytes or paravertebral ossificates**
- **ankylosis of sacroiliac joints**
- partial ankylosis of the sacroiliac joints, joints of the spine
- narrowing of the intervertebral joint spaces

- When prescribing NSAID therapy for patients with ankylosing spondylitis, the following drugs are most often used:
- **diclofenac**
- **indomethacin**
- **meloxicam**
- **celecoxib**
- aspirin

- What is typical for the I radiological stage of ankylosing spondylitis?
- **blurring or unevenness of the surfaces of the sacroiliac joints**
- **areas of subchondral osteosclerosis**
- **expansion of joint spaces**
- osteolysis
- osteophytes

- The most typical signs of the II radiological stage of ankylosing spondylitis are:
- **narrowing of the sacroiliac joints**
- **narrowing of the intervertebral joint spaces**
- **partial ankylosis of the sacroiliac joints, joints of the spine**
- osteophytes
- osteolysis

- The basic therapy of ankylosing spondylitis includes the appointment of:
- **methotrexate**
- **sulfosalazine**

- meloxicam
- indomethacin
- diclofenac

- Which of the following would be indications for the use of systemic glucocorticosteroids in patients with ankylosing arthritis?
- **resistance to NSAIDs - therapy**
- **development of extra-articular manifestations**
- **signs of a systemic inflammatory process in the blood, lasting no less than 3 months**
- **severe course of arthritis with pronounced functional insufficiency of the joints**
- weakness

- Indications for intra-articular administration of glucocorticosteroids in ankylosing arthritis are:
- **intolerance to NSAIDs**
- **resistance to NSAIDs–therapy**
- **contraindications to NSAIDs**
- development of extra-articular manifestations
- severe course of arthritis with pronounced functional insufficiency of the joints

Level 3 test tasks:

- A 27-year-old patient with complaints of pain in the lumbosacral region of the spine, limitation of their movements, morning stiffness for up to 3 hours. Positive symptoms of Kushelevsky. In the blood – ESR – 42 mm/h, leukocytes – 4.8 x 10^9/l, erythrocytes – 4.1 x 10^{12}/l, Hb – 110 g/l; CFC level – 194 units/l. On the X-ray of the bones of the pelvis: narrowing of the joint space, X-ray signs of partial ankylosis of the sacroiliac joints. What preliminary diagnosis can be established in this clinical situation?
- **ankylosing spondylitis**
- rheumatoid arthritis
- rheumatic arthritis
- gouty arthritis
- psoriatic arthritis

- A 38-year-old patient complains of pain in the place of attachment of the Achilles tendon of the right foot, pain in the hip, knee, and shoulder joints, constant pain in the lumbosacral region of the spine, radiating to the groin, buttocks, intensifies at night and in the morning, stiffness in movements of the lumbar spine. Objectively: increased kyphosis, smoothing of lordosis, fixed

bending in the cervical-thoracic spine. Positive symptoms of "chin", Forestier, Ott, Thomayer, Kushelevsky-Patrick. On the radiograph of the lumbosacral spine: narrowing of the joint spaces of the sacroiliac joints and intervertebral joint spaces, erosion of the vertebral bodies, ossification of the anterior longitudinal ligament, the symptom of "squaring of the vertebrae." What disease can we be talking about in this case?

- **ankylosing spondylitis**
- gout
- rheumatoid arthritis
- psoriatic arthritis
- reactive arthritis

- A 32-year-old patient is suspected of having ankylosing spondylitis. What instrumental research method is considered the standard for early diagnosis of this disease?

- **MRI of the sacroiliac joints and the spine**
- CT of the sacroiliac joints and the spine
- X-ray of the sacroiliac joints and the spine
- Ultrasound of the sacroiliac joints and the spine
- arthroscopy of the sacroiliac joints and the spine

- A 37-year-old patient with complaints of pain in the sacrum, hip and shoulder joints, stiffness during movements in the lumbosacral spine. In the blood: leukocytes $14x10^9$/l, ESR – 56 mm/h, on the X-ray: signs of bilateral sacroiliitis stage I. Which of the following immune tests would be most specific for the diagnosis?

