

ATTENTION! FOR ALL THE QUESTIONS BELOW THE CORRECT ANSWER IS "A"

1. (23) A 52-year-old patient, who has been suffering from angina pectoris for 2 weeks, has more and more frequent pain attacks in the area behind his sternum and his need for nitroglycerine increased. Objectively: the condition is of moderate severity. Skin is pale. Heart sounds are weakened, rhythmic. Heart rate is 84 per minute. ECG shows no signs of focal myocardial damage. What is the most likely diagnosis?

- A. Progressive angina pectoris
- B. First-time angina pectoris
- C. Stable FC II angina pectoris
- D. Variant angina pectoris
- E. Acute cardiac infarction

1. A 56-year-old scientist experiences constricting retrosternal pain several times a day while walking for 100-150 m. The pain lasts for up to 10 minutes and can be relieved by nitroglycerine. Objectively: the patient is overweight, heart borders exhibit no abnormalities, heart sounds are rhythmic, Ps- 78 bpm, AP- 130/80 mm Hg. ECG contains low amplitude of T wave in V4-5. What disease might be suspected?

- A. Instable stenocardia
- B. Stable FC III stenocardia
- C. Stable FC I stenocardia
- D. Stable FC II stenocardia
- E. Stable FC IV stenocardia

1. (176) A 19-year-old patient complains of dyspnea during physical exertion. He often has bronchitis and pneumonia. Cardiac murmur has been observed since his childhood. On auscultation: there is splitting of II heart sound over pulmonary artery, systolic murmur in the third intercostal space near the left sternum margin. ECG test shows right bundle-branch block. What is the provisional diagnosis?

- A. Interatrial septum defect
- B. Open arterial duct
- C. Coarctation of aorta
- D. Aortic stenosis
- E. Mitral valve insufficiency

1. (67) A 40-year-old woman with a history of combined mitral valve disease with predominant stenosis complains of dyspnea, asthma attacks at night, heart problems. At present, she is unable to do even easy housework. What is the optimal tactics of the patient treatment?

- A. Mitral commissurotomy
- B. Implantation of an artificial valve
- C. Antiarrhythmia therapy
- D. Treatment of heart failure
- E. Antirheumatic therapy

1. (82) A 26-year-old female patient has an 11 year history of rheumatism. Four years ago she suffered 2 rheumatic attacks. Over the last 6 months there have been paroxysms of atrial fibrillation every 2-3 months. What option of antiarrhythmic therapy or tactics should be proposed?

- A. Prophylactic administration of cordarone
- B. Immediate hospitalization
- C. Defibrillation
- D. Lidocaine administration
- E. Heparin administration

2. (85) An 8-year-old girl periodically has sudden short-term heart pain, sensation of chest compression, epigastric pain, dizziness, vomiting. Objectively: the patient is pale, respiratory rate - 40/min, jugular pulse is present. Heart rate - 185 bpm, of poor volume. BP - 75/40 mm Hg. ECG taken during an attack shows ectopic P waves, QRS wave is not deformed. At the end of an attack a compensatory pause is observed. The most likely cause of the attack is:

- A. Paroxysmal atrial tachycardia
- B. Sinus tachycardia
- C. Paroxysmal ventricular tachycardia
- D. Complete AV-block
- E. Atrial fibrillation

2. (73) A 20 year-old patient complains of nosebleeds, numbness of the lower extremities. Objectively: hyperaemia of face, on the upper extremities AP is 160/90 mm Hg, and 80/50 mm Hg on the lower ones. Pulse on the popliteal and pedal arteries is of poor volume, there is systolic murmur over the carotid arteries. What is the most likely diagnosis?

- A. Dissecting aortic aneurysm
- B. Aorta coarctation
- C. Aortopulmonary window
- D. Ventricular septal defect
- E. Atrial septal defect

3. (108) A 30-year-old patient was hospitalised in an intensive care unit with a diagnosis of multiple bee stings. Skin is pale and covered with cold sweat. Pulse can be palpated only at the carotid arteries and is 110/min; breathing rate is 24/min, rhythmical, weakened. What drug must be administered immediately?

- A. Adrenaline hydrochloride intravenously
- B. Prednisolone intravenously
- C. Adrenaline hydrochloride intramuscularly
- D. Dopamine intravenously
- E. Tavegil (Clemastine) intravenously

4. (183) A 70-year-old patient consulted a doctor about arrhythmic cardiac activity, dyspnea. Objectively: BP - 150/90 mm Hg, extrasystole arrhythmia (10-12 beats per minute), left ventricular systolic dysfunction (ejection fraction at the rate of 42%). Which of antiarrhythmic drugs should be administered as initial therapy in this case?

- A. Amiodarone
- B. Flecainide
- C. Encainide
- D. Moracizine
- E. Digoxin

1. (149) A week before, a 65-year-old male patient suffered an acute myocardial infarction. His general condition has deteriorated: he complains of dyspnea at rest, pronounced weakness. Objectively: edema of the lower extremities, ascites is present. Heart borders are extended, paradoxical pulse is 2 cm displaced from the apex beat to the left. What is the most likely diagnosis?

- A. Acute cardiac aneurysm
- B. Recurrent myocardial infarction
- C. Acute pericarditis
- D. Cardiosclerotic aneurysm
- E. Pulmonary embolism

1. (163) A 44-year-old man complains of dyspnea with sensation of lack of air on inhale, palpitations occurring during slight physical exertion, and shin edemas that appear in evening and resolve in morning. His condition has been lasting for 5 months already, deterioration is gradual. What method of instrumental diagnostics allows to verify decrease of systolic function in this patient?

- A. Echocardiography
- B. Electrocardiography
- C. Computed tomogram
- D. Phonocardiography
- E. Holter blood pressure monitoring

3. (84) A 33-year-old man with a history of rheumatic fever complains of fever up to 38 – 39°C, abdominal pain, dyspnea, tachycardia. Heart borders are displaced to the left by 2 cm, systolic and diastolic murmurs above aorta, BP of 160/30 mm Hg. Petechial rash occurs after measurement of blood pressure. Liver is enlarged by 3 cm, spleen is palpable. Urine is brown-yellow. What is the most likely diagnosis?

- A. Aortic regurgitation
- B. Rheumatic fever
- C. Acute hepatitis
- D. Acute nephritis
- E. Infectious endocarditis

1. (46) A 34-year-old patient after vacation in Crimea has developed severe pain in her elbow joints, dyspnea and weakness. Body temperature is 37,6°C, skin pallor and erythema on the cheeks and bridge of nose are observed, lip mucosa is ulcerated. The joints are not visibly deformed, movement of the right elbow joint is restricted. Pleura friction sound is detected in the lungs on the right side below the angle of scapula. Heart sounds are dull, tachycardia, gallop rhythm, heart rate 114/min, BP - 100/60 mm Hg. The most likely diagnosis is:

- A. Systemic lupus erythematosus
- B. Rheumatic carditis
- C. Rheumatoid arthritis
- D. Infectious allergic myocarditis
- E. Dry pleurisy

1. (61) A 28-year-old female patient with a six-year history of Raynaud's syndrome has recently developed pain in the small joints of hands, difficult movement of food down the esophagus. What disease can be suspected in this case?

- A. Systemic scleroderma
- B. Periarteritis nodosa
- C. Rheumatoid arthritis
- D. Systemic lupus erythematosus
- E. Pseudotrachiniasis

1. (135) A 68-year-old patient complains of pain, slight swelling and creaking in the distal joints of her fingers and knee joints. She has been suffering from this condition for 4 years. Objectively: thickening of knee and interphalangeal joints, restricted mobility of these joints. Blood test: leukocytes $5,4 \cdot 10^9/l$, ESR - 12 mm/h, fibrinogen - 3,5 g/l; Rheumatoid factor - 1:32; anti-streptolysin O - 160 units; seromucoid - 0,20 units.; CRP+. What mechanism of development is likely for this condition?

- A. Glycosaminoglycans synthesis disruption
- B. Rheumatoid factor development
- C. Native DNA antibodies hyperproduction
- D. Increased uric acid synthesis
- E. Immune reaction to streptococcosis

1. (166) A 25-year-old patient is not married and has sexual relations with several partners. During the last 3 months he noticed small amount of mucoserous secretions produced from urethra. Subjectively: periodical itching or burning pain in urethra. Two months ago pain in knee joint developed. Possibility of trauma or exposure to cold is denied by the patient. During the last week eye discomfort is noted - lacrimation and itching. What provisional diagnosis can be suggested?

- A. Reactive arthritis
- B. Rheumatoid arthritis
- C. Seasonal pollinosis
- D. Bacterial nonspecific urethral conjunctivitis
- E. URTI with conjunctiva and joints affected

2. (195) A 40-year-old patient complains of constant moderate pain in the lumbar spine and significantly reduced mobility. The patient has been suffering from this condition for the last 7 years since pain appeared first in the sacrum area. X-ray: ankylosis of sacroiliac articulation, significant narrowing of intervertebral joint fissures of lumbar vertebrae and calcification of spinal ligaments. What pathology is most likely to cause such X-ray image?

- A. Ankylosing spondylitis
- B. Spinal tuberculosis
- C. Spinal osteochondrosis
- D. Vertebral osteochondropathy
- E. Rheumatoid arthritis

7. (136) A 19 y.o. girl admitted to the hospital complained of pain in the knee and fever of $38,6^{\circ}C$. She is ill for 2 weeks after acute tonsillitis. On exam, hyperemia and swelling of both knees, temperature is $37,4^{\circ}C$, HR- 94/min, BP- 120/80 mm Hg, and heart border is displaced to the left; S1 is weak, systolic murmur is present. Total blood count shows the following: Hb- 120 g/L, WBC- $9,8 \cdot 10^9/L$, ESR of 30 mm/L. ECG findings: the rhythm is regular, PQ = 0,24 sec. What is a causative agent of the disease?"

- A. Staphylococci

- B. Viral-bacterial association
- C. Autoimmune disorder
- D. Beta-hemolytic streptococci
- E. Ricchetsia

1. (143) A 58-year-old patient complains of general weakness, weight loss up to 10 kg within the last 1,5 months, progressive pain in the small of the back, raise of blood pressure to 220/160 mm Hg, subfebrile body temperature. Objectively: tuberos slightly movable lump can be palpated in the right subcostal area; veins of spermatic cord and scrotum are dilated. Blood test: Hb - 86 g/l, ESR - 44 mm/h. Urine test: specific gravity - 1020, proteine - 0,99 g/l, erythrocytes - all field of vision, leukocytes - 4-6 in the field of vision. The provisional diagnosis is:

- A. Kidney tumor
- B. Urolithiasis
- C. Acute pyelonephritis
- D. Acute glomerulonephritis
- E. Nephroptosis

1. (100) A 45-year-old patient with urolithiasis had an attack of renal colic. What is the mechanism of the attack development?

- A. Disturbed urine outflow from the kidney
- B. Increase in urine specific gravity
- C. Ureteric twists
- D. Destruction of renal glomerules
- E. Renal artery spasm

1. (34) A 39-year-old patient complains of morning headache, appetite loss, nausea, morning vomiting, periodic nasal haemorrhages. The patient had acute glomerulonephritis at the age of 15. Examination revealed rise of arterial pressure up to 220/130 mm Hg, skin haemorrhages on his arms and legs, pallor of skin and mucous membranes. What biochemical parameter is the most important for making diagnosis in this case?

- A. Blood creatinine
- B. Blood bilirubin
- C. Blood sodium
- D. Uric acid
- E. Fibrinogen

2. (68) A 30-year-old woman with a long history of chronic pyelonephritis complains of considerable weakness, sleepiness, decrease in diuresis down to 100 ml per day. BP is 200/120 mm Hg. In blood: creatinine - 0,62 millimole/l, hypoproteinemia, albumines - 32 g/l, potassium - 6,8 millimole/l, hypochromic anemia, increased ESR. What is the first step in the patient treatment tactics?

- A. Haemodialysis
- B. Antibacterial therapy
- C. Enterosorption
- D. Haemosorption
- E. Blood transfusion

3. (157) A 23-year-old patient after intake of brake fluid has developed anuria that has been lasting for 5 days already. Creatinine level increased up to 0,769 mmol/l. What treatment tactics should be chosen in the given case?

- A. Hemodialysis
- B. Detoxification therapy
- C. Antidotal therapy
- D. Diuretics
- E. Plasmapheresis

4. (193) A 74-year-old patient visited a urologist with complaints of pain above the pubis and inability to urinate for 8 hours. At home he had taken antispasmodics and had a warm bath but no improvement occurred. Objectively: abdomen is soft and painful above the pubis; dullness of percussion sound is observed above the pubis. Murphy's (Pasternatski's) punch sign is negative on the both sides. What condition does the patient have?

- A. Acute urinary retention
- B. Paradoxal ischuria
- C. Chronic urinary retention
- D. Anuria
- E. Oliguria

8. (9) A 38 year old female patient complains about body stiffness in the morning, especially in the articulations of her upper and lower limbs, that disappears 30-60 minutes later after active movements. She has also arthritis of metacarpophalangeal and proximal phalangeal articulations, subfebrile temperature. ESR- 45 mm/h. Roentgenography revealed osteoporosis and erosion of articular surface of small hand and foot articulations. What is the most probable diagnosis?

- A. Systemic lupus erythematosus
- B. Psoriatic arthropathy
- C. Osteoarthritis deformans
- D. Rheumatoid arthritis
- E. Reactive polyarthritis

1. (9) A patient has been hospitalised. The onset of the disease was gradual: nausea, vomiting, dark urine, cholic stool, yellowness of the skin and scleras. The liver is enlarged by 3 cm. Jaundice developed on the 14th day of the disease. The liver diminished in size. What complication of viral hepatitis caused deterioration of the patient's condition?

- A. Hepatic encephalopathy
- B. Meningitis
- C. Relapse of viral hepatitis
- D. Cholangitis
- E. Infectious-toxic shock

1. (11) A 60-year-old woman, mother of 6 children, developed a sudden onset of upper abdominal pain radiating to the back, accompanied by nausea, vomiting, fever and chills. Subsequently, she noticed yellow discoloration of her sclera and skin. On physical examination the patient was found to be febrile with temperature of 38,9°C, along with right upper quadrant tenderness. The most likely diagnosis is:

- A. Choledocholithiasis

- B. Benign biliary stricture
- C. Malignant biliary stricture
- D. Carcinoma of the head of the pancreas
- E. Choledochal cyst

2. (59) A 50-year-old patient complains about having pain attacks in the right subcostal area for about a year. The pain arises mainly after taking fatty food. Over the last week the attacks occurred daily and became more painful. On the 3rd day of hospitalization the patient presented with icteritiousness of skin and scleras, light-coloured feces and dark urine. In blood: neutrophilic leukocytosis - $13,1 \cdot 10^9/l$, ESR - 28 mm/h. What is the most likely diagnosis?

- A. Chronic calculous cholecystitis
- B. Chronic recurrent pancreatitis
- C. Fatty degeneration of liver
- D. Chronic cholangitis, exacerbation stage
- E. Hypertensive dyskinesia of gallbladder

1. (52) A 45-year-old patient complains of pain in the epigastric region, left subcostal area, abdominal distension, diarrhea, loss of weight. He has been suffering from this condition for 5 years. Objectively: tongue is moist with white coating near the root; deep palpation of abdomen reveals slight pain in the epigastric region and -Robson's point. Liver is painless and protrudes 1 cm from the costal arch. Spleen cannot be palpated. What disease can be primarily suspected?

- A. Chronic pancreatitis
- B. Atrophic gastritis
- C. Peptic stomach ulcer
- D. Chronic cholecystitis
- E. Chronic enteritis

1 (6) A 22 year old woman complained of right subcostal aching pain, nausea, and decreased appetite. She fell ill 2 months after appendectomy when jaundice appeared. She was treated in an infectious hospital. 1 year later above mentioned symptoms developed. On exam: the subicteric sclerae, enlarged firm liver. Your preliminary diagnosis:

- A. Chronic viral hepatitis
- B. Calculous cholecystitis
- C. Gilbert's disease
- D. Acute viral hepatitis
- E. Chronic cholangitis

2. (156) A 53-year-old woman complains of weight loss up to 10 kg within the last 2 years, liquid foul-smelling stool two times a day that poorly washes off the toilet, periodic bouts of nausea, girdle pain in the upper abdomen. Objectively: pain in Gubergrits zone (on the right from navel) and Mayo-Robson's point. Biochemical blood analysis: glucose - 3,2 mmol/l, bilirubin 16,5 micromole/l, crude protein - 56,4g/l. Urine diastase - 426 g/h/l. D-xylose test (oral administration of 25 g of d-xylose) after 5 hours reveals 3 g of xylose in urine. The most likely diagnosis is:

- A. Pancreatitis. Malabsorption syndrome
- B. Pseudomembranous colitis

- C. Nonspecific ulcerative colitis
- D. Irritable bowel syndrome
- E. Chronic gastritis

1.(32) A 56-year-old scientist experiences constricting retrosternal pain several times a day while walking for 100-150 m. The pain lasts for up to 10 minutes and can be relieved by nitroglycerine. Objectively: the patient is overweight, heart borders exhibit no abnormalities, heart sounds are rhythmic, Ps-78bpm, AP- 130/80mmHg. ECG contains low amplitude of T wave in V4-5. What disease might be suspected?

- A. Stable FC III stenocardia
- B. Instable stenocardia
- C. Stable FC I stenocardia
- D. Stable FC II stenocardia
- E. Stable FC IV stenocardia

1.(11) A 45-year-old woman, mother of four children, comes to the emergency room complaining of a sudden onset of the epigastric and right upper quadrant pain, radiating to the back, accompanied by vomiting. On examination, tenderness is elicited in the right upper quadrant, bowel sounds are decreased, and laboratory data shows leukocytosis, normal serum levels of amylase, lipase, and bilirubin. The most likely diagnosis is:

- A. Acute cholecystitis
- B. Perforated peptic ulcer disease
- C. Myocardial infarction
- D. Sigmoid diverticulitis
- E. Acute pancreatitis

2. (170) A 58-year-old patient complains of a headache in the occipital region, nausea, choking, oploentes. The presentations appeared after a physical exertion. Objectively: the patient is excited. Face is hyperemic. Skin is pale. Heart sounds are regular, the 2nd aortic sound is accentuated. AP- 240/120 mm Hg, HR92/min. Auscultation reveals some fine moist rales in the lower parts of the lungs. Liver is not enlarged. ECG shows signs of hypertrophy and left ventricular overload. What is the most likely diagnosis?