- **blood test for the presence of HLA B_{27} antigen**
- the presence of antibodies to native DNA
- the presence of antibodies to erythrocytes
- the presence of antibodies to cardiolipins
- the presence of antibodies to vascular endothelium

- A 42-year-old patient suffers from morning stiffness and constant pain in the spine, shoulder and hip joints. Objectively: "position of the beggar". On the roentgenogram of the lumbosacral spine, there is a spine in the form of a "bamboo stick", signs of ossification of the anterior longitudinal ligament, a symptom of "squaring of the vertebrae". The above manifestations are the most typical for:

- **ankylosing spondylitis**
- compression fractures of the thoracic spine
- tuberculous spondylitis
- osteochondrosis
- spinal lysis

• A 47-year-old patient complains of constant pain and stiffness in the hip, knee joints, lumbosacral spine and chest, which intensifies during breathing, radiates from the spine forward, along the ribs, body temperature rises to subfebrile numbers, weight loss. Objectively: body temperature is 37.7 °C. Pronounced kyphosis, lack of lordosis, atrophy of paravertebral muscles. Excursion of the chest at the level of the 4th intercostal space during maximum inhalation and exhalation – 1.5 cm. Which of the following diagnoses is the most probable?

• **ankylosing spondylitis**
• metastases in the vertebra
• compression fractures of the thoracic spine
• spinal cord compression
• Schmorl's hernia

• The doctor suspected ankylosing spondylitis in a 32-year-old patient. Which laboratory tests are most informative for verifying the diagnosis?

• **X-ray of the spine and sacroiliac joints**
• serological blood tests
• biochemical blood tests
• lipidogram
• proteinogram

• A 30-year-old patient complains of constant pain in the ankle-foot and wrist joints, stiffness during movements for 4 hours. A peripheral form of ankylosing spondylitis was detected. In the blood: normochromic anemia, leukocytosis, ESR – 42 mm/h, CRP – ++, detected HLA B_{27} antigen. What is the degree of activity of ankylosing spondylitis?

• **II**
• I
• 0
• IV
• III

• A 34-year-old patient with complaints on the pain in the lumbosacral region of the spine, periodic palpitations that worsen when lying down, headache, dizziness. From the anamnesis: he has been suffering from ankylosing spondyloarthritis for 3 years. Objectively: pallor of the skin, pulsation of the carotid arteries, a positive sign of Musset, Landolfi. Quincke's pseudocapillary pulse. Blood pressure – 180/70 mm Hg. Art. The apical impulse is increased, diffused, shifted to the left and down to the sixth intercostal space. The 1st tone over the apex and the 2nd tone over the aorta are weakened. Flint's presystolic murmur, diastolic murmur over the aorta. Active and passive movements in the lumbosacral spine are limited. The position of "beggar". Which of the following options is the most likely cause of the described clinical manifestations?

• **aortic valve insufficiency**

- myocarditis
- cardiac tamponade
- pulmonary embolism
- amyloidosis of the heart

• A 27-year-old patient was hospitalized in the therapeutic department with complaints of pain and limitation of movement in the lumbar region of the spine, the appearance of swelling on the face, feet, and lower legs. From the anamnesis: for 6 years he has been suffering from the visceral form of ankylosing spondylitis, for the last 3 months he has constantly had proteinuria up to 7 g/day. He was treated with prednisone - without effect. Objectively: an increase in the size of the tongue, swelling on the face, lumbar region, front abdominal wall, feet, lower legs. Mobility in the lumbar spine is limited. Blood pressure – 110/75 mm Hg. Art. Blood analysis: erythrocytes – 4.0 x 10^{12}/l, leukocytes – 4.7 x 10^9/l, ESR – 51 mm/h. Total protein – 93 g/l, albumins – 20 g/l, creatinine – 110 μmol/l, total cholesterol – 8.4 mmol/l. In urine: relative density – 1005, protein – 5.7 g/l, erythrocytes – 0–1 in f./v., leukocytes – 1–2 in f./v. What complication are we talking about?

• **CKD I: kidney amyloidosis, nephrotic stage**
• CKD II: glomerulonephritis, nephrotic syndrome
• CKD III: tubulointerstitial nephritis
• CKD II: kidney amyloidosis, nephritic stage
- CKD III: urolithiasis

- A 33-year-old patient has been suffering from ankylosing spondylitis for 5 years. 4 weeks ago, he noticed the appearance of hyperpigmentation around the right eye, swelling on the face, neck, shoulders and lower limbs, and an enlarged tongue. Objectively: periorbital purpura on the left "raccoon symptom", puffiness of the face, puffiness of the upper and lower eyelids, swelling of the neck, shoulders, both legs, feet. Blood pressure 100/65 mm Hg. Art. Macroglossia with teeth marks on the edges. The position of "beggar". Positive symptoms of Forestier, Thommeyer, "chin-sternum". In the blood: leukocytes – 12.7x10^9/l, ESR – 56 mm/h; total protein – 62 g/l, albumin – 29 g/l, cholesterol – 6.4 mmol/l. In the urine: protein 5.7 g/l, leukocytes – 1–2 in f./v., erythrocytes – 0–1 in f./v. What is the complication of the main disease in question?

- **amyloidosis of the kidneys**
- polymyositis
- dermatomyositis
- SLE
- myxedema

- A 35-year-old patient has been suffering from periodic pain in the chest, lumbosacral spine, buttocks, knee and ankle joints for the past 2 years, mainly at night and in the morning. The intensity of pain decreases slightly after physical

exercises. He notes redness of the sclera of the eyes, deterioration of vision and photophobia. This clinical situation is most often differentiated with all the diseases listed below, except:

- **dermatomyositis**
- reactive arthritis
- psoriatic arthritis
- Reiter's disease
- syphilis of the bones

- A 35-year-old patient was diagnosed with a central form of ankylosing spondylitis. He complains of constant pain and stiffness in the thoracic, lumbar-sacral spine, shoulder and hip joints. Constantly took meloxicam, tolperisone - without effect. Objectively: the pose of a "beggar", the mobility of the spine and joints is significantly limited, the patient's ability to self-care is impaired. In the blood: Hb – 110 g/l, leukocytes – $13.7x10^9$/l, ESR – 52 mm/h, CRP – +++, HLA B_{27} antigen detected. In the urine – proteinuria, microhematuria, cylindruria. At arthroscopy – signs of coxitis. It is most appropriate to start the treatment of the patient with:

- **prednisolone orally, at a dose of 15–20 mg per day**
- methotrexate 34 mg/week
- prednisolone intra-articularly
- prednisolone by application
- prednisolone, in the form of pulse therapy

- A 32-year-old patient complains of pain in the area of the sacroiliac joints, an increase in body temperature to 37.6 ^oC. Objectively: body temperature is 37.2 ^oC. Pain when palpating the paravertebral points of the lumbosacral spine. Positive symptoms of Thomayer, Kushelevskii – Patrick. In the blood: erythrocytes – 3.4 x 10^{12}/l, Hb – 110 g/l, leukocytes – 14 x 10^9/l, ESR – 31 mm/h, presence of HLA B_{27}. No pathological changes were detected in the urine analysis. Determine the strategy of further treatment of the patient:

- **NSAIDs**
- cytostatics
- glucocorticoids
- antibiotics
- enzyme drugs

• Reactive arthritis

Level 1 test tasks:

- Reactive arthritis is:

- **a group of inflammatory joint diseases of a non-purulent nature that occur in response to an extra-articular infection**
- systemic connective tissue disease
- metabolic joint disease
- dystrophic disease of the joints
- degenerative joint disease

- Forms of reactive arthritis are classified according to:
- **in connection with a previous infection**
- joint sizes
- localization of affected joints
- internal organ damage
- symmetry of the lesion

- Etiological factors of reactive arthritis are most often all the listed microorganisms, except:
- **ß-hemolytic streptococcus group A**
- Chlamydia trachomatis
- Salmonella typhimurium
- Salmonella enteriditis
- Sigella sonnei

- Immunological disorders inherent in reactive arthritis include::
- **activation of antigens of the human tissue compatibility system B 27**
- activation of leukocyte factors
- activation of basal cells
- activation of circulating immune complexes
- activation of blood coagulation factors

- Which of the following is the least likely cause of reactive arthritis?
- **helminth infections**
- intestinal infections
- urogenital infections
- viral infections
- chlamydial infection

- Typical clinical criteria for reactive arthritis are all of the following except:
- **symmetrical polyarthritis**
- recurrent asymmetric mono- and oligoarthritis of the lower extremities
- enthesopathy
- tendovaginitis
- eye damage

- The greatest diagnostic value in reactive arthritis is detection:

- **HLA B_{27}**
- leukocytosis
- rheumatoid factor
- sialic acids
- creatinine

- Kidney damage, which most often occurs in reactive arthritis:
- **glomerulonephritis**
- amyloidosis
- nephropathy
- urolithiasis
- pyelonephritis

- Is not typical for reactive arthritis:
- **scleritis**
- urethritis
- cervicitis
- conjunctivitis
- calcareous basanite