- A. Complicated hypertensive crisis
- B. Acute myocardial infarction, pulmonary edema
- C. Bronchial asthma exacerbation
- D. Uncomplicated hypertensive crisis
- E. Community-acquired pneumonia

1.(58) A 67-year-old male complains of dyspnea on exertion, attacks of retrosternal pain, dizziness. He has no history of rheumatism. Objectively: pale skin, acrocyanosis. There are rales in the lower parts of lungs. There is systolic thrill in the II intercostal space on the right, coarse systolic murmur conducted to the vessels of neck. AP- 130/90 mm Hg, heart rate - 90/min, regular rhythm. The liver extends 5 cm under the edge of costal arch, skin edemata are present. Specify the assumed valvular defect:

- A. Aortic stenosis
- B. Pulmonary artery stenosis
- C. Mitral insufficiency
- D. Ventricular septal defect
- E. Tricuspid regurgitation

2. (10) 2 weeks after having quinsy, a 26 year-old male patient got facial edemata, moderate pain in the sacrum. Objectively: body temperature is 37,5°C, AP- 100/80 mm Hg. Urinalysis results: RBC- up to 100 fresh cells in per HPF, protein - 2,2 g/l, hyaline cylinders - up to 10 per HPF, relative density 1002. What is the most likely diagnosis?

- A. Acute glomerulonephritis
- B. Nephroma
- C. Acute pyelonephritis
- D. Urolithiasis
- E. Chronic glomerulonephritis

1.(30) A 55-year-old male had been treated at the surgical department for acute lower extremity thrombophlebitis. On the 7th day of treatment he suddenly developed pain in the left part of chest, dyspnea and cough. Body temperature was 36,1°C, respiratory rate - 36/min. The patient was also found to have diminished breath sounds without wheezing. Ps- 140/min, thready. AP- 70/50 mm Hg. The ECG shows Q₁II-S₁ syndrome. What is the most likely diagnosis?

- A. Pulmonary embolism
- B. Myocardial infarction
- C. Cardiac asthma
- D. Bronchial asthma
- E. Pneumothorax

1.(186) A 56-year-old patient was undergoing a surgery for suture repair of perforated ulcer. During the operation the cardiomonitor registered ventricular fibrillation. The first-priority measure should be:

- A. Electrical defibrillation
- B. Injection of adrenalin
- C. Injection of lidocaine
- D. Injection of atropine
- E. Injection of calcium chloride

27. A 58-year-old patient was delivered to an admission room with complaints of pain in the thorax on the left. On clinical examination: aside from tachycardia (102/min.) no other changes. On ECG: pathologic wave Q in I, aVL, QS in V1, V2, V3 leads and 'domed' ST elevation with negative T. What diagnosis is most likely?

- A. Acute left ventricular posterior myocardial infarction
- B. Variant angina pectoris
- C. Aortic dissection
- D. Acute left ventricular anterior myocardial infarction
- E. Exudative pericarditis

1.(100) A 53-year-old woman complained of cardiac pain and rhythm intermissions. She had experienced these presentations since childhood. The patient's father had a history of cardiac arrhythmias. Objectively: the patient was in grave condition, Ps- 220 bpm, AP- 80/60 mm Hg. ECG: heart rate - 215/min, widening and deformation of QRS complex accompanied by atrioventricular dissociation; positive P wave. Some time later heart rate

reduced down to 45/min, there was a complete dissociation of P wave and QRST complex. Which of the following will be the most effective treatment?

- A. Implantation of the artificial pacemaker
- B. β -adrenoreceptor blocking agents
- C. Cholinolytics
- D. Calcium antagonists
- E. Cardiac glycosides

1.(45) A 60-year-old female patient had been admitted to a hospital for acute transmural infarction. An hour later the patient's condition got worse. She developed progressing dyspnea, dry cough. Respiratory rate - 30/min, heart rate - 130/min, AP- 90/60 mm Hg. Heart sounds were muffled, there was also diastolic shock on the pulmonary artery. The patient presented with medium moist rales in the lower parts of lungs on the right and on the left. Body temperature 36,4°C. What drug should be given in the first place?

- A. Promedol
- B. Aminophylline
- C. Dopamine
- D. Heparin
- E. Digoxin

1.(33). A 32-year-old patient has a 3-year history of asthma attacks, that can be hardly stopped with berotec. Over a few last months he has experienced pain in the joints and sensitivity disorder of legs and feet skin. Ps - 80/min, AP - 210/100 mm Hg. In blood: eosinophilia at the rate of 15%. What disease can be suspected in this case?

- A. Systemic scleroderma
- B. Systemic lupus erythematosus
- C. Periarthritis nodosa
- D. Dermatomyositis
- E. Wegener's disease

1.(5) During dynamic investigation of a patient the increase of central venous pressure is combined with the decrease of arterial pressure. What process is proved by such combination?

- A. Developing of cardiac insufficiency
- B. Depositing of blood in venous channel
- C. Shunting
- D. Presence of hypervolemia
- E. Increase of bleeding speed

2. (41) A 57-year-old man complains of shortness of breath, swelling on shanks, irregularity in cardiac work, pain in the left chest half with irradiation to the left scapula. Treatment is ineffective. On physical exam: heart's sounds are diminished, soft systolic murmur on the apex. Ps - 100/min, arrhythmical, BP - 115/75 mm Hg. The liver is +2 cm, painful. Roentgenoscopy: enlargement of heart shadow to all sides, pulsation is weak. Electrocardiogram (ECG): left ventricular extrasystolia, decreased voltage. What method of investigation is necessary to do to determine the diagnosis?

- A. Echocardiography
- B. Velocimetry

- C. X-raykymography
- D. ECG in the dynamics
- E. Coronarography

3. (74) A patient has chronic heart failure of the II stage. He takes furosemide regularly three times a week. He had developed bronchopneumonia and had been administered combined pharmacotherapy. On the fifth day of therapy the patient complained of hearing impairment. What drug coadministered with furosemide might have caused the hearing loss?

- A. Gentamicin
- B. Linex
- C. Nystatin
- D. Tavegil
- E. Mucaltin

3. (24). A 32-year-old male patient has been suffering from pain in the sacrum and coxofemoral joints, painfulness and stiffness in the lumbar spine for a year. ESR - 56 mm/h. Roentgenography revealed symptoms of bilateral sacroileitis. The patient is the carrier of HLA B27 antigen. What is the most likely diagnosis?

- A. Spondylosis
- B. Coxarthrosis
- C. Rheumatoid arthritis
- D. Reiter's disease
- E. Ankylosing spondylitis

1.(142) A 58-year-old patient complains about sensation of numbness, sudden paleness of II-IV fingers, muscle rigidity, intermittent pulse. The patient presents also with polyarthralgia, dysphagia, constipations. The patient's face is masklike, solid edema of hands is present. The heart is enlarged; auscultation revealed dry rales in lungs. In blood: ESR- 20 mm/h, crude protein - 85/l, γ globulines - 25%. What is the most likely diagnosis?

- A. Systemic scleroderma
- B. Dermatomyositis
- C. Rheumatoid arthritis
- D. Systemic lupus erythematosus
- E. Raynaud's disease

1.(22) A 35-year-old patient complains about pain and morning stiffness of hand joints and temporomandibular joints that lasts over 30 minutes. She has had these symptoms for 2 years. Objectively: edema of proximal interphalangeal digital joints and limited motions of joints. What examination should be administered?

- A. Roentgenography of hands
- B. Complete blood count
- C. Rose-Waalerreaction
- D. Immunogram
- E. Proteinogram

1.(35) A 32-year-old male patient has been suffering from pain in the sacrum and coxofemoral joints, painfulness and stiffness in the lumbar spine for a year. ESR 56 mm/h.

Roentgenography revealed symptoms of bilateral sacroileitis. The patient is the carrier of HLA B27 antigen. What is the most likely diagnosis?

- A. Ankylosing spondylitis
- B. Coxarthrosis
- C. Rheumatoid arthritis
- D. Reiter's disease
- E. Spondylosis

1.(36) A 58-year-old female patient complains about periodical headache, dizziness and ear noise. She has been suffering from diabetes mellitus for 15 years. Objectively: heart sounds are rhythmic, heart rate is 76/min, there is diastolic shock above aorta, AP is 180/110 mm Hg. In urine: OD- 1,014. Daily loss of protein with urine is 1,5 g. What drug should be chosen for treatment of arterial hypertension?

- A. Inhibitor of angiotensin converting enzyme
- B. β -blocker
- C. Calcium channel antagonist
- D. Thiazide diuretic
- E. α -blocker

2. (78) A 30-year-old woman with a long history of chronic pyelonephritis complains about considerable weakness, sleepiness, decrease in diuresis down to 100 ml per day. AP-200/120 mm Hg. In blood: creatinine - 0,62 millimole/l, hypoproteinemia, albumines - 32 g/l, potassium - 6,8 millimole/l, hypochromic anemia, increased ESR. What is the first step in the patient treatment tactics?

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- A. Choledocholithiasis
- B. Benign biliary stricture
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- A. Chronic calculous cholecystitis
- B. Chronic recurrent pancreatitis
- C. Fatty degeneration of liver

- D. Chronic cholangitis, exacerbation stage
- E. Hypertensive dyskinesia of gallbladder

3. (154) A 35-year-old patient complains of heartburn, sour eructation, burning, compressing retrosternal pain and pain along the esophagus rising during forward bending of body. The patient hasn't been examined, takes Almagel on his own initiative, claims to feel better after its taking. Make a provisional diagnosis:

- A. Gastroesophageal reflux disease
- B. Functional dyspepsia
- C. Cardiospasm
- D. Gastric ulcer
- E. Duodenal ulcer

1. (52) 4 hours after having meals a patient with signs of malnutrition and steatorrhea experiences stomach pain, especially above navel and to the left of it. Diarrheas take turns with constipation lasting up to 3-5 days. Palpation reveals moderate painfulness in the choledochopancreatic region. The amylase rate in blood is stable. X-ray reveals some calcifications located above navel. What is the most likely diagnosis?

- A. Chronic pancreatitis
- B. Chronic gastroduodenitis
- C. Duodenal ulcer
- D. Zollinger-Ellison syndrome
- E. Chronic calculous cholecystitis

53. A 61 y.o. man complained of sneezing and substernal pain on exertion. In the last 2 weeks such pain appeared at rest, with increased frequency, and couldn't be suppressed by 1 tablet of nitroglycerin. What is the most likely diagnosis?

- A. Unstable angina pectoris
- B. Angina pectoris of a new onset
- C. Myocarditis
- D. Radiculitis
- E. Stable angina pectoris of the III functional class

144. A 52 y.o. male patient suffers from squeezing pain attacks in substernal area which irradiates to the left hand and occurs occasionally and on physical exercises. He has had it for 1 year. On examination: heart borders are enlargement to the left side, sounds are muffled, Ps- 76 bpm, rhythmic, AP- 155/80 mm Hg, ECG: the left type, the rest signs are normal. What additional examination is necessary to confirm the diagnosis?

- A. Veloergometry
- B. Echocardiography
- C. Lipoprotein test
- D. General blood count
- E. Transaminases

51. A 58 y.o. man complained of severe inspiratory dyspnea and expectoration of frothy and blood-tinged sputum. He has been suffering from essential hypertension and ischemic heart disease. On examination: acrocyanosis, "bubbling" breathing, Ps- 30/min, BP- 230/130 mm Hg, bilateral rales. Choose medicines for treatment.

- A. Morphine, furosemide, nitroprusside sodium
- B. Theophylline, prednisolone

- C. Albuterol, atropine, papaverine
- D. Strophanthine, potassium chloride, plathyphylline
- E. Cordiamine, isoproterenol

52. A patient has got a sudden attack of severe substernal pain at night. On examination: confusion, pallor of the skin, acrocyanosis, cold sweat, BP- 80/50 mm Hg, Ps- 120/min, irregular and weak pulse. What condition are these symptoms typical for?

- A. Cardiogenic shock
- B. Acute left-side heart failure
- C. Acute right-side heart failure
- D. Radicular syndrome
- E. Acute vascular insufficiency

141. The doctors in maternity hospital made a newborn boy the following diagnosis: congenital heart disease (interventricular septal defect). At the age of 2 months the boy has got a dyspnea. Objectively: BR- up to 60/min, Krok 1 Medicine 2006 19 tachycardia up to 170/min, liver is 3 cm below the costal margin. What medicines must be immediately prescribed?

- A. Cardiac glycosides
- B. Nonsteroidal antiinflammatory drugs
- C. Potassium preparations
- D. β -adrenoceptor blockers
- E. Glucocorticoids

37. A 40 y.o. patient with rheumatic heart disease complains of anorexia, weakness and loss of weight, breathlessness and swelling of feet. The patient had tooth extraction one month ago. On examination: $t_{0-39}^{\circ}\text{C}$, Ps- 100/min. Auscultation: diastolic murmur in the mitral area. Petechial lesion are round of clavicle; spleen was palpable.

- A. Subacute bacteria endocarditis
- B. Recurrence of rheumatic fever
- C. Thrombocytopenia purpura
- D. Mitral stenosis
- E. Aortic stenosis

48. A 40 y.o. woman is ill with rheumatic disease with composite mitral disease with prevalence of the stenosis of left venous foramen. Complains of palpitation, fatigability, progressing dyspnea, attacks of dyspnea and hemoptysis. Now she cannot be engaged even in the easy activities. What tactics is the most expedient?

- A. Mitral commissurotomy
- B. Conduction of current bicilinoprofilaxis
- C. Prescription of anticoagulants
- D. Prescription of venous vasodilators
- E. –

3. On the 3rd day after the acute anterior myocardial infarction a 55 y.o. patient complains of dull ache behind his breast bone, that can be reduced by bending forward, and of dyspnea. Objectively: AP- 140/180 mm Hg, heart sounds are dull. ECG results: atrial fibrillation with frequency of ventricular contractions at the rate of 110/min, pathological Q

wave and S-T segment raising in the right chest leads. The patient refused from thrombolysis. What is the most probable diagnosis?

- A. Acute pericarditis
- B. Pulmonary embolism
- C. Tietze's syndrome
- D. Dissecting aortic aneurysm
- E. Dressler's syndrome

151. A 35 y.o. male patient suffers from chronic glomerulonephritis and has been treated with hemodialysis for the last 3 years. He has got irregularities in the heart activity, hypotension, progressive weakness, dyspnea. On ECG: bradycardia, 1st degree atrioventricular block, high sharpened T-waves. Some time before he had seriously broken the water consumption and dietary pattern. What is the most likely cause of these changes?

- A. Hyperkalemia
- B. Hyperhydratation
- C. Hypokalemia
- D. Hypernatremia
- E. Hypocalcemia

145. A 70 y.o. patient complains of weakness, dizziness, short periods of loss of consciousness, pain in the region of heart. Objectively: HR- 40/min, sounds are rhythmic, the 1st sound is dull, occasionally very intensive. AP- 180/90 mm Hg. What is the most probable reason of hemodynamic disorders?

- A. III degree atrioventricular heart block
- B. I degree atrioventricular heart block
- C. Bradysystolic form of the atrial fibrillation
- D. Sinus bradycardia
- E. Complete block of the left branch of His bundle

60. A 60 y.o. woman has had increased BP up to 210/110 mm Hg for the last 7 years. On examination: heart apex is displaced to the left. There are signs of left ventricular hypertrophy on ECG. What is the most probable diagnosis?

- A. Essential hypertension, 2nd stage
- B. Essential hypertension, 1st stage
- C. Symptomatic hypertension
- D. Cardiomyopathy
- E. Ischemic heart diseases

70. A 17 y.o. patient complains of acute pain in the knee joint and t 0- 380C. He was ill with angina 3 weeks ago. Objectively: deformation and swelling of the knee joints with skin hyperemia. Small movement causes an acute pain in the joints. Which diagnose is the most correct?

- A. Rheumatism, polyarthritis
- B. Systemic lupus erythematoses
- C. Reactive polyarthritis
- D. Infectious-allergic polyarthritis

E. Rheumatoid arthritis

30. A 10 y.o. boy was ill with angina 2 weeks ago, has complaints of joint pain and stiffness of his left knee and right elbow. There was fever (38, 50) and ankle dysfunction, enlargement of cardiac dullness by 2 cm, tachycardia, weakness of the 1st sound, gallop rhythm, weak systolic murmur near apex. What diagnosis corresponds with such symptoms?

- A. Acute rheumatic fever
- B. Systemic lupus erythematosus
- C. Juvenile rheumatoid arthritis
- D. Reiter's disease
- E. Reactive arthritis

93. A patient has complained of great weakness for 6 years. He fell seriously ill, the illness is accompanied by body temperature rise, indisposition, pain in joints and along the legs muscles. Objectively: violet-bluish erythema around eyes and over knee joints. HR-120/min, heart sounds are weak. Blood count: leukocytes - $12 \times 10^9/L$, ESR- 40 mm/h. What is the most probable diagnosis?

- A. Dermatomyositis
- B. Systemic lupus erythematosus
- C. Rheumatoid arthritis
- D. Atopic dermatitis
- E. Reactive polyarthritis

139. A 31 y.o. patient has been suffering from systemic scleroderma for 14 years. She has been treated in hospital many times. She complains of occasional dull pain in the heart region, palpitation, dyspnea, headache, eye-lid edemata, weight loss and deformation of extremities joints. What organ affection worsens the disease prognosis?

- A. Kidneys
- B. Heart
- C. Lungs
- D. Gastrointestinal tract
- E. Skin and joints

152. A 60 y.o. patient complains of pain in interphalangeal joints of hand that gets worse during working. Objectively: distal and proximal joints of the II-IV fingers are deformed, with Heberden's and Bouchard's nodes, painful, stiff. X-ray picture of joints: joint spaces are constricted, there are marginal osteophytes, subchondral sclerosis. What is the most probable diagnosis?

- A. Osteoarthritis
- B. Reiter's disease
- C. Bechterew's disease
- D. Rheumatoid arthritis
- E. Psoriatic arthritis

185. A man, aged 30, complains of intense pain, reddening of skin, edema in the ankle-joint area, fever up to 39.0°. There was acute onset of the illness. In the past there were similar attacks lasting 5-6 days without residual changes in the joint. The skin over the joint is hyperemic without definite borders and without infiltrative bank on the periphery. What is the most likely diagnosis?

- A. Gout

- B. Infectious arthritis
- C. Rheumatoid arthritis
- D. Erysipelatous inflammation
- E. Osteoarthritis

112. A 54 y.o. patient has been suffering from osteomyelitis of femoral bone for over 20 years. In the last month there appeared and gradually progressed edemata of lower extremities. Urine analysis: proteinuria - 6,6 g/L. Blood analysis: dysproteinemia in form of hypoalbuminemia, increase of α_2 - and γ -globulins, ESR- 50 mm/h. What is the most probable diagnosis?

- A. Secondary renal amyloidosis
- B. Acute glomerulonephritis
- C. Myelomatosis
- D. Chronic glomerulonephritis
- E. Systemic lupus erythematosus

77. 3 weeks ago a patient was ill with tonsillitis. Clinical examination reveals edema, arterial hypertension, hematuria, proteinuria (1,8 g/per day), granular and erythrocytic casts. What is the preliminary diagnosis?

- A. Glomerulonephritis
- B. Cystitis
- C. Pyelonephritis
- D. Intestinal nephritis
- E. Renal amyloidosis

56. A 29 y.o. woman is critically ill. The illness is presented by high fever, chills, sweating, aching pain in lumbar area, discomfort during urination and frequent voiding.