- Typical skin manifestations of reactive arthritis include::
- **hyperkeratosis**
- erythema
- enantheme
- urticaria type rash
- heliotropic rash

- Pathology of the cardiovascular system, which is not typical for extra-articular manifestations of reactive arthritis?
- **endocarditis**
- myocarditis
- aortitis
- AV conduction disorders
- pericarditis

- Pathology of the peripheral nervous system, which is most typical for reactive arthritis?
- **polyneuritis**
- paresis
- paraparesis
- amyotrophic sclerosis
- paraplegia

• The most typical lesion of the bronchopulmonary system in reactive arthritis is:
• **pleuritis**
• bronchitis
• bronchial asthma
• pneumonia
• emphysema

• For reactive arthritis, all the listed laboratory indicators are pathognomonic, except:
• **lymphocytopenia**
• leukocytosis
• anemia
• ESR acceleration
• thrombocytosis

• The most effective initial method of administration of nonsteroidal anti-inflammatory drugs for the treatment of reactive arthritis is:
• **intramuscular**
• oral
• intravenous
• intra-articular
• application

• Drugs of which pharmacological groups are the drugs of choice for the treatment of patients with reactive arthritis:
• **NSAIDs**
• glucocorticosteroids
• antibiotics
• cytostatics
• myorelaxants

Level 2 test tasks:

• The most common cause of reactive arthritis are:
• **infections of the intestinal tract**
• **infections of the reproductive system**
• skin infections
• throat infections
• bronchial infections
• Typical clinical manifestations of Lyme disease are:
• **myalgia**
• **lymphadenopathy, splenomegaly**
• **recurrent mono- and/or oligoarthritis**
• **erythema migrans**

- neuritis
- What laboratory criteria have the greatest diagnostic value for establishing the diagnosis of reactive arthritis?
- **serological confirmation of infection**
- **HLA B_{27}**
- **bacteriological confirmation of infection**
- leukocytosis
- increasing the level of sialic acids

- Which of the proposed options indicate the presence of reactive arthritis?
- **asymmetric, oligoarticular lesion of the peripheral joints**
- **HLA B_{27}**
- **sausage-like deformity of the toes**
- **negative rheumatoid factor**
- symmetrical, polyarticular lesion of the peripheral joints

- The most frequent localization of the affected joints in reactive arthritis is:
- **joints of the toes**
- **knee**
- ankle-foot
- interphalangeal joints of the hands
- carpal joints

- Which of the following is not part of the classic triad of symptoms of Reiter's syndrome:
- **glomerulonephritis**
- **fever**
- conjunctivitis
- arthritis
- urethritis

- Nail damage, which is typical for reactive arthritis:
- **onychodystrophy**
- **onycholysis**
- koilonychia
- onychomycosis
- hemorrhages under the nail

- Typical manifestations of reactive arthritis associated with parasitic invasion are:
- **acute monoarthritis with signs of local and systemic inflammation**
- **eosinophilia, increased level of IgE**
- the presence of specific antibodies in blood serum
- paraproctitis

- sigmoiditis

- Typical clinical manifestations of reactive arthritis of bacterial etiology are:
- **acute monoarthritis**
- **regional lymphadenitis**
- **signs of non-specific inflammation in the blood**
- endocarditis
- gastritis

- It is most typical for Whipple's disease:
- **diarrhea**
- **migratory mono-/oligoarthritis**
- **fever**
- **steatorrhea**
- splenomegaly

- The presence of which laboratory parameters must be detected first of all to confirm the diagnosis of reactive arthritis:
- **blood test for the presence of specific agglutinating antibodies to infectious agents**
- **bacterial culture of a scraping from the urethra/cervical canal**
- **blood test for HLA B_{27}**
- **general blood test, CRP,**
- skin biopsy

- Variants of the clinical tetrad of Reiter's syndrome include::
- **arthritis, urethritis, conjunctivitis, nail damage**
- **arthritis, urethritis, conjunctivitis, skin lesions**
- **arthritis, urethritis, conjunctivitis, damage to mucous membranes**
- arthritis, conjunctivitis, gastritis, diarrhea
- arthritis, conjunctivitis, hepatitis, polyneuritis

- Typical forms of Reiter's syndrome are:
- **urogenital**
- **postenterocolitic**
- fulminant
- skeptical
- pulmonary

- Typical clinical signs of yersinia reactive arthritis:
- **myocarditis**
- **symptoms of Reiter's triad**
- **lymphadenopathy**
- hepatitis