Pasternatsky's sign is positive in both sides. On lab examination: WBC- $20 \times 10^9/L$; on urine analysis: protein - 0,6g/L, leukocyturia, bacteriuria. Your preliminary diagnosis. Krok 1

- A. Acute pyelonephritis
- B. Exacerbation of chronic pyelonephritis
- C. Acute glomerulonephritis
- D. Acute cystitis
- E. Nephrolithiasis

173. A 32 y.o. woman has been suffering for 5 months from pain in lumbar region, low grade fever, frequent urination. Urine analysis: moderate proteinuria, leukocytes occupy the whole field of sight, bacteriuria. Blood analysis: leukocytosis, increased ESR. What is the most probable diagnosis?

- A. Chronic pyelonephritis
- B. Acute glomerulonephritis
- C. Chronic glomerulonephritis
- D. Acute pyelonephritis
- E. Urolithiasis

142. A 50 y.o. woman who suffers from chronic pyelonephritis was prescribed a combination of antibiotics for the period of exacerbation - gentamicin (80 mg 3 times a

day) and biseptol (960 mg twice a day). What consequences may be caused by such a combination of antibiotics?

- A. Acute renal insufficiency
- B. Glomerulosclerosis
- C. Chronic renal insufficiency
- D. Antibiotic combination is optimal and absolutely safe
- E. Acute suprarenal insufficiency

118. A 28 y.o. woman consulted a doctor about edematic face, moderate legs edemata; occasionally her urine has colour of "meat slops". When she was a teenager she often fell ill with angina. Objectively: skin is pallor, body temperature is 36, 80°, Ps- 68/min, rhythmic. AP- 170/110 mm Hg. What urine changes are the most probable?

- A. Proteinuria, hematuria, cylindrouria
- B. Increase of relative density, hematuria, bacteriuria
- C. Decrease of relative density, proteinuria, some urinary sediment
- D. Erythrocyturia and urinozuria
- E. Decrease of relative density, proteinuria

105. A 7 y.o. boy has been treated in a hospital for a month. At the time of admission he had evident edemata, proteinuria - 7,1 g/L, protein content in the daily urine- 4,2 g. Biochemical blood analysis reveals permanent hypoproteinemia (43,2 g/L), hypercholesterolemia (9,2 mmol/L). What variant of glomerulonephritis is the most probable?

- A. Nephrotic
- B. Nephritic
- C. Isolated urinary
- D. Hematuric
- E. Mixed

188. An 8 y.o. boy was ill with B hepatitis one year ago. In the last 2 months he has complaints of undue fatiguability, sleep disorder, appetite loss, nausea, especially in the mornings. Skin isn't icterious, liver and spleen are 1 cm below the costal margins, painless. Alanine aminotransferase activity is 2,2 mcmol/L. How can this condition be estimated?

- A. Development of chronic hepatitis
- B. Recurrence of viral hepatitis type B
- C. Biliary dyskinesia
- D. Residual effects of old viral hepatitis type B
- E. Development of liver cirrhosis

117. A 16 y.o. teenager complains of weakness, dizziness, sense of heaviness in the left hypochondrium. Objectively: skin and visible mucous membranes are icteric. Steeple skull. Liver +2 cm, the lower pole of spleen is at the level of navel. Blood test: RBC- $2,7 \times 10^{12}/L$, Hb- 88 g/L, WBC- $5,6 \times 10^9/L$, ESR- 15 mm/h. What is the most probable reason of bilirubin level change?

- A. Increase of unconjugated bilirubin
- B. Increase of conjugated bilirubin
- C. Increase of unconjugated and conjugated bilirubin
- D. Decrease of conjugated bilirubin
- E. Decrease of unconjugated bilirubin

78. 47 y.o. patient complains of intensive skin itching, jaundice, bone pain. The skin is hyperpigmented. There are multiple xanthelasma palpebrae. The liver is +6 cm enlarged, solid with acute edge. The blood analysis revealed total bilirubin - 160 $\mu\text{mol/L}$, direct - 110 $\mu\text{mol/L}$, AST-2,1 mmol/L , ALT- 1,8 mmol/L , alkaline phosphatase - 4,6 mmol/L , cholesterol- 9,2 mmol/L , antimitochondrial antibodies M2 in a high titer. What is the probable diagnosis?

- A. Primary biliary liver cirrhosis
- B. Primary liver cancer
- C. Chronic viral hepatitis B
- D. Acute viral hepatitis B
- E. Alcoholic liver cirrhosis

129. A 60 y.o. woman complains of unbearable pains in the right hypochondrium. In the medical history: acute pancreatitis. Body temperature is 38, 20. Objectively: sclera icteritiousness. No symptoms of peritonium irritation are present. There are positive Ortner's and Hubergrits-Skulski's symptoms. Urine diastase is 320 g/h. What diagnosis is the most probable?

- A. Chronic pancreatitis
- B. Acute cholangitis
- C. Chronic cholecystitis
- D. Acute cholecystitis
- E. Cancer of pancreas

1.(27) A 45-year-old male patient was admitted to the intensive care unit because of myocardial infarction. An hour later the ventricular facilitation occurred. Which of the following should be administered?

- A. Defibrillation
- B. External chest compression
- C. Lidocaine injection
- D. Adrenalin injection
- E. Cardiac pacing

2.(30) A 45-year-old driver was admitted to the hospital with 5 hour substernal pain. Nitroglycerin is not effective. He is pale, heart sounds are regular but weak. HR 96 per minute, BP of 100/60 mmHg. What is the most likely diagnosis?

- A. Acute myocardial infarction
- B. Stable angina
- C. Pulmonary embolism
- D. Acute myocarditis
- E. Acute left ventricular failure

3.(82) A 60-year-old female patient was admitted to a hospital for acute transmural infarction. An hour ago the patient's condition got worse. She developed progressing dyspnea, dry cough. Respiratory rate - 30/min, heart rate - 130/min, AP- 90/60 mm Hg. Heart sounds are muffled, diastolic shock on the pulmonary artery. There are medium moist rales in the lower parts of lungs on the right and on the left. Body temperature 36,4°C. What drug should be given in the first place?

- A. Promedol
- B. Aminophylline
- C. Dopamine

- D. Heparin
- E. Digoxin

4.(110) A patient has got acute macrofocal myocardial infarction complicated by cardiogenic shock. The latter is progressing under conditions of weak general peripheral resistance and decreased cardiac output. What antihypertensive drug should be injected to the patient in the first place?

- A. Dopamine
- B. Noradrenaline
- C. Adrenaline
- D. Mesatonum
- E. Prednisolone

1.(31) A 33-year-old man with a history of rheumatic fever complains of fever up to 38 – 39°C, abdominal pain, dyspnea, tachycardia. Heart borders are displaced to the left by 2 cm, systolic and diastolic murmurs above aorta, BP of 160/30 mm Hg. Petechial rash occurs after measurement of blood pressure. Liver is enlarged by 3 cm, spleen is palpable. Urine is brown-yellow. What is the most likely diagnosis?

- A. Infectious endocarditis
- B. Rheumatic fever
- C. Acute hepatitis
- D. Acute nephritis
- E. Aortic regurgitation

1.(32) A 30-year-old patient complains of breathlessness, pain in the right rib arc region, dry cough and the edema of legs. He is ill for 2 months. He had been treated for rheumatic fever without any effect. On exam: cyanosis, edema of legs, BT of 36.6°C, RR of 28/min, HR of 90/min, BP of 110/80 mm Hg, crackles above low parts of both lungs, heart borders are displaced to the left and to the right, weak sounds, systolic murmur above the apex. What is the preliminary diagnosis?

- A. Dilated cardiomyopathy
- B. Infectious endocarditis
- C. Acute myocarditis
- D. Rheumatic fever, mitral stenosis
- E. Acute pericarditis

2.(55) A 32-year-old patient complains of cardiac irregularities, dizziness, dyspnea at physical stress. He has never suffered from this before. Objectively: Ps- 74 bpm, rhythmic. AP- 130/80 mm Hg. Auscultation revealed systolic murmur above aorta, the first heart sound was normal. ECG showed hypertrophy of the left ventricle, signs of repolarization disturbance in the I, V5 and V6 leads. Echocardiogram revealed that interventricular septum was 2 cm. What is the most likely diagnosis?

- A. Hypertrophic cardiomyopathy
- B. Aortic stenosis
- C. Essential hypertension
- D. Myocardium infarction
- E. Coarctation of aorta

1.(83) A 52-year-old male patient complains about attacks of asphyxia, pain in his right side during respiration. These manifestations turned up all of a sudden. It is known from

his anamnesis that he had been treated for thrombophlebitis of the right leg for the last month. In the admission ward the patient suddenly lost consciousness, there was a sudden attack of asphyxia and pain in his side. Objectively: heart rate - 102/min, respiratory rate - 28/min, AP- 90/70 mm Hg. Auscultation revealed diastolic shock above the pulmonary artery, gallop rhythm, small bubbling rales above the lungs under the scapula on the right, pleural friction rub. What examination method will be the most informative for a diagnosis?

- A. Angiography of pulmonary vessels
- B. Echocardiography
- C. Study of external respiration function
- D. ECG
- E. Coagulogram

1.(89) A 56-year-old patient with diffuse toxic goiter has ciliary arrhythmia with pulse rate 110 bpm, arterial hypertension, AP- 165/90 mm Hg. What preparation should be administered along with mercazolil?

- A. Propranolol
- B. Radioactive iodine
- C. Procaine hydrochloride
- D. Verapamil
- E. Corinfar

1.(189) A 60-year-old patient complains about asphyxia, palpitation, rapid fatiguability. He has 8 year history of essential hypertension. Objectively: the left cardiac border is 2 cm deviated to the left from the medioclavicular line, heart sounds are rhythmic and weak; there is diastolic shock above aorta. AP- 170/100 mm Hg. Liver - +2 cm; shin pastosity is present. ECG shows deviation of cardiac axis to the left, left ventricle hypertrophy. Ejection fraction - 63%. What type of cardiac insufficiency is observed?

- A. Diastolic
- B. Systolic
- C. Combined
- D. It's a norm
- E. Unspecified

1.(105) A 30-year-old patient presented with body temperature rise up to 38,5°C, pain in the small articulations of hands; face edemata and erythema. In blood: RBCs $2,6 \cdot 10^{12}/l$; Hb- 98 g/l; WBCs - $2 \cdot 10^9/l$; ESR - 58 mm/h. In the urine: protein - 3,1 g/l; RBCs - 10-15 in the vision field. What disease can be suspected in this case?

- A. Systemic lupus erythematosus
- B. Sepsis
- C. Systemic scleroderma
- D. Periarteritis nodosa
- E. Acute glomerulonephritis

1.(166) A 58-year-old patient complains about sensation of numbness, sudden paleness of II-IV fingers, muscle rigidness, intermittent pulse. The patient presents also with polyarthralgia, dysphagia, constipations. The patient's face is masklike, solid edema of hands is present. The heart is enlarged; auscultation revealed dry rales in lungs. In blood: ESR - 20 mm/h, crude protein - 85 g/l, γ globulines - 25%. What is the most likely diagnosis?

- A. Systemic scleroderma

- B. Dermatomyositis
- C. Rheumatoid arthritis
- D. Systemic lupus erythematosus
- E. Raynaud's disease

2.(167) A 36-year-old female patient complains of general weakness, edemata of her face and hands, rapid fatiguability during walking, difficult deglutition, cardiac irregularities. These symptoms turned up 11 days after a holiday at the seaside. Objectively: face erythema, edema of shin muscles. Heart sounds are muffled, AP is 100/70 mm Hg. In blood: ASAT activity is 0,95 millimole/h·l, ALAT - 1,3 millimole/h·l, aldolase - 9,2 IU/l, creatine phosphokinase - 2,5 millimole /g·l. What method of study would be the most specific?

- A. Muscle biopsy
- B. ECG
- C. Echocardiogram
- D. Electromyography
- E. Determination of cortisol concentration in blood and urine

1.(187) On the second day after preventive vaccination a 2-year-old boy presented with abdominal pain without clear localization, body temperature rose up to 38°C. On the third day the child got red papular haemorrhagic eruption on the extensor surfaces of limbs and around the joints. Knee joints were edematous and slightly painful. Examination of other organs and systems revealed no pathological changes. What is the most likely diagnosis?

- A. Haemorrhagic vasculitis
- B. Thrombocytopenic purpura
- C. Meningococemia
- D. Urticaria
- E. DIC syndrome

1.(65) A 35-year-old patient complains about pain and morning stiffness of hand joints and temporomandibular joints that lasts over 30 minutes. She has had these symptoms for 2 years. Objectively: edema of proximal interphalangeal digital joints and limited motions of joints. What examination should be administered?

- A. Roentgenography of hands
- B. Complete blood count
- C. Rose-Waaler reaction
- D. Immunogram
- E. Proteinogram

1.(28) A 47-year-old obese man complained of periodic attacks of acute arthritis in the left tarsophalangeal joint. Labexam revealed increased serum rate of uric acid. What is the diagnosis?

- A. Gout arthritis
- B. Reiter's disease
- C. Rheumatoid arthritis
- D. Rheumatic arthritis
- E. Osteoarthritis

1.(77) A 32-year-old male patient has been suffering from pain in the sacrum and coxofemoral joints, painfulness and stiffness in the lumbar spine for a year. ESR - 56

mm/h. Roentgenography revealed symptoms of bilateral sacroileitis. The patient is the carrier of HLA B27 antigen. What is the most likely diagnosis?

- A. Ankylosing spondylitis
- B. Coxarthrosis
- C. Rheumatoid arthritis
- D. Reiter's disease
- E. Spondylosis

1.(14) A man, aged 25, presents with facial edema, moderate back pains, body temperature of 37,5°C, BP- 180/100 mm Hg, hematuria (up to 100 in v/f), proteinuria (2,0 g/l), hyaline casts - 10 in v/f, specific gravity - 1020. The onset of the disease is probably connected with acute tonsillitis 2 weeks ago. The most likely diagnosis is:

- A. Acute glomerulonephritis
- B. Acute pyelonephritis
- C. Cancer of the kidney
- D. Urolithiasis
- E. Chronic glomerulonephritis

1.(101) After supercooling a 38-year-old woman developed muscle pain, body temperature rise up to 39°C, headache, dysuria, positive Pasternatsky's symptom. In the urine: leukocyturia, bacteriuria. In blood: Decrease in Hb rate down to 103 g/l, left shift leukocytosis, ESR acceleration up to 32 mm/h. Blood urea - 6,0 millimole/l. What is the most likely diagnosis?

- A. Acute pyelonephritis
- B. Renal tuberculosis
- C. Acute glomerulonephritis
- D. Urolithiasis
- E. Acute cystitis

1.(66) A 68-year-old female patient complains about temperature rise up to 38,3°C, haematuria. ESR- 55mm/h. Antibacterial therapy turned out to be ineffective. What diagnosis might be suspected?

- A. Renal cancer
- B. Polycystic renal disease
- C. Renal amyloidosis
- D. Urolithiasis
- E. Chronic glomerulonephritis

2.(78) A 58-year-old female patient complains about periodical headache, dizziness and ear noise. She has been suffering from diabetes mellitus for 15 years. Objectively: heart sounds are rhythmic, heart rate is 76/min, there is diastolic shock above aorta, AP is 180/110 mm Hg. In urine: OD- 1,014. Daily loss of protein with urine is 1,5 g. What drug should be chosen for treatment of arterial hypertension?

- A. Inhibitor of angiotensin converting enzyme
- B. β -blocker
- C. Calcium channel antagonist
- D. Thiazide diuretic
- E. α -blocker

3.(114) A 30-year-old woman with a long history of chronic pyelonephritis complains about considerable weakness, sleepiness, decrease in diuresis down to 100 ml per day. AP- 200/120 mmHg. In blood: creatinine - 0,62 millimole/l, hypoproteinemia, albumines - 32 g/l, potassium - 6,8 millimole/l, hypochromic anemia, increased ESR. What is the first step in the patient treatment tactics?

- A. Haemodialysis
- B. Antibacterial therapy
- C. Enterosorption
- D. Haemosorption
- E. Blood transfusion

4.(160) A 45-year-old patient with urolithiasis had an attack of renal colic. What is the mechanism of the attack development?

- A. Disturbed urine outflow from the kidney
- B. Increase in relative density of urine
- C. Ureteric twists
- D. Destruction of glomerules
- E. Renal artery spasm

5.(168) A 33-year-old patient has acute blood loss: erythrocytes - $2,2 \cdot 10^{12}/l$, Hb- 55 g/l, blood group is A(II)Rh+. Accidentally the patient got a transfusion of donor erythrocyte mass of AB(IV)Rh+ group. An hour later the patient became anxious, got abdominal and lumbar pain. Ps- 134 bpm, AP- 100/65 mm Hg, body temperature- 38,6°C. After catheterization of urinary bladder 12 ml/h of dark brown urine were obtained. What complication is it?

- A. Acute renal insufficiency
- B. Cardial shock
- C. Allergic reaction to the donor erythrocyte mass
- D. Citrate intoxication
- E. Toxic infectious shock

6.(181) A 35-year-old man complains about intense lumbar pain irradiating to the inguinal area, external genitalia, thigh; frequent urination, chill, nausea, vomiting. Objectively: positive Pasternatsky's symptom. Urine analysis revealed that RBCs and WBCs covered the total field of microscope; the urine exhibited high protein concentration. These clinical presentations were most likely caused by the following pathology:

- A. Urolithiasis, renal colic
- B. Cholelithiasis, biliary colic
- C. Renal infarct
- D. Intestinal obstruction
- E. Osteochondrosis, acute radicular syndrome

7.(200) A 67-year-old female patient complains about edemata of face and legs, pain in the lumbar area that is getting worse at moving; great weakness, sometimes nasal haemorrhages, rise of body temperature up to 38,4°C. Objectively: painfulness of vertebral column and ribs on palpation. Laboratorial study revealed daily proteinuria of 4,2 g, ESR- 52 mm/h. What changes of laboratory indices are to be expected?

- A. Whole protein of blood serum - 51 g/l
- B. Leukocytes - 15,3 g/l
- C. Haemoglobin - 165 g/l

- D. Albumins - 65%
- E. γ -globulins - 14%

1.(46) In which of the following disorders does the pathophysiology of portal hypertension involve presinusoidal intrahepatic obstruction?

- A. Congenital hepatic fibrosis
- B. Alcoholic cirrhosis
- C. Hemochromatosis
- D. Budd-Chiari syndrome
- E. Cavernomatous transformation of the portal vein

1.(24) A 60-year-old woman, mother of 6 children, developed a sudden onset of upper abdominal pain radiating to the back, accompanied by nausea, vomiting, fever and chills. Subsequently, she noticed yellow discoloration of her sclera and skin. On physical examination the patient was found to be febrile with temp. of 38,9°C, along with right upper quadrant tenderness. The most likely diagnosis is:

- A. Choledocholithiasis
- B. Benign biliary stricture
- C. Malignant biliary stricture
- D. Carcinoma of the head of the pancreas
- E. Choledochal cyst

2.(102) A 50-year-old patient complains about having pain attacks in the right subcostal area for about a year. The pain arises mainly after taking fattening food. Over the last week the attacks occurred daily and became more painful. On the 3rd day of hospitalization the patient presented with icteritiousness of skin and scleras, light-colored feces and dark urine. In blood: neutrophilic leukocytosis $13,1 \cdot 10^9/l$, ESR - 28 mm/h. What is the most likely diagnosis?

- A. Chronic calculous cholecystitis
- B. Chronic recurrent pancreatitis
- C. Fatty degeneration of liver
- D. Chronic cholangitis, exacerbation stage
- E. Hypertensive dyskinesia of gallbladder

93.A52 y.o. patient with previously functional Class II angina complains of 5 days of intensified and prolonged retrosternal pains, decreased exercise tolerance. Angina is less responsive to Nitroglycerinum.

Which of the following diagnosis is most likely?

- A. IHD. Unstable angina
- B. Cardialgia due to spine problem
- C. IHD. Functional Class II angina
- D. Myocarditis
- E. Myocardial dystrophy

19. A 58 y.o. patient developed acute myocardium infarction 4 hours ago, now he is in the acute care department. ECG registers short paroxysms of ventricular tachycardia. The most appropriate measure will be to introduce:

- A. Lidocain
- B. Flecainid
- C. Amyodaron

- D. Propafenone
- E. Veropamil

49. A 40 y.o. patient with rheumatic heart disease complains of anorexia, weakness and loss of weight, breathlessness and swelling of feet. The patient had tooth extraction one month ago. On examination: t_0 - 39.0°C, Ps- 100/min. Auscultation: diastolic murmur in the mitral area. Petechial lesion around the clavicle; spleen was palpable.

- A. Subacute bacteria endocarditis
- B. Recurrence of rheumatic fever
- C. Thrombocytopenia purpura
- D. Mitral stenosis
- E. Aortic stenosis

73. A 42 y.o. woman complains of dyspnea, edema of the legs, and tachycardia during small physical exertion. Heart borders are displaced to the left and S1 is accentuated, there is diastolic murmur on apex. The liver is enlarged by 5 cm. What is the cause of heart failure?

- A. Mitral stenosis
- B. Mitral regurgitation
- C. Tricuspid stenosis
- D. Tricuspid regurgitation
- E. Aortic stenosis

168. A 39 y.o. patient complains of having dyspnea during physical activity, lower extremity edema, palpitation, heart intermissions. Objectively: HR is 150 bpm, atrial fibrillation. Heart is both ways enlarged. Heart sounds are muted. Liver is 6 cm below the costal margin.

Echocardiogram reveals dilatation of heart chambers (end diastolic volume of left ventricle is 6.8 cm) EF is 29%, valve apparatus is unchanged. What is the most probable diagnosis?

- A. Dilated cardiomyopathy
- B. Exudative pericarditis
- C. Restrictive cardiomyopathy
- D. Hypertrophic cardiomyopathy
- E. Thyrotoxic cardiomyopathy

113. After a long period of subfebrility a patient registered increase of dyspnea, pain in the right hypochondrium, leg edema. Objectively: neck veins are edematous. Ps is 120 bpm, sometimes it disappears during inspiration. Heart sounds are very weakened. ECG showed low voltage

waves of ventricular complex. A month ago there was a rise of ST V1 – V4 segment. Cardiac silhouette is enlarged, roundish. What is the most probable diagnosis?

- A. Exudative pericarditis
- B. Small-focal myocardial infarction
- C. Postinfarction cardiosclerosis
- D. Metabolic postinfection myocardiopathy
- E. Primary rheumatic

143. A 35 y.o. patient who suffers from chronic glomerulonephritis and has

been hemodialysis-dependent for the last three years developed intermissions of heart activity, hypotension, increasing weakness, dyspnea. ECG showed bradycardia, atrioventricular block type I, high pointed waves T. The day before the flagrant violation of diet took place. What is the most probable cause of these changes?

- A. Hyperkalemia
- B. Hyperhydratation
- C. Hypokalemia
- D. Hyponatremia

139. A 70 y.o. patient complains of weakness, dizziness, short periods of unconsciousness, pain in the cardiac area. Objectively: HR- 40 bpm, heart sounds are rhythmic, the S1 is dull, periodically amplified. AP is 180/90 mm Hg. What is the most probable cause of hemodynamic disturbances?

- A. Atrioventricular block type III
- B. Atrioventricular block type I
- C. Bradysystolic form of ciliary arrhythmia
- D. Sinus bradycardia
- E. Complete left bundle-branch block

1. (3) A regional cardiologist is tasked with the development of a plan for medioprophylactic measures aimed at decrease of cardiovascular mortality. What measures should be planned for secondary prevention?

- A. Prevention of recurrences and complications
- B. Referring patients for sanatorium-and-spa treatment
- C. Prevention of diseases
- D. Referring patients for in-patient treatment
- E. Optimization of life style and living conditions

2. (44) A 30-year-old woman complains of pain in the heart area ("aching, piercing pain") that arises primarily in the morning hours in autumn and spring. Pain irradiates into the neck, back, abdomen and is attended by rapid heart rate and low vital tonus. This condition occurs independently from physical exertion. In the evening her condition improves. Somatic and neurologic state and ECG have no pathologies. What pathology is likely to result in such clinical presentation?

- A. Somatized depression
- B. Rest angina pectoris
- C. Pseudoneurotic schizophrenia
- D. Somatoform autonomic dysfunction
- E. Hypochondriacal depression

3. (116) In the morning upon waking a 65-year-old patient developed weakness in the right side limbs, speech disorder, decreased sensitivity of the left side of the body. On examination: conscious, BP- 100/60 mm Hg, motor aphasia, right-sided central hemiparesis and hemihypalgesia. Make the preliminary diagnosis:

- A. Ischemic stroke
- B. Hemorrhagic stroke
- C. Encephalitis
- D. Brain tumor
- E. Subarachnoid hemorrhage

4. (178) A 37-year-old man suffers from attacks of unconsciousness, dyspnea during physical exertion, periodical sensations of heart rate disorder. Father of the patient died suddenly at the age of 45. Objectively: heart rate is 90/min., BP is 140/90 mm Hg. On heart US: ejection fraction - 49%, significant myocardium thickening of the left ventricle and interventricular septum. What drug should be prescribed for the treatment?

- A. Bisoprolol
- B. Enalapril
- C. Phenyhydinum(Nifedipine)
- D. Hydrochlorothiazide
- E. Furosemide

(28) A 58-year-old patient was delivered to an admission room with complaints of pain in the thorax on the left. On clinical examination: aside from tachycardia (102/min.) no other changes. On ECG: pathologic wave Q in I, VL, QS in V1, V2, V3 leads and 'domed' ST elevation with negative T. What diagnosis is most likely?

- A. Acute left ventricular anterior myocardial infarction
- B. Variant angina pectoris
- C. Aortic dissection
- D. Acute left ventricular posterior myocardial infarction
- E. Exudative pericarditis

2. (147) A 58-year-old patient complains of a headache in the occipital region, nausea, choking, opptentes. The presentations appeared after a physical exertion. Objectively: the patient is excited. Face is hyperemic. Skin is pale. Heart sounds are regular, the 2nd aortic sound is accentuated. BP- 240/120 mm Hg, HR- 92/min. Auscultation reveals some fine moist crackles in the lower lungs. Liver is not enlarged. ECG shows signs of hypertrophy and left ventricular overload. What is the most likely diagnosis?

- A. Complicated hypertensive crisis
- B. Acute myocardial infarction, pulmonary edema
- C. Bronchial asthma exacerbation
- D. Uncomplicated hypertensive crisis
- E. Community-acquired pneumonia

3. (151) A week ago a 65-year-old patient suffered an acute myocardial infarction, his general condition deteriorated: he complains of dyspnea at rest, pronounced weakness. Objectively: edema of the lower extremities, as cistis present. Heart border sare extended, paradoxical pulse is observed 2 cm from the apex beat to the left. What is the most likely diagnosis?

- A. Acute cardiac aneurysm
- B. Recurrent myocardial infarction
- C. Acute pericarditis
- D. Cardiosclerotic aneurysm
- E. Pulmonary embolism

1. (170) A 19-year-old patient complains of dyspnea during physical exertion. He often has bronchitis and pneumonia. Cardiac murmur has been observed since his childhood. On auscultation: there is splitting of the II heart sound over pulmonary arteria, systolic murmur in the third intercostal space near the left sternum margin. ECG test shows right bundle-branch block. What is the provisional diagnosis?

- A. Interatrial septum defect

- B. Open arterial duct
- C. Coarctation of aorta
- D. Aortic stenosis
- E. Mitral valve insufficiency

(62) A 67-year-old man complains of dyspnea on exertion, attacks of retrosternal pain, dizziness. He has no history of rheumatism. Objectively: pale skin, acrocyanosis. There are crackles in the lower lungs. There is systolic thrill in the II intercostal space on the right, coarse systolic murmur conducted to the vessels of neck. BP- 130/90 mm Hg, heart rate - 90/min., regular rhythm. The liver extends 5 cm from under the edge of costal arch, shin edemas are present. Specify the suspected valvular defect:

- A. Aortic stenosis
- B. Pulmonary artery stenosis
- C. Mitral insufficiency
- D. Ventricular septal defect
- E. Tricuspid regurgitation

(190) A 33-year-old patient has developed dyspnea during physical exertion, palpitations, disruptions of heart rate, swollen legs. In the childhood the patient had a case of acute rheumatic fever that required in-patient treatment. There were no further requests for medical care. Objectively: heart rate is 92/min., rhythmic; BP is 110/70 mm Hg. At the apex the I heart sound is increased, triple rhythm, diastolic murmur. What heart disease is most likely?

- A. Mitral valve stenosis
- B. Mitral valve failure
- C. Aortic outflow stenosis
- D. Aortic valve failure
- E. Tricuspid valve stenosis

(4) An 8-year-old boy developed a temperature of 37.5°C two days after his recovery from the case of URTI. He complains of suffocation, heart pain. Objectively: the skin is pale, tachycardia, the I heart sound is weakened, short systolic murmur in the 4th intercostal area near the left edge of the breastbone. What heart disorder such clinical presentation is characteristic of?

- A. Nonrheumatic myocarditis
- B. Primary rheumatic carditis
- C. Myocardiodystrophy
- D. Fallot's tetrad
- E. Cardiomyopathy

2. (7) A 32-year-old patient complains of cardiac irregularities, dizziness, dyspnea at physical exertion. He has never suffered from such condition before. Objectively: Ps- 74/min., rhythmic. BP- 130/80 mm Hg. Auscultation revealed systolic murmur above aorta, the first heart sound was normal. ECG showed hypertrophy of the left ventricle, signs of repolarization disturbance in the I, V5 and V6 leads. Echocardiogram revealed that interventricular septum was 2 cm. What is the most probable diagnosis?

- A. Hypertrophic cardiomyopathy
- B. Aortic stenosis
- C. Essential hypertension
- D. Myocardial infarction
- E. Coarctation of aorta

(27) A woman has developed sudden thoracic pain on the right with expectoration of pink sputum and body temperature rise up to 37,7°C on the 4th day after the surgery for cystoma of the right ovary. On lung examination: dullness of the lung sound on the lower right is observed. Isolated moist crackles can be auscultated in the same area. What complication is the most likely?

- A. Pulmonary infarction
- B. Pneumonia
- C. Pulmonary abscess
- D. Exudative pleurisy
- E. Pneumothorax

(53) A 56-year-old patient with diffuse toxic goiter has a sinus tachycardia, heart rate is 110-120/min., arterial hypertension, BP is 165/90 mm Hg. What drug besides Mercapitol (Thiamazole) should be prescribed in this case?

- A. Propranolol
- B. Radioactive iodine
- C. Novocainamide (procainamide)
- D. Verapamil
- E. Corinfar

2. (92) An 8-year-old girl periodically has sudden short-term heart pains, sensation of chest compression, epigastric pain, dizziness, vomiting. Objectively: the patient is pale, respiratory rate - 40/min., jugular pulse is present. Ps - 185/min., of poor volume. BP - 75/40 mm Hg. ECG taken during an attack shows ectopic P waves, QRS wave is not deformed. At the end of an attack a compensatory pause is observed. The most likely cause of the attack is:

- A. Paroxysmal atrial tachycardia
- B. Sinus tachycardia
- C. Paroxysmal ventricular tachycardia
- D. Complete AV-block
- E. Atrial fibrillation

3. (162) ECG revealed the following in a 10-year-old child: sharp acceleration of the heart rate - 240/min., P wave overlaps with T wave and deforms it, moderate lengthening of PQ interval, QRS complex is without changes. What pathology does this child have?

- A. Paroxysmal atrial tachycardia
- B. Atrial hypertrophy
- C. Ventricular hypertrophy
- D. WPW syndrome
- E. Extrasystole

(124) 4 weeks after myocardial infarction a 56-year-old patient developed acute heart pain, pronounced dyspnea. Objectively: the patient's condition is extremely grave, there is marked cyanosis of the face, swelling and throbbing of the neck veins, peripheral pulse is absent, carotid artery pulse is rhythmic, 130/min., BP is 60/20 mm Hg. Auscultation of the heart reveals extremely muffled sounds, percussion reveals heart border extension in both directions. What is the optimal treatment tactic for this patient?

- A. Pericardiocentesis and immediate thoracotomy
- B. Oxygen inhalation
- C. Puncture of the pleural cavity on the left

- D. Conservative treatment, infusion of adrenomimetics
- E. Pleuralcavity drainage

(112) A 36 year old female patient complains of general weakness, edemas of her face and hands, rapid fatigability during walking, difficult deglutition, cardiac irregularities. These symptoms developed 11 days after holiday at the seaside. Objectively: face erythema, edema of shin muscles. Heart sounds are muffled, BP is 100/70 mm Hg. In blood: ASAT activity is 0,95 millimole/h·l, ALAT 1,3 micromole/h·l, aldolase - 9,2 IU/l, creatinephosphokinase-2,5micromole/g·l. What method of study would be most specific? A.

- Muscle biopsy
- B. ECG
- C. Echocardiogram
- D. Electromyography
- E. Determination of cortisol concentration in blood and urine

1. (159) A 25-year-old patient is not married and has sexual relations with several partners. During the last 3 months he noticed small amount of mucoserous secretions produced from urethra. Subjectively: periodical itching or burning pain in urethra. Two months ago pain in the knee joint developed. Possibility of trauma or exposure to cold is denied by the patient. During the last week eye discomfort is noted-lacrimation and itching. What provisional diagnosis can be suggested?

- A. Reactive arthritis
- B. Rheumatoid arthritis
- C. Seasonal pollinosis
- D. Bacterial nonspecific urethral conjunctivitis
- E. URTI with conjunctiva and joints affected

(57) A 46-year-old woman complains of pain attacks in the right lumbar area, which irradiate to the lower abdomen, and nausea. This kind of pain attacks has never been detected in the patient before. Survey Xray of the abdominal cavity reveals no pathologic shadows. Ultrasonic scan detects a hyperechogenic growth 1,5 cm in diameter, which reflects sound wave, in the enlarged right renal pelvis. What diagnosis is most likely?

- A. Renal calculus
- B. Benign renal tumor
- C. Renal cyst
- D. Renal tuberculosis
- E. Malignant renal tumor

(105) A 45-year-old patient with urolithiasis had an attack of renal colic. What is the mechanism of the attack development?

- A. Disturbed urine outflow from the kidney
- B. Increase in urine specific gravity
- C. Ureteric twists
- D. Destruction of glomerules
- E. Renal artery spasm

(114) For the last 15 years a 48-year-old patient has been working at the factory producing synthetic resins. Lately he has been complaining of significant general fatigue, headaches, frequent urination (predominantly during the day), red color of urine. What complication of benzene nitrocompounds poisoning can be suspected?

- A. Malignant tumor of the urinary bladder
- B. Chronic cystitis
- C. Chronic prostatitis
- D. Acute glomerulonephritis
- E. Chronic pyelonephritis

(126) A 35-year-old man complains of intense lumbar pain irradiating to the inguinal area, external genitalia, thigh; frequent urination, chill, nausea, vomiting. Objectively: positive Pasternatsky's symptom (costovertebral angle tenderness). Urine analysis revealed that RBCs and WBCs covered the total field of microscope; the urine exhibited high protein concentration. These clinical presentations were most likely caused by the following pathology:

- A. Urolithiasis, renal colic
- B. Cholelithiasis, biliary colic
- C. Renal infarct
- D. Intestinal obstruction
- E. Osteochondrosis, acute radicular syndrome

(127) A 20-year-old patient complains of pain in the left lumbar region, arterial pressure rise up to 160/110 mm Hg. US revealed that the structure and size of the right kidney were within age norms, there were signs of 3 degree hydronephrotic transformation of the left kidney. Doppler examination revealed an additional artery running to the lower pole of the kidney. Excretory urogram shows an arrowing in the region of ureteropelvic junction.

Specify the treatment tactics:

- A. Surgical intervention
- B. Administration of spasmolytics
- C. Administration of ACE inhibitors
- D. Kidney catheterization
- E. Administration of β -blockers

(30). A 39-year-old patient complains of morning headache, appetite loss, nausea, morning vomiting, periodic nasal haemorrhages. The patient had a case of acute glomerulonephritis at the age of 15. Examination revealed rise of arterial pressure up to 220/130 mm Hg, skin haemorrhages on his arms and legs, pallor of skin and mucous membranes. What biochemical parameter is most important for making diagnosis in this case?

- A. Blood creatinine
- B. Blood bilirubin
- C. Blood sodium
- D. Uric acid
- E. Fibrinogen

(120) A 30-year-old woman suffers from polycystic renal disease. She has been admitted with signs of fatigue, thirst and nocturia. Diuresis is up to 1800 ml per day. BP is 200/100 mm Hg. Blood test: erythrocytes $1,8 \cdot 10^9/l$, Hb- 68 g/l. Urine analysis: specific gravity-1005, leukocytes-50-60, erythrocytes - 3-5 in the vision field, creatinine - 0,82 mmol/l, potassium - 6,5 mmol/l, glomerular filtration rate - 10 ml/min. What tactics would be leading in the patient's treatment?

- A. Hemodialysis
- B. Antibacterial therapy

- C. Sorbent agents
- D. Blood transfusion
- E. Hypotensive therapy

(39) A 48-year-old man complains of constant pain in the upper abdomen, predominantly on the left, which aggravates after eating, diarrhea, loss of weight. The patient has alcohol use disorder. Two years ago he had a case of acute pancreatitis. Blood amylase is 4 g/hour·l. Feces analysis: steatorrhea, creatorrhea. Blood sugar is 6,0 mmol/l. What treatment should be prescribed?

- A. Panzinorm forte (Pancreatin)
- B. Insulin
- C. Gastrozepin (Pirenzepine)
- D. Contrykal (Aprotinin)
- E. No-Spa (Drotaverine)

(67) A 45-year-old patient complains of pain in the epigastric region, left subcostal area, abdominal distension, diarrhea, loss of weight. He has been suffering from this condition for 5 years. Objectively: tongue is moist with white coating near the root; deep palpation of abdomen reveals slight pain in the epigastric region and Robson's point. Liver is painless and protrudes 1 cm from the costal arch. Spleen cannot be palpated. What disease can be primarily suspected?