- pancreatitis

- Reactive arthritis is most often differentiated from:
- **infectious arthritis**
- **хвороба Бехчета**
- **rheumatoid arthritis**
- **osteoarthritis**
- hemarthrosis

- Typical X-ray signs of the chronic course of reactive arthritis:
- **erosive changes in the small joints of the feet**
- **narrowing of the joint space**
- **asymmetric signs of sacroiliitis, spondylitis**
- **ossification of ligaments and tendons, mainly of the lateral ligaments of the knee joints**
- osteophytes

- Indications for intra-articular administration of glucocorticosteroids are:
- **intolerance to NSAIDs**
- **resistance to NSAID therapy**
- lysis of the phalanges
- hepatitis
- secondary infection

- Indications for sulfosalazine for the treatment of reactive arthritis:
- **chronic course of arthritis**
- **refractoriness of arthritis to treatment with pathogenetic agents**
- **relapsing arthritis**
- joint swelling
- polyneuropathy

- Indications for systemic glucocorticosteroids in reactive arthritis are:
- **contraindications to the appointment of cytostatics and NSAIDs**
- **pregnancy and lactation**
- **severe course of reactive arthritis with extra-articular manifestations**
- **uveitis**
- glomerulonephritis

Level 3 test tasks:

- A 32-year-old patient complains of constant aching pain in the ankle-foot joints, the 2nd and 3rd toes of the left foot, an increase in temperature to 37.9 °C, redness of the sclera, a feeling of "sand" in the eyes. From the anamnesis: he fell ill

acutely, 5 days after a urogenital infection. Objectively: deformity of the ankle-foot and proximal joints of the 2nd and 3rd toes of the left foot – "sausage-shaped toes", limitation of active and passive movements in them. Hyperemia of the skin over the affected joints. What preliminary diagnosis can be established for the patient?

- **Reiter's disease**
- rheumatoid arthritis
- septic arthritis
- rheumatic arthritis
- gouty arthritis

- The patient is 34 years old, with complaints of periodic pain in the lumbosacral region of the spine, and the first toes of the right foot. From the anamnesis: 14 days ago he finished the course of treatment for enterocolitis. Objectively: body temperature is 37.7 °C. Sausage-like deformity of the 1st toe of the left foot, with limitation of active and passive movements due to pain. The skin over it is swollen, hyperemic, hot to the touch. During examination: RF is negative, presence of HLA B_{27}. X-ray signs of periostitis of the small bones of the right foot. The preliminary diagnosis is reactive arthritis. With which disease do you most often have to differentiate this clinical situation?

- **ankylosing spondylitis**
- pseudogouty arthritis
- gouty arthritis
- septic arthritis
- osteoarthritis

- During the examination of a man with suspicion of reactive arthritis of the first metatarsal-phalangeal joint of the right foot, the following were found: in the blood – signs of anemia, leukocytosis, thrombocytosis, acceleration of ESR, increased CRP and Ig A levels. Urinalysis shows pyuria. Which of the listed examinations should not be prescribed?

- **puncture of the joint**
- blood test for the presence of HLA B_{27}, markers of HIV infection
- blood test for the markers of HIV infection
- examination of a scraping from the urethra
- urine analysis

- The patient was diagnosed with reactive arthritis of urogenital origin. Symptoms have been going on for more than 2 months. The course of the disease in this case is interpreted as:

- **acute**
- chronic
- fulminant
- slowly progressing
- subacute

• A 34-year-old patient has been suffering from periodic exacerbations of arthritis with damage to the knee and ankle joints, fever, conjunctivitis, and urethritis for the past 3 years. Rheumatoid factor is negative. Your previous diagnosis?

• **Reiter's disease**
• gout
• pseudogout
• osteoarthritis
• rheumatoid arthritis

• A 22-year-old girl developed acute pain in her left knee joint after endocervicitis, and her body temperature rose to 38.8 °C. Objectively: the left knee joint is swollen, painful during active movements, the skin over it is hyperemic, hot to the touch. In the blood: anemia, leukocytosis, thrombocytosis. Which of the following immune tests would be most specific for diagnosis?