- A. Chronic pancreatitis
- B. Atrophic gastritis
- C. Peptic stomach ulcer
- D. Chronic cholecystitis
- E. Chronic enteritis

(177) A 48-year-old woman has been suffering from chronic pancreatitis for the last 7 years. Lately she has been noticing an increase in daily feces with foul smell, abdominal distention, gurgling. The patient complains of diarrhea, weakness, fatigability, loss of appetite, loss of weight. What syndrome can be suspected in this case?

- A. Malabsorption
- B. Irritable colon
- C. Maldigestion
- D. Exudative enteropathy
- E. Endocrine gland failure

71

A 56-year-old scientist experiences constricting retrosternal pain several times a day while walking for 100-150 m. The pain lasts for up to 10 minutes and can be relieved by nitroglycerine.

Objectively: the patient is overweight, heart borders exhibit no abnormalities, heart sounds are

rhythmic, Ps- 78 bpm, AP- 130/80 mm Hg. ECG contains low amplitude of T wave in V₄₋₅. What disease might be suspected?

- A Stable FC III stenocardia
- B Instable stenocardia
- C Stable FC I stenocardia
- D Stable FC II stenocardia
- E Stable FC IV stenocardia

160

3 hours before, a 68-year-old male patient got a searing chest pain radiating to the neck and left

forearm, escalating dyspnea. Nitroglycerin failed to relieve pain but somewhat reduced dyspnea. Objectively: there is crimson cyanosis of face. Respiratory rate is 28/min. The patient

has vesicular breathing with isolated sibilant rales. Heart sounds are muffled, with a gallop rhythm. Ps - 100/min, AP - 100/65 mmHg. ECG shows negative T-wave in V2-V6 leads.

What

drug can reduce the heart's need for oxygen without aggravating the disease?

- A Isosorbide dinitrate
- B Corinfar
- C Atenolol
- D Streptokinase
- E Aminophylline

233

A 47-year-old male patient has been lately complaining of compressing chest pain that occurs

when he walks a distance of 700-800 m. Once a week, he drinks 2 liters of beer. Rise in arterial

pressure has been observed for the last 7 years. Objectively: Ps - 74/min, AP - 120/80 mm Hg.

The bicycle ergometry performed at workload of 75 watts shows 2 mm ST-segment depression in V4-V6 leads. What is the most likely diagnosis ?

- A Exertional stenocardia, II functional class
- B Exertional stenocardia, III functional class
- C Exertional stenocardia, IV functional class
- D Vegetative-vascular dystonia of hypertensive type
- E Alcoholic cardiomyopathy

9

A patient with unstable angina pectoris was given the following complex treatment: anticoagulants, nitrates, α -adrenoblockers. However on the third day of treatment the

pain still remains. Which investigation should be carried out to establish diagnosis?

- A Coronarography
- B Stress-echocardiogram
- C Test with dosed physical exercises
- D Esophageal electrocardiac stimulator
- E Myocardial scintigraphy

59

A 42-year-old patient applied to hospital with complaints of pain behind the sternum with irradiation to the left scapula. The pain appears during significant physical work, this lasts for

5-10 minutes and is over on rest. The patient is sick for 3 weeks. What is the preliminary diagnosis?

- A IHD: First established angina pectoris
- B IHD: Variant angina pectoris (Prinzmetal's)
- C IHD: Stable angina pectoris of effort I FC
- D IHD: Stable angina pectoris of effort IV FC
- E IHD: Progressive angina pectoris

213

Thrombosis of the coronary artery caused myocardial infarction. What mechanisms of injury will

be the dominating ones in this disease?

- A Calcium mechanisms
- B Electrolyte osmotic mechanisms
- C Acidotic mechanisms
- D Protein mechanisms
- E Lipid mechanisms

190

An 18-year-old patient presents no problems. Percussion reveals that heart borders are displaced to the right and left by 1 cm, there is a coarse systolic murmur with its epicenter within

the 4th intercostal space on the left. What is the most informative examination to confirm the

clinical diagnosis?

- A Ventriculography
- B ECG
- C PCG
- D Echocardiography
- E Polycardiography

306

A 29-year-old female patient complains of dyspnea and palpitations on exertion. According to

her mother, as a child she had heart murmur, did not undergo any examinations.

Objectively: the

patient has pale skin, Ps- 94/min, rhythmic. AP- 120/60 mm Hg. In the II intercostal space on

the left auscultation reveals a continuous rasping systolodiastolic murmur, diastolic shock above

the pulmonary artery. Blood and urine are unremarkable. What is the most likely diagnosis?

- A Patent ductus arteriosus
- B Atrial septal defect
- C Ventricular septal defect
- D Aortarctia
- E Tetralogy of Fallot

44

Examination of a 35-year-old patient with rheumatism revealed that the right heart border was 1

cm displaced outwards from the right parasternal line, the upper border was on the level with

inferior margin of the 1st rib, the left border was 1 cm in from the left midclavicular line.

Auscultation revealed atrial fibrillation, loud apical first sound, diastolic shock above the pulmonary artery. Echocardiocopy revealed abnormal pattern of the mitral valve motion.

What

heart disease is characterized by these symptoms?

- A Mitral stenosis
- B Mitral valve prolapse
- C Mitral valve insufficiency
- D Aortic stenosis
- E Tricuspid valve insufficiency

115

A 67-year-old male complains of dyspnea on exertion, attacks of retrosternal pain, dizziness.

He has no history of rheumatism. Objectively: pale skin, acrocyanosis. There are rales in the

lower parts of lungs. There is systolic thrill in the II intercostal space on the right, coarse systolic

murmur conducted to the vessels of neck. AP- 130/90 mm Hg, heart rate - 90/min, regular

rhythm. The liver extends 5 cm under the edge of costal arch, shin edemata are present.

Specify the assumed valvular defect:

- A Aortic stenosis
- B Pulmonary artery stenosis
- C Mitral insufficiency
- D Ventricular septal defect
- E Tricuspid regurgitation

118

A 18 y.o. female student complains of dyspnea during the intensive exertion. The condition

became worse half a year ago. On examination: pulse rate is 88 bpm, accelerated, AP- 180/20

mm Hg, pale skin, heart borders are dilated to the left and up. There is systolic-diastolic murmur

in the 2nd intercostal space, S₂ at pulmonary artery is accentuated. ECG has revealed both

ventricles hypertrophy. Thoracic X-ray has revealed pulsation and protrusion of the left ventricle, lung trunk. What doctor's tactics should be?

- A Cardiosurgeon consultation
- B Dispensary observation
- C Administration of therapeutic treatment
- D Continuation of investigation
- E Exemption from physical exercises

134

A female rheumatic patient experiences diastolic thoracic wall tremor (diastolic thrill), accentuated S₁ at apex, there is diastolic murmur with presystolic intensification, opening snap, S₂ accent at pulmonary artery. What kind of heart disorder is observed?

- A Mitral stenosis
- B Aortic valve insufficiency
- C Pulmonary artery stenosis
- D Mitral valve insufficiency
- E Opened arterial duct

137

A 60-year-old patient has been admitted to a hospital with complaints of dyspnea, tightness in

the right subcostal area, abdomen enlargement. These presentations have been progressing

for a year. Heart auscultation reveals presystolic gallop rhythm. Objectively: swelling of the neck

veins, ascites, palpable liver and spleen. What disease requires differential diagnostics?

- A Constrictive pericarditis
- B Hepatocirrhosis
- C Lung cancer with invasion to the pleura
- D Chronic pulmonary heart
- E Pulmonary embolism

3

On the 3rd day after the acute anterior myocardial infarction a 55 y.o. patient complains of dull

ache behind his breast bone, that can be reduced by bending forward, and of dyspnea.

Objectively: AP- 140/180 mm Hg, heart sounds are dull. ECG results: atrial fibrillation with frequency of ventricular contractions at the rate of 110/min, pathological Q wave and S-T segment raising in the right chest leads. The patient refused from thrombolysis. What is the most

probable diagnosis?

- A Acute pericarditis
- B Pulmonary embolism
- C Tietze's syndrome
- D Dissecting aortic aneurysm
- E Dressler's syndrome

A 43-year-old female patient complains of dyspnea, swelling of legs, abdomen enlargement, pricking heart pain. She has a history of tuberculous bronchadenitis, quinsies. The patient's condition deteriorated 6 months ago. Objectively: cyanosis, bulging neck veins, vesicular breathing. Heart borders are not displaced. Heart sounds are muffled, Ps is 106/min, liver is +4 cm, ascites is present. Low voltage on the ECG has been revealed. Radiograph shows a thin layer of calcium deposits along the left contour of heart. What treatment should be recommended to the patient?

- A Treatment by a cardiac surgeon
- B Digitalis preparations
- C Anti-TB drugs
- D Diuretics
- E Vasodilators, nitrates

53

A 28-year-old patient complains of periodic compressing heart pain. His brother died at the age of 34 from a cardiac disease with similar symptoms. Objectively: the patients skin is pale. Heart borders display no significant deviations. Heart sounds are loud, there is a systolic murmur above all the points with a peak above the aorta. Echocardiography reveals thickening of the interventricular septum in the basal parts, reduction of left ventricular cavity. What drug should be administered in order to prevent the disease progression?

- A Metoprolol
- B Digoxin
- C Nitroglycerin
- D Captopril
- E Furosemide

56

A 37 y.o. woman is suffering from squeezing substernal pain on physical exertion. On examination: AP- 130/80 mm Hg, heart rate=pulse rate 72 bpm, heart borders are dilated to the left side, aortic systolic murmur. ECG- signs of the left venticle hypertrophy. What method of examination is the most informative in this case?

- A Echocardiography
- B Phonocardiography
- C Coronarography
- D Sphygmography
- E X-ray

88

A 57-year-old man complains of shortness of breath, swelling on shanks, irregularity in cardiac

work, pain in the left chest half with irradiation to the left scapula. Treatment is ineffective. On

physical exam: heart's sounds are diminished, soft systolic murmur on the apex. Ps - 100/min,

arrhythmical, BP - 115/75 mm Hg. The liver is +2 cm, painful. Roentgenoscopy: enlargement of heart shadow to all sides, pulsation is weak. Electrocardiogram (ECG): left ventricled extrasystolia, decreased voltage. What method of investigation is necessary to do to determine the diagnosis?

A Echocardiography

B Veloergometria

C X-ray kymography

D ECG in the dynamics

E Coronarography

104

A 56-year-old patient with diffuse toxic goiter has ciliary arrhythmia with pulse rate of 110 bpm,

arterial hypertension, AP- 165/90 mm Hg. What preparation should be administered along with

mercazolil?

A Propranolol

B Radioactive iodine

C Procaine hydrochloride

D Verapamil

E Corinfar

171

A 43 y.o. woman complains of shooting heart pain, dyspnea, irregularities in the heart activity,

progressive fatigue during 3 weeks. She had acute respiratory disease a month ago. On examination: AP- 120/80 mm Hg, heart rate 98 bpm, heart borders +1,5 cm left side, sounds

are muffled, soft systolicmurmur at apex and Botkin's area; sporadic extrasystoles. Liver isn't

palpated, there are no edema. Blood test: WBC- $6,7 \times 10^9/L$, sedimentation rate- 21 mm/hour. What is the most probable diagnosis?

A Acute myocarditis

B Climacteric myocardiodystrophia

C Ichemic heart disease, angina pectoris

D Rheumatism, mitral insufficiency

E Hypertrophic cardiomyopathy

272

A 47-year-old male patient complains of compressive chest pain that occurs both at rest and

during light physical activity; irregular heartbeat. These problems arose 3 months ago.

The

patient's brother died suddenly at the age of 30. Objectively: Ps - 84/min, arrhythmic, AP -

130/80 mm Hg. ECG confirms signs of left ventricular hypertrophy, abnormal Q-waves in V4-V6 leads. EchoCG reveals that interventricular septum is 1,7 cm, left ventricular wall thickness is

1,2 cm. What is the most likely diagnosis?

- A Hypertrophic cardiomyopathy
- B Neurocirculatory asthenia
- C Exertional angina
- D Myocarditis
- E Pericarditis

65

A 55-year-old male had been treated at the surgical department for acute lower-extremity thrombophlebitis. On the 7th day of treatment he suddenly developed pain in the left part of

chest, dyspnea and cough. Body temperature was 36,1°C, respiratory rate - 36/min. The patient was also found to have diminished breath sounds without wheezing. Ps- 140/min, thready. AP- 70/50 mm Hg. The ECG shows Q_{III}-S₁ syndrome. What is the most likely diagnosis?

- A Pulmonary embolism
- B Myocardial infarction
- C Cardiac asthma
- D Bronchial asthma
- E Pneumothorax

119

A 49-year-old male patient complains of dyspnea of combined nature, cough, shin edemata,

abdomen enlargement due to ascites. He has a 20-year history of chronic bronchitis. For the

last 3 years he has been disabled (group II) because of cardiac changes. Objectively: mixed

cyanosis, edemata. Ps - 92/min, rhythmic, AP - 120/70 mm Hg, respiration rate - 24/min. There

is accentuation of the second sound above the pulmonary artery. Auscultation reveals the box

resonance above the lungs. There are also dry rales over the entire surface of lungs.

What is

the mechanism of heart changes development in this patient?

- A Euler-Liljestrand reflex
- B Kitaev's reflex
- C Bainbridge reflex
- D Cardiovascular reflex
- E Respiratory reflex

131

A 60 y.o. patient experiences acute air insufficiency following of the venoectomy due to subcutaneous vein thrombophlebitis 3 days ago. Skin became cyanotic, with grey shade.

Marked

psychomotor excitement, tachypnea, substernal pain. What postoperative complication has occurred?

- A Thromboembolism of pulmonary artery
- B Hemorrhagia
- C Hypostatic pneumonia
- D Myocardial infarction
- E Valvular pneumothorax

181

A 57-year-old male patient complains of dyspnea on exertion, heaviness in the right hypochondrium and shin edemata towards evening. Objectively: temperature - 38,1°C, HR-

20/min, HR=Ps=92/min, AP- 140/90 mm Hg. There is apparent kyphoscoliosis. In the lungs

single dry rales can be auscultated. Heart sounds are muffled, rhythmic. ECG:

Rv1+Sv5=15

mm. X-ray picture shows the bulging of pulmonary artery cone, right ventricle enlargement. What

is the most likely cause of this condition?

- A Pulmonary heart
- B Atherosclerotic cardiosclerosis
- C Dilatation cardiomyopathy
- D Mitral stenosis
- E Primary pulmonary hypertension

12

A 67 y.o. patient complains of palpitation, dizziness, noise in ears, feeling of shortage of air.

Objectively: pale, damp skin. Vesicular respiration, respiratory rate- 22 per min, pulse- 200 bpm,

AP- 100/70 mm Hg. On ECG: heart rate- 200 bpm, ventricular complexes are widened, deformed, location of segments ST and of wave T is discordant. The wave is not changed, superimposes QRST, natural conformity between and QRS is not present. What kind of arrhythmia is present?

- A Paroxysmal ventricular tachycardia
- B Sinus tachycardia
- C Atrial flutter
- D Ventricular extrasystole
- E Atrial tachycardia

122

A 76-year-old male consulted a therapist about slow discharge of urine with a small jet. The

patient reported no cardiac problems. Examination revealed atrial fibrillation with a heart rate of

72/min and without pulse deficit. There are no signs of heart failure. ECG confirms the presence

of atrial fibrillation. From history we know that the arrhythmia was detected three years ago.

What tactics for the treatment of atrial fibrillation in the patient should be chosen?

- A Does not require treatment
- B Digoxin
- C Verapamil
- D Obzidan
- E Ajmaline

161

A 46-year-old patient complains of sudden palpitation, which is accompanied by pulsation in the neck and head, fear, nausea. The palpitation lasts for 15-20 minutes and is over after straining

when holding her breath. What kind of cardiac disorder may be suspected?

- A An attack of supraventricular paroxysmal tachycardia
- B An attack of ventricular paroxysmal tachycardia
- C An attack of atrial flutter
- D An attack of ciliary arrhythmia
- E An attack of extrasystolic arrhythmia

211

A 26-year-old female patient has an 11-year history of rheumatism. Four years ago she suffered 2 rheumatic attacks. Over the last 6 months there have been paroxysms of atrial fibrillation every 2-3 months. What option of antiarrhythmic therapy or tactics should be proposed?

- A Prophylactic administration of cordarone
- B Immediate hospitalization
- C Defibrillation
- D Lidocaine administration
- E Heparin administration

210

A 53-year-old female patient complains of cardiac pain and rhythm intermissions. She has experienced these presentations since childhood. The patient's father had a history of cardiac

arrhythmias. Objectively: the patient is in grave condition, Ps- 220 bpm, AP- 80/60 mm Hg. ECG

results: heart rate - 215/min, extension and deformation of QRS complex accompanied by

atrioventricular dissociation; positive P wave. Some time later heart rate reduced down to 45/min, there was a complete dissociation of P wave and QRST complex. Which of the following will be the most effective treatment?

- A Implantation of the artificial pacemaker
- B β -adrenoreceptor blocking agents
- C Cholinolytics
- D Calcium antagonists
- E Cardiac glycosides

48

A 64 y.o. patient has developed of squeezing substernal pain which had appeared 2 hours ago

and irradiated to the left shoulder, marked weakness. On examination: pale skin, cold sweat.

Pulse- 108 bpm, AP- 70/50 mm Hg, heart sound are deaf, vesicular breathing, soft abdomen,

painless, varicose vein on the left shin, ECG: synus rhythm, heart rate is 100 bpm, ST-segment is sharply elevated in II, III aVF leads. What is the most likely disorder?

- A Cardiogenic shock
- B Cardiac asthma
- C Pulmonary artery thromboembolia
- D Disquamative aortic aneurizm
- E Cardiac tamponade

51

A 54-year-old drowned man was rescued from the water and delivered to the shore.

Objectively:

the man is unconscious, pale, breathing cannot be auscultated, pulse is thready.

Resuscitation

measures allowed to save the patient. What complications may develop in the near future?

- A Pulmonary edema
- B Respiratory arrest
- C Encephalopathy
- D Cardiac arrest
- E Bronchospasm

96

A 60-year-old female patient had been admitted to a hospital for acute transmural infarction. An

hour later the patient's contition got worse. She developed progressing dyspnea, dry cough.

Respiratory rate - 30/min, heart rate - 130/min, AP- 90/60 mm Hg. Heart sounds were muffled,

there was also diastolic shock on the pulmonary artery. The patient presented with medium

moist rales in the lower parts of lungs on the right and on the left. Body temperature - $36,4^{\circ}\text{C}$. What drug should be given in the first place?

- A Promedol
- B Aminophylline
- C Dopamine
- D Heparin
- E Digoxin

97

A 62-year-old male has been hospitalized in the intensive care unit with a continuous attack of

retrosternal pain that cannot be relieved by nitroglycerin. Objectively: AP- 80/60 mm Hg, heart

rate - 106/min, breathing rate - 22/min. Heart sounds are muffled, a gallop rhythm is present.

How would you explain the AP drop?

- A Reduction in cardiac output
- B Reduction in peripheral resistance
- C Blood depositing in the abdominal cavity
- D Adrenergic receptor block
- E Internal haemorrhage

223

After myocardial infarction, a 50-year-old patient had an attack of asthma. Objectively: bubbling breathing with frequency of 32/min, cough with a lot of pink frothy sputum, acrocyanosis, swelling of the neck veins. Ps- 108/min, AP- 150/100 mm Hg. Heart sounds are muffled. Mixed moist rales can be auscultated above the entire lung surface. What drug would be most effective in this situation?

- A Nitroglycerin intravenously
- B Pentamin intravenously
- C Strophanthin intravenously
- D Dopamine intravenously
- E Aminophylline intravenously

245

A 58-year-old patient complains of a headache in the occipital region, nausea, choking, opptentes. The presentations appeared after a physical exertion. Objectively: the patient is excited. Face is hyperemic. Skin is pale. Heart sounds are regular, the 2nd aortic sound is accentuated. AP- 240/120 mm Hg, HR- 92/min. Auscultation reveals some fine moist rales in the lower parts of the lungs. Liver is not enlarged. ECG shows signs of hypertrophy and left ventricular overload. What is the most likely diagnosis?

- A Complicated hypertensive crisis, pulmonary edema
- B Acute myocardial infarction, pulmonary edema
- C Bronchial asthma exacerbation
- D Uncomplicated hypertensive crisis
- E Community-acquired pneumonia

260

A 57-year-old male patient had an attack of retrosternal pain that lasted more than 1,5 hours.

Objectively: the patient is inert, adynamic, has pale skin, cold extremities, poor volume pulse,

heart rate - 120/min, AP - 70/40 mm Hg. ECG shows ST elevation in II, III, aVF leads. What

condition are these changes typical for?

- A Cardiogenic shock
- B Arrhythmogenic shock
- C Perforated gastric ulcer
- D Acute pericarditis

E Acute pancreatitis

307

A 67-year-old female patient with hypertensive crisis has asthma, cough with expectoration of frothy pink sputum, moist rales in the lungs. The patient stays in sitting position, respiratory rate is 40/min, AP- 214/136 mm Hg, heart rate - 102/min. What is the most rational tactics of this patient management?

- A Intravenous administration of furosemide
- B Urgent pneumography
- C Bed rest, lying position
- D Intravenous administration of a β -blocker
- E Tactics can be determined after ECG and chest radiography

259

A 63-year-old male patient with persistent atrial fibrillation complains of moderate dyspnea.

Objectively: peripheral edemata are absent, vesicular breathing is present, heart rate - 72/min,

AP - 140/90 mm Hg. What combination of drugs will be most effective for the secondary prevention of heart failure?

- A Beta-blockers, ACE inhibitors
- B Beta-blockers, cardiac glycosides
- C Cardiac glycosides, diuretics
- D Cardiac glycosides, ACE inhibitors
- E Diuretics, beta-blockers

19

In the development of the inflammation processes glucocorticoids reduce the level of certain

most important active enzyme. It results also in the reducing of the synthesis of prostaglandins

and leucotrienes which have a key role in the development of inflammation processes.

What is

the exact name of this enzyme?

- A Phospholipase A2
- B Arachidonic acid
- C Lipoxygenase
- D Cyclooxygenase – 1
- E Cyclooxygenase – 2

99

A 18 y.o. male patient complains of pain in knee and ankle joints, temperature elevation to 39,5°C. He had a respiratory disease 1,5 week ago. On examination: temperature- 38,5°C, swollen knee and ankle joints, pulse- 106 bpm, rhythmic, AP- 90/60 mm Hg, heart borders without changes, sounds are weakened, soft systolic apical murmur. What indicator is

connected with possible etiology of the process?

- A Antistreptolysine-0
- B 1-antitrypsine
- C Creatinkinase
- D Rheumatic factor
- E Seromucoid

283

After a holiday in the Crimea, a 36-year-old female patient presents with severe pain in the

elbow joints, dyspnea and weakness. The body temperature is of 37,6°C, the skin is pale, there is erythema of cheeks and nose, lower lip ulceration. Visual inspection reveals no changes in the joints, the right elbow movement is limited. There is murmur and pleural friction in

the lungs below the right angle of the scapula. Cardiac sounds are muffled, there is tachycardia,

gallop rhythm, Ps- 114/min. AP- 100/60. What is the most likely diagnosis?

- A SLE
- B Rheumatic heart disease
- C Rheumatoid arthritis
- D Infectious allergic myocarditis
- E Dry pleurisy

234

A 58-year-old patient complains about sensation of numbness, sudden paleness of II-IV fingers,

muscle rigidity, intermittent pulse. The patient presents also with polyarthralgia, dysphagia,

constipations. The patient's face is masklike, solid edema of hands is present. The heart is

enlarged; auscultation revealed dry rales in lungs. In blood: ESR- 20 mm/h, crude protein - 85/l,

γ-globulines - 25%. What is the most likely diagnosis?

- A Systemic scleroderma
- B Dermatomyositis
- C Rheumatoid arthritis
- D Systemic lupus erythematosus
- E Raynaud's disease

290

A 39-year-old male patient complains of moderate pain and weakness in the shoulder, back and

pelvic girdle muscles, that has been progressing for the last 3 weeks; great difficulty in getting

out of bed, going up and down the stairs, shaving. Dermatomyositis has been suspected. Blood

test results: Hb- 114 g/l, WBC- $10,8 \cdot 10^9/l$, eosinophils - 9%, ESR -22 mm/h, C-reactive protein - (++) . The alteration in the following laboratory value will be of decisive diagnostic

significance:

- A Creatine phosphokinase
- B Ceruloplasmin
- C Sialic acids
- D dsDNA antibodies
- E Gamma-globulins

77

A 38-year-old patient is under observation having polyneuritic syndrome with considerable loss of weight, fever, rise in BP. Blood test:: considerable inflammatory changes. What examination

is the most expedient to make the diagnosis?

- A Muscular biopsy with histological investigation of the material
- B Determination of antinuclear antibodies
- C Electromyography
- D Blood culture
- E Determination of HLA antigens

159

A 32-year-old patient has a 3-year history of asthma attacks, that can be hardly stopped with

berotec. Over a few last months he has experienced pain in the joints and sensitivity disorder of

legs and feet skin. Ps - 80/min, AP - 210/100 mm Hg. In blood: eosinophilia at the rate of 15%.

What disease can be suspected in this case?

- A Periarthritis nodosa
- B Systemic lupus erythematosus
- C Systemic scleroderma
- D Dermatomyositis
- E Wegener's disease

20

A 30 y.o. female with rheumatoid arthritis of five years duration complains of pain in the

first three fingers of her right hand over past 6 weeks. The pain seems especially severe at

night often awakening her from sleep. The most likely cause is?

- A Carpal tunnel syndrome
- B Atlanto-axial subluxation of cervical spine
- C Sensory peripheral neuropathy
- D Rheumatoid vasculitis
- E Rheumatoid arthritis without complication

42

A 35-year-old patient complains about pain and morning stiffness of hand joints and temporomandibular joints that lasts over 30 minutes. She has had these symptoms for 2 years.

Objectively: edema of proximal interphalangeal digital joints and limited motions of joints.

What

examination should be administered?

- A Roentgenography of hands
- B Complete blood count
- C Rose-Waaler reaction
- D Immunogram
- E Proteinogram

133

A patient has an over a year-old history of fast progressive rheumatoid arthritis. X-raying confirms presence of marginal erosions. What basic drug would be the most appropriate in this case?

- A Methotrexate
- B Chloroquine
- C Prednisolone
- D Diclofenac sodium
- E Aspirin

178

A 60-year-old female patient complains of recurrent pain in the proximal interphalangeal and

wrist joints, their periodic swelling and reddening that have been observed for 4 years.

X-ray

picture represents changes in form of osteoporosis, joint space narrowing and single

What is the most likely diagnosis?

- A Rheumatoid arthritis
- B Osteoarthritis
- C Gout
- D Pseudogout
- E Multiple myeloma

57

A 58-year-old woman complains of osteoarthrosis of knee-joint. For 2 weeks she had been

receiving an in-patient medical treatment. She was discharged from the hospital in

satisfactory condition with complaints of minor pain after prolonged static work. Local hyperemia and exudative effects in the area of joints are absent. What further tactics is the most expedient?

- A Outpatient treatment
- B Repeated in-patient treatment
- C Conducting arthroscopy
- D Referral to MSEC
- E Orthopedist consultation

281

A 36-year-old female patient complains of intense pain in the knee joints and neck. In the

morning she experiences pain in the interscapular region and leg joints; pain subsides after

warm-up gymnastics. The patient is overnourished, there is a clicking sound in the knees when

squatting, the knees are somewhat disfigured, painful on palpation. Blood test results: ESR- 18

mm/h, WBC- $8,0 \cdot 10^9/l$. Radiography reveals subchondral sclerosis in the left knee.

What is the basis of this pathology?

- A Degenerative processes in cartilage
- B Autoimmune process in the synovium
- C Deposition of urates (tophi) in the articular tissues
- D Beta-haemolytic streptococcus
- E Hemarthrosis

286

A 53-year-old male has been admitted to a hospital for an attack of renal colic which has repeatedly occurred throughout the year. Objectively: in the region of auricles and the right

elbow some nodules can be seen that are covered with thin shiny skin. Ps- 88/min, AP- 170/100

mm Hg. There is bilateral costovertebral angle tenderness (positive Pasternatsky's symptom).

The patient has been scheduled for examination. What laboratory value would be most helpful

for making a diagnosis?

- A Uric acid
- B Rheumatoid factor
- C ESR
- D Urine sediment
- E Lactic acid

54

A patient, aged 40, has been ill during approximately 8 years, complains of pain in the lumbar

part of the spine on physical exertion, in cervical and thoracic part (especially when coughing),

pain in the hip and knee joints on the right. On examination: the body is fixed in the forward

inclination with head down, gluteal muscles atrophy. Spine roentgenography: ribs osteoporosis,

longitudinal ligament ossification. What is the most likely diagnosis?

- A Ankylosing spondylitis
- B Tuberculous spondylitis
- C Psoriatic spondyloarthropathy
- D Spondyloarthropathy on the background of Reiter's disease
- E Spread osteochondrosis of the vertebral column

78

A 32-year-old male patient has been suffering from pain in the sacrum and coxofemoral joints,

painfulness and stiffness in the lumbar spine for a year. ESR- 56 mm/h. Roentgenography revealed symptoms of bilateral sacroileitis. The patient is the carrier of HLA B27 antigen.

What

is the most likely diagnosis?

- A Ankylosing spondylitis
- B Coxarthrosis
- C Rheumatoid arthritis
- D Reiter's disease
- E Spondylosis

145

A 35-year-old patient has been admitted to a hospital for pain in the left sternoclavicular and

knee joints, lumbar area. The disease has an acute character and is accompanied by fever up

to 38°C. Objectively: the left sternoclavicular and knee joints are swollen and painful. In blood: WBCs - $9,5 \times 10^9/l$, ESR - 40 mm/h, CRP - 1,5 millimole/l, fibrinogen - 4,8 g/l, uric acid - 0,28 millimole/l. Examination of the urethra scrapings reveals chlamydia. What is the most

likely diagnosis?

- A Reiter's syndrome
- B Rheumatic arthritis
- C Gout
- D Bechterew's disease
- E Rheumatoid arthritis

297

A 26-year-old male patient complains of pain in the right knee, which is getting worse in the

morning. Two weeks before, he consulted an urologist about prostatitis. Objectively: conjunctivitis is present. There is also periarticular edema of the knee joint, redness of the overlying skin. Rheumatoid factor was not detected. Until further diagnosis is specified, it would

be reasonable to start treatment with the following antibiotic:

- A Tetracyclines
- B Cephalosporins
- C Penicillins
- D Aminoglycosides
- E Lincosamides

15

A 24 y.o. patient complains of nausea, vomiting, headache, shortness of breath. He had an

acute nephritis being 10 y.o. Proteinuria was found out in urine. Objectively: a skin is grey-pale,

the edema is not present. Accent of II tone above aorta. BP 140/100-180/100 mm Hg.

Blood

level of residual N_2 - 6,6 mmol/L, creatinine- 406 mmol/L. Day's diuresis- 2300 ml, nocturia.

Specific density of urine is 1009, albumin- 0,9 g/L, WBC- 0-2 in f/vis. RBC.- single in f/vis.,

hyaline casts single in specimen. Your diagnosis?

- A Chronic nephritis with violation of kidney function
- B Feochromocytoma
- C Hypertensive illness of the II degree
- D Nephrotic syndrome
- E Stenosis of kidney artery

18

A 25-year-old man has facial edema, moderate back pains. His temperature is 37,5°, BP 180/100 mm Hg, hematuria [up to 100 in v/f], proteinuria [2,0 g/L], hyaline casts - 10 in v/f., specific gravity -1020. The onset of the disease is probably connected with acute tonsillitis that started 2 weeks ago. What is the most probable diagnosis?

- A Acute glomerulonephritis
- B Acute pyelonephritis
- C Cancer of the kidney
- D Urolithiasis
- E Chronic glomerulonephritis

67

A 26-year-old patient undergoes a course of treatment due to chronic glomerulonephritis. The

treatment was successful, normalization of all the characteristics was recorded. What sanatorium and health resort treatment could be recommended?

- A The south coast of the Crimea
- B Not recommended
- C Morshyn
- D Myrhorod
- E Truskavets

70

2 weeks after recovering from angina a 29-year-old patient noticed face edemata, weakness,

decreased work performance. There was gradual progress of dyspnea, edemata of the lower

extremities, lumbar spine. Objectively: pale skin, weakening of the heart sounds, anasarca. AP-

160/100 mm Hg. In urine: the relative density - 1021, protein - 5 g/l, erythrocytes - 20-30 in the

field of vision, hyaline cylinders - 4-6 in the field of vision. What is the most likely diagnosis?

- A Acute glomerulonephritis
- B Essential hypertension
- C Acute pyelonephritis
- D Infectious allergic myocarditis
- E Myxedema

90

A 54-year-old patient has an over 20-year history of femoral osteomyelitis. Over the last month

she has developed progressing edemata of the lower extremities. Urine test reveals: proteinuria

at the rate of 6,6 g/l; in blood: dysproteinemia in form of hypoalbuminemia, increase in α_2 - and γ -globulin rate, ESR - 50 mm/h. What is the most likely diagnosis?

- A Secondary renal amyloidosis
- B Acute glomerulonephritis
- C Myelomatosis
- D Chronic glomerulonephritis
- E Systemic lupus erythematosus

288

2 weeks after having quinsy, a 26-year-old male patient got facial edemata, moderate pain in the

sacrum. Objectively: body temperature is 37,5°C, AP- 100/80 mm Hg. Urinalysis results:

RBC- up to 100 fresh cells in per HPF, protein - 2,2 g/l, hyaline cylinders - up to 10 per HPF,

relative density - 1002. What is the most likely diagnosis?

- A Acute glomerulonephritis
- B Nephroma
- C Acute pyelonephritis
- D Urolithiasis
- E Chronic glomerulonephritis

114

A 54-year-old male patient complains of aching pain in the lumbar region, that is getting worse

after standing in an upright position, physical exercise, supercooling. The patient also reports of

experiencing weakness in the afternoon. Pain in the lumbar region, said about 10 years old.

Objectively: pale skin, t^o - 37,2°C, AP- 180/100 mm Hg, minor costovertebral angle tenderness (Pasternatsky symptom). In blood: RBCs - $3,5 \times 10^{12}/l$, WBCs - $6,5 \times 10^9/l$, ESR - 22 mm/h. In urine: the relative density - 1010, leukocytes - 12-15 in the field of vision, erythrocytes - 2-3 in the field of vision. Urine bacterial count - 100000 in 1 ml. What is the most likely diagnosis?

- A Chronic pyelonephritis
- B Nephrolithiasis
- C Polycystic renal disease
- D Chronic glomerulonephritis
- E Amyloidosis

63

A 72-year-old patient after operation due toolecystectomy was prescribed gentamicin (80 mg

every 8 hours) and cephalothin (2 g every 6 hours) due to fever. In 10 days there was an increase of creatinine up to 310 $\mu\text{mol/L}$. BP - 130/80 mm Hg, daily quantity of the urine is

1200 mL. Urine tests are without pathology. Ultrasound: the size of kidneys is normal.

What is the most probable reason for renal failure?

- A Nephrotoxicity of gentamicin

- B Acute glomerulonephritis
- C Cortical necrosis of kidneys
- D Unequal infusion of the liquid
- E Hepatorenal syndrome

87

A 37-year-old patient was brought to resuscitation unit. General condition of the patient is very serious. Sopor. The skin is grey, moist. Turgor is decreased. Pulse is rapid, intense. BP - 160/110 mm Hg, muscle tonus is increased. Hyperreflexia. There is an ammonia odor in the air.

What is the presumptive diagnosis?

- A Uraemic coma
- B Alcoholic coma
- C Hyperglycemic coma
- D Hypoglycemic coma
- E Cerebral coma

125

A 35-year-old patient has been in the intensive care unit for acute renal failure due to crush for

4 days. Objectively: the patient is inadequate. Breathing rate - 32/min. Over the last 3 hours

individual moist rales can be auscultated in lungs. ECG shows high T waves, right ventricular

extrasystoles. CVP - 159 mm Hg. In blood: the residual nitrogen - 62 millimole/l, K^+ - 7,1 millimole/l, Cl^- - 78 millimole/l, Na^+ - 120 millimole/l, Ht - 0,32, Hb - 100 g/l, blood creatinine - 0,9 millimole/l. The most appropriate method of treatment would be:

- A Hemodialysis
- B Plasma sorption
- C Hemosorption
- D Plasma filtration
- E Ultrafiltration

139

A 28-year-old woman has a 12-year history of chronic glomerulonephritis with latent course.

Over the past six months she has developed general weakness, loss of appetite, low work

performance, nausea. The patient complains of headache, pain in the joints. On examination:

anemia, blood urea - 34,5 millimole/l, blood creatinine - 0,766 millimole/l, hyperkalemia.

What

complication has developed?

- A Chronic renal insufficiency
- B Acute renal insufficiency
- C Nephrotic syndrome
- D Renal amyloidosis
- E Pyelonephritis

177

A patient has chronic heart failure of the II stage. He takes furosemide regularly three times a week. He had developed bronchopneumonia and had been administered combined pharmacotherapy. On the fifth day of therapy the patient complained of hearing impairment.

What drug coadministered with furosemide might have caused the hearing loss?

- A Gentamicin
- B Linex
- C Nystatin
- D Tavegil
- E Mucaltin

184

A 30-year-old woman with a long history of chronic pyelonephritis complains about considerable weakness, sleepiness, decrease in diuresis down to 100 ml per day. AP- 200/120 mm Hg. In blood: creatinine - 0,62 millimole/l, hypoproteinemia, albumines - 32 g/l, potassium - 6,8 millimole/l, hypochromic anemia, increased ESR. What is the first step in the patient treatment tactics?