• **HLA B_{27}**
• antibodies to native DNA
• antibodies to RNA
• ACCP
• RF

• A 37-year-old patient is worried about an increase in body temperature up to 37.7 °C, pain and swelling of the 1st toe on the right foot, with restriction of movement in it, and yellowing of the nails on the toes. Objectively: body temperature is 37.4 °C. Dactylitis of the first toe of the right foot, yellow coloration of the nails on the toes of the right foot, onycholysis. Determine the strategy of further treatment of the patient:

• **the appointment of NSAIDs by injection**
• **immobilization of the affected joint**
• prescription of cytostatics
• prescription of antibiotics
• prescription of glucocorticoids

• A 30-year-old patient was diagnosed with acute reactive arthritis of the ankle-foot and first metatarsal-phalangeal joints of the right foot. Medical history: 3 years ago he suffered from prostatitis. Objectively: body temperature is 37.5°C. The right ankle-foot and I metatarsal-phalangeal joints are swollen, painful during active movements, the skin over them is hyperemic, hot to the touch. In the blood: leukocytes – 9.4 x 10^9/l, ESR – 30 mm/h; in urine: leukocytes – 6–7 in f./v., bacteria – a lot. What causative agent most likely triggered reactive arthritis?

• **Chlamydia trachomatis**
• Campylobacter jeuni
• Vibrio parahaemolyticus

- Salmonella enteriditis
- Neisseria gonorrhoeae

- The patient is 27 years old, with complaints of pain in the left knee, right ankle-foot joint, pain and swelling in the heel area, frequent painful urination, feeling of "sand" in the eyes, and lacrimation. Objectively: body temperature is 37.6 °C. Scleral hyperemia, lacrimation. Swelling and painful sensations in the area of the left knee and right ankle-foot joints. Active and passive movements in the specified joints are limited due to pain. The skin over the above joints is swollen, hyperemic, hot to the touch. Which of the following diagnoses is the most probable in this case?
- **Reiter's disease**
- rheumatic arthritis
- gouty arthritis
- rheumatoid arthritis
- septic arthritis

- A 26-year-old patient is suspected of reactive arthritis of the left ankle-foot joint. Which laboratory tests will be most informative?
- **blood test for HLA B27**
- blood test for ACCP
- blood test for ANCA
- blood test for RF
- urine analysis

LIST OF SOURCES

- BEVRA H. HAHN et al. American College of Rheumatology Guidelines for Screening, Treatment, and Management of Lupus Nephritis. Arthritis Care & Research Vol. 64, No. 6, June 2012, pp 797– 808.
- Daniel Aletaha et al. 2010 Rheumatoid Arthritis Classification Criteria. An American College of Rheumatology/European League Against Rheumatism Collaborative Initiative. ARTHRITIS & RHEUMATISM Vol. 62, No. 9, September 2010, pp 2569–2581
- DINESH KHANNA et al. 2012 American College of Rheumatology Guidelines for Management of Gout. Part 1: Systematic Nonpharmacologic and Pharmacologic Therapeutic Approaches to Hyperuricemia. Arthritis Care & Research Vol. 64, No. 10, October 2012, pp 1431–1446.
- DINESH KHANNA et al. 2012 American College of Rheumatology Guidelines for Management of Gout. Part 2: Therapy and Antiinflammatory Prophylaxis of Acute Gouty Arthritis. Arthritis Care & Research Vol. 64, No. 10, October 2012, pp 1447–1461.
- JASVINDER A. SINGH et al. 2015 American College of Rheumatology Guideline for the Treatment of Rheumatoid Arthritis.

• JENNIFER M. GROSSMAN et al. American College of Rheumatology 2010. Recommendations for the Prevention and Treatment of Glucocorticoid-Induced Osteoporosis. Arthritis Care & Research Vol. 62, No. 11, November 2010, pp 1515–1526.
• Kelley's Textbook of Rheumatology E-Book, 10th Edition, 2014. By Gary S. Firestein, MD, Ralph Budd, Sherine E Gabriel, MD, MSc, James R O'Dell, MD and Iain B. McInnes, PhD, FRCP, FRSE.
• MARC C. HOCHBERG et al. American College of Rheumatology 2012 Recommendations for the Use of Nonpharmacologic and Pharmacologic Therapies in Osteoarthritis of the Hand, Hip, and Knee. Arthritis Care & Research Vol. 64, No. 4, April 2012, pp 465– 474.
• Michael M. Ward et al. American College of Rheumatology/Spondylitis Association of America/Spondyloarthritis Research and Treatment Network 2015 Recommendations for the Treatment of Ankylosing Spondylitis and Nonradiographic Axial Spondyloarthritis. Arthritis Rheumatol. 2016 Feb;68(2):282-98. doi: 10.1002/art.39298.