- A Haemodialysis
- B Antibacterial therapy
- C Enterosorption
- D Haemosorption
- E Blood transfusion

295

A 41-year-old male patient was delivered to a hospital unconscious. During the previous 7 days he had been taking large doses of biseptolum for a cold. The night before, he began complaining of dyspnea, especially when lying down, swollen legs, 2-day urinary retention. In the morning he had seizures and lost consciousness. Objectively: noisy breathing at the rate of 30/min, edematous legs and lumbar region, Ps- 50/min. Plasma creatinine is 0,586 mmol/l, plasma potassium - 7,2 mmol/l. What treatment is necessary for this patient?

- A Hemodialysis
- B Large doses of verospiron
- C Plasma volume expanders
- D Glucocorticosteroids
- E Heparin

64

A 40 y.o. patient was admitted to the gastroenterology with skin itching, jaundice, discomfort in

the right subcostal area, generalized weakness. On examination: skin is jaundice, traces of scratches, liver is +5 cm, spleen is 6x8 cm. In blood: alkaline phosphatase - 2,0 mmol/(hour*L), general bilirubin - 60 μmol/L, cholesterol - 8,0 mmol/L. What is the leading syndrome in the patient?

- A cholestatic
- B cytolytic
- C Mesenchymal inflammatory
- D Asthenic
- E Liver-cells insufficiency

143

A 40-year-old man is ill with autoimmune hepatitis. Blood test: PT/AP ratio 0,8, bilirubin – 42 μmol/L, transaminase: ALT-2,3 mmol g/L, AST - 1,8 mmol g/L. What is the most effective means in treatment from the given below?

- A Glucocorticoids, cytostatics
- B Antibacterial medication
- C Hepatoprotectors
- D Antiviral medications
- E Hemosorption, vitamin therapy

176

A 42-year-old female patient suffers from micronodular cryptogenic cirrhosis. Over the last week her condition has deteriorated: she developed convulsions, mental confusion, progressing jaundice. What study may give reasons for such aggravation?

- A Determination of serum ammonia
- B Determination of cholesterol esters
- C Determination of alpha-fetoprotein
- D Determination of ALAT and ASAT
- E Determination of alkaline phosphatase

31

The complications of acute cholecystitis which require surgical intervention are as follows EXCEPT:

- A Jaundice
- B Empyema of the gall-bladder
- C Emphysematous gall-bladder
- D Gall-bladder perforation
- E Cholangitis conditioned by the presence of stones in the bile tract

75

A 37-year-old patient has sudden acute pain in the right epigastric area after having fatty food.

What method of radiological investigation is to be used on the first stage of examining the patient?

- A Ultrasonic
- B Roentgenological

- C Radionuclid
- D Magnetic-resonance
- E Thermographic

150

A 50-year-old patient complains about having pain attacks in the right subcostal area for about a

year. He pain arises mainly after taking fattening food. Over the last week the attacks occurred

daily and became more painful. On the 3rd day of hospitalization the patient presented with

icteritiousness of skin and scleras, light-colored feces and dark urine. In blood: neutrophilic

leukocytosis - $13,1 \times 10^9/l$, ESR- 28 mm/h. What is the most likely diagnosis?

- A Chronic calculous cholecystitis
- B Chronic recurrent pancreatitis
- C Fatty degeneration of liver
- D Chronic cholangitis, exacerbation stage
- E Hypertensive dyskinesia of gallbladder

89

A 55 y.o. patient complains of distended abdomen and rumbling, increased winds evacuation,

liquid foamy feces with sour smell following the dairy products consumption. What is the correct

name of this syndrome?

- A Syndrome of fermentative dyspepsia
- B Syndrome of decayed dyspepsia
- C Syndrome of fatty dyspepsia
- D Dyskinesia syndrome
- E Malabsorption syndrome

95

A 48-year-old male patient complains of constant pain in the upper abdomen, mostly on the left,

that is getting worse after taking meals; diarrhea, weight loss. The patient is an alcohol abuser. 2

years ago he had acute pancreatitis. Blood amylase is $4 \text{ g/h} \cdot l$. Coprogram shows steatorrhea, creatorrhea. Blood glucose is $6,0 \text{ mmol/l}$. What treatment is indicated for this patient?

- A Panzinorm forte
- B Insulin
- C Gastrozepin
- D Contrycal
- E No-spa

102

4 hours after having meals a patient with signs of malnutrition and steatorrhea experiences

stomach pain, especially above navel and to the left of it. Diarrheas take turns with constipation lasting up to 3-5 days. Palpation reveals moderate painfulness in the choledochopancreatic region. The amylase rate in blood is stable. X-ray reveals some calcifications located above navel. What is the most likely diagnosis?

- A Chronic pancreatitis
- B Chronic gastroduodenitis
- C Duodenal ulcer
- D Zollinger-Ellison syndrome
- E Chronic calculous cholecystitis

165

A 56 y.o. man, who has taken alcoholic drinks regularly for 20 years, complains of intensive girdle pain in the abdomen. Profuse nonformed stool 2-3- times a day has appeared for the last 2 years, loss of weight for 8 kg for 2 years. On examination: abdomen is soft, painless. Blood amylase - 12g/L. Feces examination-neutral fat 15 g per day, starch grains. What is the most reasonable treatment at this stage?

- A Pancreatine
- B Contrykal
- C Aminocapron acid
- D Levomicytine
- E Imodium

275

A 64-year-old male patient has a 35-year history of chronic pancreatitis. In the last 5 years, he claims to observe the pain abatement, bloating, frequent bowel movements up to 3-4 times a day, grayish, glossy stool with undigested food rests, the progressive loss of body weight. Change of symptoms in the patient is due to overlay of:

- A Exocrine pancreatic insufficiency
- B Endocrine pancreatic insufficiency
- C Lactase deficiency syndrome
- D Irritable bowel syndrome
- E Chronic enterocolitis

1.(117) After myocardial infarction, a 50 year-old patient had an attack of asthma. Objectively: bubbling breathing with frequency of 32/min, cough with a lot of pink frothy sputum, acrocyanosis, swelling of the neck veins. Ps- 108/min, AP- 150/100 mm Hg. Heart sounds are muffled. Mixed moist rales can be auscultated above the entire lung surface. What drug would be most effective in this situation?

- A. Nitroglycerin intravenously
- B. Pentamin intravenously
- C. Strophanthin intravenously

- D. Dopamine intravenously
- E. Aminophylline intravenously

2.(139) 4 weeks after myocardial infarction a 56-year-old patient developed acute heart pain, pronounced dyspnea. Objectively: the patient's condition is extremely grave, there is marked cyanosis of face, swelling and throbbing of neck veins, peripheral pulse is absent, the carotid artery pulse is rhythmic, 130 bpm, AP is 60/20 mm Hg. Auscultation of heart reveals extremely muffled sounds, percussion reveals heart border extension in both directions. What is the optimal treatment tactics for this patient?

- A. Pericardiocentesis and immediate thoracotomy
- B. Oxygen inhalation
- C. Puncture of the pleural cavity on the left
- D. Conservative treatment, infusion of adrenomimetics
- E. Pleural cavity drainage

3. (164) A week ago a 65-year-old patient suffered an acute myocardial infarction, his general condition deteriorated: he complains of dyspnea at rest, pronounced weakness. Objectively: edema of the lower extremities, as cites is present. Heart borders are extended, paradoxical pulse is 2 cm displaced from the apex beat to the left. What is the most likely diagnosis?

- A. Acute cardiac aneurysm
- B. Recurrent myocardial infarction
- C. Acute pericarditis
- D. Cardiosclerotic aneurysm
- E. Pulmonary embolism

1.(176) A 19-year-old patient complains of dyspnea on exertion. He often has bronchitis and pneumonia. Since childhood, the patient presents with cardiac murmur. Auscultation revealed splitting of the II sound above the pulmonary artery, systolic murmur in 3 intercostal space at the left sternal border. ECG showed right bundle branch block. What is the provisional diagnosis?

- A. Atrial septal defect
- B. Open ductus arteriosus
- C. Aortarctia
- D. Aortic stenosis
- E. Mitral insufficiency

1.(63) A 40-year-old woman with a history of combined mitral valve disease with predominant stenosis complains of dyspnea, asthma attacks at night, heart problems. At present, she is unable to do easy house work. What is the optimal tactics of the patient treatment?

- A. Mitral commissurotomy
- B. Implantation of an artificial valve
- C. Antiarrhythmia therapy
- D. Treatment of heart failure
- E. Antirheumatic therapy

1.(160) Six months ago, a 5-year-old child was operated for CHD. For the last 3 weeks he has complained of fever, heart pain, aching muscles and bones. Examination results: "white-coffee" skin colour, auscultation revealed systolic murmur in the region of heart

along with a noise in the III-IV intercostal space. Examination of finger tips revealed Janeway lesions. What is your provisional diagnosis?

- A. Infectious endocarditis
- B. Sepsis
- C. Nonrheumatic carditis
- D. Acute rheumatic fever
- E. Typhoid fever

1.(78) A 59-year-old male complains of heart pain, cough, fever up to 38.0°C. Three weeks ago he suffered a heart attack. Objectively: Ps- 86/min, rhythmic, blood pressure - 110/70 mm Hg. Auscultation reveals pericardial rub, rales beneath the shoulder blade. Radiography reveals no pathology. Blood count: WBCs - 10·10⁹/l, ESR - 35mm/h. ECG shows no dynamics. It would be most reasonable to administer the drugs of the following pharmaceutical group:

- A. Glucocorticoids
- B. Antibiotics
- C. Direct anticoagulants
- D. Nitrates and nitrites
- E. Fibrinolytics

1.(64) A 25-year-old patient complains of having dull heart pain for the last 10 days, dyspnea on mild exertion, palpitations. The disease developed 2 weeks ago after a respiratory infection. Objectively: acrocyanosis, AP- 90/75 mm Hg, Ps 96/min. Cardiac borders appear to be shifted to the left and right. Heart sounds are weak and have triple rhythm, there is systolic murmur at the apex. ECG showed sinus rhythm, complete left bundle branch block. What is the most likely diagnosis?

- A. Infectious-allergic myocarditis
- B. Exudative pericarditis
- C. Infective endocarditis
- D. Myocarditic cardiosclerosis
- E. Vegetative-vascular dystonia

1.(62) A 57-year-old male patient complains of dyspnea on exertion, heaviness in the right hypochondrium and shin edema towards evening. Objectively: temperature - 38.1°C, HR- 20/min, HR=Ps=92/min, AP- 140/90 mm Hg. There is apparent kyphoscoliosis. In the lungs single dry rales can be auscultated. Heart sounds are muffled, rhythmic. ECG: Rv1+Sv5=15 mm. X-ray picture shows the bulging of pulmonary artery cone, right ventricle enlargement. What is the most likely cause of this condition?

- A. Pulmonary heart
- B. Atherosclerotic cardiosclerosis
- C. Dilatation cardiomyopathy
- D. Mitral stenosis
- E. Primary pulmonary hypertension

1.(89) A 53-year-old female patient complains of cardiac pain and rhythm intermissions. She has experienced these presentations since childhood. The patient's father had a history of cardiac arrhythmias. Objectively: the patient is in grave condition, Ps- 220 bpm, AP- 80/60 mm Hg. ECG results: heart rate-215/min, extension and deformation of QRS complex accompanied by atrioventricular dissociation; positive P wave. Some time later

heart rate reduced down to 45/min, there was a complete dissociation of P wave and QRS complex. Which of the following will be the most effective treatment?

- A. Implantation of the artificial pacemaker
- B. β -adrenoreceptor blocking agents
- C. Cholinolytics
- D. Calcium antagonists
- E. Cardiac glycosides

2. (193) A 70-year-old patient consulted a doctor about arrhythmic cardiac activity, dyspnea. Objectively: AP- 150/90 mm Hg, extrasystole arrhythmia (10-12 beats per minute), left ventricular systolic dysfunction (ejection fraction at the rate of 42%). Which of antiarrhythmic drugs should be administered as initial therapy in this case?

- A. Amiodarone
- B. Flecainide
- C. Encainide
- D. Moracizine
- E. Digoxin

1.(158) A 58-year-old patient complains of a headache in the occipital region, nausea, choking, opptentes. The presentations appeared after a physical exertion. Objectively: the patient is excited. Face is hyperemic. Skin is pale. Heart sounds are regular, the 2nd aortic sound is accentuated. AP- 240/120 mm Hg, HR92/min. Auscultation reveals some fine moist rales in the lower parts of the lungs. Liver is not enlarged. ECG shows signs of hypertrophy and left ventricular overload. What is the most likely diagnosis?

- A. Complicated hypertensive crisis, pulmonary edema
- B. Acute myocardial infarction, pulmonary edema
- C. Bronchial asthma exacerbation
- D. Uncomplicated hypertensive crisis
- E. Community-acquired pneumonia

1.(181) A 63-year-old patient with persistent atrial fibrillation complains of moderate dyspnea. Objectively: peripheral edemata are absent, vesicular respiration is present, heart rate - 72/min, AP- 140/90 mm Hg. What combination of drugs will be most useful in the secondary prevention of heart failure?

- A. Beta-blockers, ACE inhibitors
- B. Beta-blockers, cardiac glycosides
- C. Cardiac glycosides, diuretics
- D. Cardiac glycosides, ACE inhibitors
- E. Diuretics, beta-blockers

1.(182) A 57-year-old patient had an attack of retrosternal pain that lasted more than 1,5 hours. Objectively: the patient is inert, adynamic, has pale skin, cold extremities, poor volume pulse, heart rate - 120/min, AP-70/40 mm Hg. ECG shows ST elevation in leads II, III, aVF. What condition are these changes typical for?

- A. Cardiogenic shock
- B. Arrhythmogenic shock
- C. Perforated gastric ulcer
- D. Acute pericarditis
- E. Acute pancreatitis

1.(5) 5 weeks after hypothermia a 22-year-old patient developed fever, weakness, muscle pain, inability to move independently. Objectively: tenderness, induration of shoulder and shin muscles, restricted active movements, erythema on the anterior surface of chest. There is a periorbital edema with heliotropic erythema. Gottron's sign is present. What study is required to verify the diagnosis?

- A. Muscle biopsy
- B. Aminotransferase activity
- C. Pneumoarthrography
- D. ASO titre
- E. Rheumatoid factor

2.(52) A 28-year-old female patient with a six-year history of Raynaud's syndrome has recently developed pain in the small joints of hands, difficult movement of food down the esophagus. What kind of disease can you think of in this case?

- A. Systemic scleroderma
- B. Periarteritis nodosa
- C. Rheumatoid arthritis
- D. Systemic lupus erythematosus
- E. Pseudotrichiniasis

1.(60) A 60-year-old patient complains of recurrent pain in the proximal interphalangeal and wrist joints, their periodic swelling and reddening that have been observed for 4 years. X-ray picture represents changes in form of osteoporosis, joint space narrowing and single erosions. What is the most likely diagnosis?

- A. Rheumatoid arthritis
- B. Osteoarthritis
- C. Gout
- D. Pseudogout
- E. Multiple myeloma

(42) A 60-year-old male patient, who works as a construction worker, complains of pain in the right hip and knee joints, that is getting worse on exertion. These presentations have been observed for the last 5 years. Objectively: the patient is overnourished. Right knee joint is moderately deformed. Examination of other organs and systems revealed no pathology. Blood test results: WBCs $8,2 \cdot 10^9/l$, ESR - 15 mm/h. Uric acid - 0,35 mmol/l. What is the most likely diagnosis?

- A. Deforming osteoarthritis
- B. Reactive arthritis
- C. Gout
- D. Rheumatoid arthritis
- E. Reiter's disease

1. (19) A patient complains about sudden onsets of paroxysmal pain in the right lumbar region. 2 hours after the onset the patient had hematuria. Plain radiograph of the lumbar region shows no pathological shadows. USI reveals pyelocaliectasis on the right, the left kidney is normal. What is the most likely diagnosis?

- A. Renal colic
- B. Acute appendicitis
- C. Bowel volvulus
- D. Torsion of the right ovary cyst
- E. Right renal pelvis tumour

2. (35) A 54-year-old patient complains of frequent painful urination, chills, fever up to 38°C. Urine test results: protein 0,33 g/L, WBCs - up to 50-60 in the field of vision, RBCs - 5-8 in the field of vision, gram-negative bacilli. Which of the listed antibiotics should be preferred in this case?

- A. Ciprofloxacin
- B. Oxacillin
- C. Erythromycin
- D. Tetracycline
- E. Tseporin

3.(157) A 58-year-old patient complains of general weakness, loss of 10 kg of weight within 1,5 months, progressive pain in the lumbar region, increased blood pressure up to 220/160 mm Hg, subfebrile temperature. Objectively: in the right hypochondrium palpation reveals a formation with uneven surface and low mobility; veins of the spermatic cord and scrotum are dilated. Blood test results: Hb- 86 g/l, ESR- 44 mm/h. Urine test results: specific gravity - 1020, protein 0,99 g/l, RBCs - cover the whole field of vision, WBCs - 4-6 in the field of vision. What is the provisional diagnosis?

- A. Renal tumour
- B. Urolithiasis
- C. Acute pyelonephritis
- D. Acute glomerulonephritis
- E. Nephroptosis

4. (169) A 48-year-old patient complains of weakness, subfebrile temperature, aching pain in the kidney region. These presentations turned up three months ago after hypothermia. Objectively: kidneys are painful on palpation, there is bilaterally positive Pasternatsky's symptom. Urine test res: acid reaction, pronounced leukocyturia, microhematuria, minor proteinuria-0,165-0,33g/l. After the urine sample had been inoculated on conventional media, bacteriuria were not found. What research is most required in this case?

- A. Urine test for Mycobacterium tuberculosis
- B. Daily proteinuria
- C. Nechiporenko urine test
- D. Zimnitsky urine test
- E. Isotope renography

5. (190) A 56-year-old female patient complains of recurrent attacks of intensive pain irradiating along the ureters. Urine test results: protein - 0,37 g/l, RBCs 20-25 in the field of vision, WBCs - 1214 in the field of vision. What method of instrumental diagnostics is the most informative for the diagnosis?

- A. Intravenous urography
- B. USI of kidneys
- C. Computer tomography
- D. Radioisotope renography
- E. Cystoscopy

1.(69) A 48-year-old patient complains of having dull pain in the right lumbar region for over three years. USI shows that kidneys are of normal size, at the upper pole of the right kidney there is a fluid containing formation up to 12 cm in diameter. Excretory urograms

show normal condition on the left, and the deformation of the superior renal calyces with satisfactory function on the right. What kind of disease can you think of?

- A. Simple cyst of the right kidney
- B. Multicystic kidney disease
- C. Multiple cysts of the right kidney
- D. Tumour of the right kidney
- E. Right hydronephrosis

1.(45) A 55-year-old male has a 1,5-year history of viral cirrhosis with symptoms of portal hypertension. Over the last month the weakness has progressed, there appeared coffee ground vomit. Fibrogastroduodenoscopy revealed variceal esophageal haemorrhage. What drug should be used to reduce the pressure in the portal vein?

- A. Vasopressin
- B. Reserpine
- C. Calcium gluconate
- D. Dicynone
- E. Furosemide

2.(59) A 42-year-old female patient suffers from micronodular cryptogenic cirrhosis. Over the last week her condition has deteriorated: she developed convulsions, mental confusion, progressing jaundice. What study may give reasons for such aggravation?

- A. Determination of serum ammonia
- B. Determination of cholesterol esters
- C. Determination of alpha-fetoprotein
- D. Determination of ALAT and ASAT
- E. Determination of alkaline phosphatase

3. (99) A 24-year-old female patient complains of pain in the right hypochondrium that is getting worse after taking meals; nausea, fever up to 37,7°C, icteric skin, pain in the large joints. These presentations have been observed for 8 months. Objectively: hepatosplenomegaly. Blood test results: ESR- 47 mm/h, total bilirubin - 86,1 mmol/l, direct bilirubin - 42,3 mmol/l. Total protein - 62 g/l, albumins - 40%, globulins - 60%, gamma globulins - 38%. Viral hepatitis markers were not detected. The antibodies to smooth muscle cells are present. On ultrasound the portal vein diameter was of 1 cm. What is the most likely diagnosis?

- A. Autoimmune hepatitis
- B. Primary biliary cirrhosis
- C. Gilbert's syndrome
- D. Cholangiocarcinoma
- E. Hemochromatosis

(24) A 48-year-old male patient complains of constant pain in the upper abdomen, mostly on the left, that is getting worse after taking meals; diarrhea, weight loss. The patient is an alcohol abuser. 2 years ago he had acute pancreatitis. Blood amylase is 4 g/h·l. Coprogram shows steatorrhea, creatorrhea. Blood glucose is 6,0 mmol/l. What treatment is indicated for this patient?

- A. Panzinorm forte
- B. Insulin
- C. Gastrozepin
- D. Contrycal

E. No-spa

1.(29) A 56-year-old scientist experiences constricting retrosternal pain several times a day while walking for 100-150 m. The pain lasts for up to 10 minutes and can be relieved by nitroglycerine. Objectively: the patient is overweight, heart borders exhibit no abnormalities, heart sounds are rhythmic, Ps- 78bpm, AP-130/80mmHg. ECG contains low amplitude of T wave in V4-5. What disease might be suspected?

- A. Stable FC III stenocardia
- B. Instable stenocardia
- C. Stable FC I stenocardia
- D. Stable FC II stenocardia
- E. Stable FC IV stenocardia

(43) A 60-year-old female patient was admitted to a hospital for acute transmural infarction. An hour later the patient's condition got worse. She developed progressing dyspnea, dry cough. Respiratory rate - 30/min, heart rate - 130/min, AP- 90/60 mm Hg. Heart sounds were muffled, there was also diastolic shock on the pulmonary artery. The patient presented with medium moist rales in the lower parts of lungs on the right and on the left. Body temperature 36,4°C. What drug should be given in the first place?

- A. Promedol
- B. Aminophylline
- C. Dopamine
- D. Heparin
- E. Digoxin

2.(44) A 62-year-old male has been hospitalized in the intensive care unit with a continuous attack of retrosternal pain that cannot be relieved by nitroglycerin. Objectively: AP- 80/60 mm Hg, heart rate - 106/min, breathing rate - 22/min. Heart sounds are muffled, a gallop rhythm is present. How would you explain the AP drop?

- A. Reduction in cardiac output
- B. Reduction in peripheral resistance
- C. Blood depositing in the abdominal cavity
- D. Adrenergic receptor block
- E. Internal haemorrhage

3.(191) A 58-year-old patient complains of a headache in the occipital region, nausea, choking, opptentes. The presentations appeared after a physical exertion. Objectively: the patient is excited. Face is hyperemic. Skin is pale. Heart sounds are regular, the 2nd aortic sound is accentuated. AP- 240/120 mm Hg, HR92/min. Auscultation reveals some fine moist rales in the lower parts of the lungs. Liver is not enlarged. ECG shows signs of hypertrophy and left ventricular overload. What is the most likely diagnosis?

- A. Complicated hypertensive crisis
- B. Acute myocardial infarction, pulmonary edema
- C. Bronchial asthma exacerbation
- D. Uncomplicated hypertensive crisis
- E. Community-acquired pneumonia

1.(6) Examination of a 9-month-old girl revealed skin pallor, cyanosis during excitement. Percussion revealed transverse dilatation of cardiac borders. Auscultation revealed continuous systolic murmur to the left of the breastbone in the 3-4 intercostal space. This

murmur is conducted above the whole cardiac region to the back. What congenital cardiac pathology can be suspected? A. Defect of interventricular septum

B. Defect of interatrial septum

C. Coarctation of aorta

D. Fallot's tetrad

E. Pulmonary artery stenosis

2.(176) A 20 year-old patient complains of nosebleeds, numbness of the lower extremities. Objectively: hyperaemia of face, on the upper extremities AP is 160/90 mm Hg, and 80/50 mm Hg on the lower ones. Pulse on the popliteal and pedal arteries is of poor volume, there is systolic murmur over the carotid arteries. What is the most likely diagnosis?

A. Aorta coarctation

B. Dissecting aortic aneurysm

C. Aortopulmonary window

D. Ventricular septal defect

E. Atrial septal defect

1.(68) A 60-year-old patient has been admitted to a hospital with complaints of dyspnea, tightness in the right subcostal area, abdomen enlargement. These presentations have been progressing for a year. Heart auscultation reveals presystolic gallop rhythm.

Objectively: swelling of the neck veins, ascites, palpable liver and spleen. What disease requires differential diagnostics?

A. Constrictive pericarditis

B. Hepatocirrhosis

C. Lung cancer with invasion to the pleura

D. Chronic pulmonary heart

E. Pulmonary embolism

1.(24) A 28-year-old patient complains of periodic compressing heart pain. His brother died at the age of 34 from a cardiac disease with similar symptoms. Objectively: the patients skin is pale. Heart borders display no significant deviations. Heart sounds are loud, there is a systolic murmur above all the points with a peak above the aorta. Echocardiography reveals thickening of the interventricular septuminthebasalparts, reduction of left ventricular cavity. What drug should be administered in order to prevent the disease progression?

A. Metoprolol

B. Digoxin

C. Nitroglycerin

D. Captopril

E. Furosemide

1.(53) A 56-year-old patient with diffuse toxic goiter has ciliary arrhythmia with pulse rate of 110 bpm, arterial hypertension, AP- 165/90 mm Hg. What preparation should be administered along with mercazolil?

A. Propranolol

B. Radioactive iodine

C. Procaine hydrochloride

D. Verapamil

E. Corinfar

2.(86) A 46-year-old patient complains of sudden palpitation, which is accompanied by pulsation in the neck and head, fear, nausea. The palpitation lasts for 15-20 minutes and is over after straining when holding her breath. What kind of cardiac disorder may be suspected?

- A. An attack of supraventricular paroxysmal tachycardia
- B. An attack of ventricular paroxysmal tachycardia
- C. An attack of atrial flutter
- D. An attack of ciliary arrhythmia
- E. An attack of extrasystolic arrhythmia

2.(127) A 53-year-old woman complained of cardiac pain and rhythm intermissions. She had experienced these presentations since childhood. The patient's father had a history of cardiac arrhythmias. Objectively: the patient was in grave condition, Ps -220bpm, AP-80/60 mmHg. ECG: heart rate - 215/min, widening and deformation of QRS complex accompanied by atrioventricular dissociation; positive P wave. Some time later heart rate reduced down to 45/min, there was a complete dissociation of P wave and QRST complex. Which of the following will be the most effective treatment?

- A. Implantation of the artificial pacemaker
- B. β -adrenoreceptor blocking agents
- C. Cholinolytics
- D. Calcium antagonists
- E. Cardiac glycosides

1.(103) As a result of prolonged exposure to the sun a 20-year-old patient has developed low-grade fever, pain and swelling in the knee and ankle joints, erythema on her face and nose bridge, leukopenia and accelerated ESR. She has been provisionally diagnosed with systemic lupus erythematosus. What pathognomonic laboratory data may confirm this diagnosis?

- A. Antinuclear factor
- B. Accelerated ESR
- C. C-reactive protein
- D. Anaemia
- E. Lymphocytosis

1.(90) An 8-year-old girl has been admitted to the cardiology department. Objectively: there is a skin lesion over the extensor surfaces of joints with atrophic cicatrices, depigmentation, symmetrical affection of skeletal muscles (weakness, edema, hypotrophy). What disease are these changes most typical for?

- A. Dermatomyositis
- B. Systemic scleroderma
- C. Nodular periarteritis
- D. Systemic lupus erythematosus
- E. Reiter's disease

2.(170) A 58-year-old patient complains about sensation of numbness, sudden paleness of II-IV fingers, muscle rigidity, intermittent pulse. The patient presents also with polyarthralgia, dysphagia, constipations. The patient's face is masklike, solid edema of hands is present. The heart is enlarged; auscultation revealed dry rales in lungs. In blood: ESR - 20 mm/h, crude protein - 85/l, γ globulines - 25%. What is the most likely diagnosis?

- A. Systemic scleroderma

- B. Dermatomyositis
- C. Rheumatoid arthritis
- D. Systemic lupus erythematosus
- E. Raynaud's disease

1.(85) A 32-year-old patient has a 3-year history of asthma attacks, that can be hardly stopped with berotec. Over a few last months he has experienced pain in the joints and sensitivity disorder of legs and feet skin. Ps - 80/min, AP - 210/100 mm Hg. In blood: eosinophilia at the rate of 15%. What disease can be suspected in this case?

- A. Periarteritis nodosa
- B. Systemic lupus erythematosus
- C. Systemic scleroderma
- D. Dermatomyositis
- E. Wegener's disease

1.(64) A patient has an over a year-old history of fast progressive rheumatoid arthritis. X-raying confirms presence of marginal erosions. What basic drug would be the most appropriate in this case?

- A. Methotrexate
- B. Chloroquine
- C. Prednisolone
- D. Diclofenac sodium
- E. Aspirin

1.(35) A 32-year-old male patient has been suffering from pain in the sacrum and coxofemoral joints, painfulness and stiffness in the lumbar spine for a year. ESR - 56 mm/h. Roentgenography revealed symptoms of bilateral sacroileitis. The patient is the carrier of HLA B27 antigen. What is the most likely diagnosis?

- A. Ankylosing spondylitis
- B. Coxarthrosis
- C. Rheumatoid arthritis
- D. Reiter's disease
- E. Spondylosis

2.(77) A 35-year-old patient has been admitted to a hospital for pain in the left sternoclavicular and knee joints, lumbar area. The disease has an acute character and is accompanied by fever up to 38°C. Objectively: the left sternoclavicular and knee joints are swollen and painful. In blood: WBCs - $9,5 \cdot 10^9/l$, ESR - 40 mm/h, CRP - 1,5 millimole/l, fibrinogen - 4,8 g/l, uric acid - 0,28 millimole/l. Examination of the urethra scrapings reveals chlamydia. What is the most likely diagnosis?

- A. Reiter's syndrome
- B. Rheumatic arthritis
- C. Gout
- D. Bechterew's disease
- E. Rheumatoid arthritis

1.(28) 2 weeks after recovering from angina a 29-year-old patient noticed face edemata, weakness, decreased work performance. There was gradual progress of dyspnea, edemata of the lower extremities, lumbar spine. Objectively: pale skin, weakening of the heart sounds, anasarca. AP-160/100 mm Hg. In urine: the relative density 1021, protein - 5

g/l, erythrocytes - 20-30 in the field of vision, hyaline cylinders 4-6 in the field of vision.

What is the most likely diagnosis?

- A. Acute glomerulonephritis
- B. Essential hypertension
- C. Acute pyelonephritis
- D. Infectious allergic myocarditis
- E. Myxedema

2.(39) A 54-year-old patient has an over 20-year history of femoral osteomyelitis. Over the last month she has developed progressing edemata of the lower extremities. Urine test reveals: proteinuria at the rate of 6,6 g/l; in blood: dysproteinemia in form of hypoalbuminemia, increase in α_2 and γ -globulin rate, ESR - 50 mm/h. What is the most likely diagnosis?

- A. Secondary renal amyloidosis
- B. Acute glomerulonephritis
- C. Myelomatosis
- D. Chronic glomerulonephritis
- E. Systemic lupus erythematosus

1.(57) A 54-year-old male patient complains of aching pain in the lumbar region, that is getting worse after standing in an upright position, physical exercise, supercooling. The patient also reports of experiencing weakness in the afternoon. Pain in the lumbar region, said about 10 years old. Objectively: pale skin, t_{core} - 37,2°C, AP - 180/100 mm Hg, minor costovertebral angle tenderness (Pasternatsky symptom). In blood: RBCs - $3,5 \cdot 10^{12}/l$, WBCs - $6,5 \cdot 10^9/l$, ESR 22 mm/h. In urine: the relative density 1010, leukocytes-12-15 in the field of vision, erythrocytes- 2-3 in the field of vision. Urine bacterial count - 100000 in 1 ml. What is the most likely diagnosis?

- A. Chronic pyelonephritis
- B. Nephrolithiasis
- C. Polycystic renal disease
- D. Chronic glomerulonephritis
- E. Amyloidosis

1.(36) A 58-year-old female patient complains about periodical headache, dizziness and ear noise. She has been suffering from diabetes mellitus for 15 years. Objectively: heart sounds are rhythmic, heart rate is 76/min, there is diastolic shock above aorta, AP is 180/110 mm Hg. In urine: OD - 1,014. Daily loss of protein with urine is 1,5 g. What drug should be chosen for treatment of arterial hypertension?

- A. Inhibitor of angiotensin converting enzyme
- B. β -blocker
- C. Calcium channel antagonist
- D. Thiazide diuretic
- E. α -blocker

2.(61) A 35-year-old patient has been in the intensive care unit for acute renal failure due to crush for 4 days. Objectively: the patient is inadequate. Breathing rate 32/min. Over the last 3 hours individual moist rales can be auscultated in lungs. ECG shows high T waves, right ventricular extrasystoles. CVP - 159 mm Hg. In blood: the residual nitrogen - 62 millimole/l, K^+ - 7,1 millimole/l, Cl^- - 78 millimole/l, Na^+ - 120 millimole/l, Ht - 0,32, Hb - 100 g/l, blood creatinine - 0,9 millimole/l. The most appropriate method of treatment would be:

- A. Hemodialysis

- B. Plasma sorption
- C. Hemosorption
- D. Plasmafiltration
- E. Ultrafiltration

3.(71) A 28-year-old woman has a 12-year history of chronic glomerulonephritis with latent course. Over the past six months she has developed general weakness, loss of appetite, low work performance, nausea. The patient complains of headache, pain in the joints. On examination: anemia, blood urea - 34,5 millimole/l, blood creatinine - 0,766 millimole/l, hyperkalemia. What complication has developed?

- A. Chronic renal insufficiency
- B. Acute renal insufficiency
- C. Nephrotic syndrome
- D. Renal amyloidosis
- E. Pyelonephritis

4.(101) A 24-years-old patient has chronic glomerulonephritis. Urine test reveals the following: the relative density is 1010, protein - 1,65 g/l, RBCs - 5-7 in the field of vision, WBCs - 2-3 in the field of vision. Blood creatinine - 0,350 millimole/l. Serum sodium - 148 millimole/l. What is the main reason for hyperazotemia in this patient?

- A. Reduction of glomerular filtration rate
- B. Reduction of tubular reabsorption rate
- C. Increased proteinuria
- D. Reduction of renal blood flow
- E. Sodium retention in the organism

1.(96) A 42-year-old female patient suffers from micronodular cryptogenic cirrhosis. Over the last week her condition has deteriorated: there appeared convulsions, mental confusion, increased jaundice. What study may explain such aggravation?

- A. Determination of serum ammonia
- B. Determination of cholesterol ethers
- C. Determination of alpha-phetoprotein rate
- D. Determination of ALAT and ASAT
- E. Determination of alkaline phosphatase rate

1.(52) 4 hours after having meals a patient with signs of malnutrition and steatorrhea experiences stomach pain, especially above navel and to the left of it. Diarrheas take turns with constipation lasting up to 3-5 days. Palpation reveals moderate painfulness in the choledochopancreatic region. The amylase rate in blood is stable. X-ray reveals some calcifications located above navel. What is the most likely diagnosis?

- A. Chronic pancreatitis
- B. Chronic gastroduodenitis
- C. Duodenal ulcer
- D. Zollinger-Ellison syndrome
- E. Chronic calculous cholecystitis

128. A 38 year old female patient complains about body stiffness in the morning, especially in the articulations of her upper and lower limbs, that disappears 30-60 minutes later after active movements. She has also arthritis of metacarpophalangeal and proximal phalangeal articulations, subfebrile temperature. ESR- 45 mm/h. Roentgenography

revealed osteoporosis and erosion of articular surface of small hand and foot articulations. What is the most probable diagnosis?

- A. Rheumatoid arthritis
- B. Psoriatic arthropathy
- C. Osteoarthritis deformans
- D. Systemic lupus erythematosus
- E. Reactive polyarthritis

100. A 15 year old girl suddenly got arthralgia, headache, nausea, vomiting; pain and muscle tension in the lumbar area; body temperature rose up to 38 – 39°C. Pasternatsky's symptom was distinctly positive on the right. In the urine: bacteriuria, pyuria. What is the most probable diagnosis?

- A. Acute pyelonephritis
- B. Renal colic
- C. Acute glomerulonephritis
- D. Pararenal abscess
- E. Cystitis

180. A 33 year old patient has acute blood loss (erythrocytes - $2 \cdot 10^{12}/l$, Hb- 55 g/l), blood group is A(II)Rh+. Accidentally the patient got transfusion of donor packed red blood cells of AB(IV)Rh+ group. An hour later the patient became anxious, got abdominal and lumbar pain. Ps- 134 bpm, AP- 100/65 mm Hg, body temperature - 38, 6°C. After catheterization of urinary bladder 12 ml/h of dark-brown urine were obtained. What complication is it?

- A. Acute renal insufficiency
- B. Cardiac shock
- C. Allergic reaction to the donor red blood cells
- D. Citrate intoxication
- E. Toxic infectious shock

12. A 38 year old man, previously in good health, suddenly develops severe abdominal pain radiating from the left loin to groin and accompanied by nausea, perspiration and the need for frequent urination. He is restless, tossing in bed but has no abnormal findings. The most likely diagnosis is:

- A. Left-sided renal colic
- B. Herpes zoster
- C. Sigmoid diverticulitis
- D. Torsion of the left testicle
- E. Retroperitoneal haemorrhage

74. A 68 year old female patient complains about temperature rise up to 38, 3°C, haematuria. ESR- 55 mm/h. Antibacterial therapy turned out to be ineffective. What diagnosis might be suspected? K A. Renal cancer

- B. Polycystic renal disease
- C. Renal amyloidosis
- D. Urolithiasis
- E. Chronic glomerulonephritis

93. A 39 year old patient complained about morning headache, appetite loss, nausea, morning vomiting, periodic nasal haemorrhages. The patient had acute glomerulonephritis at the age of 15. Examination revealed rise of arterial pressure up to 220/130 mm Hg, skin

haemorrhages on his arms and legs, pallor of skin and mucous membranes. What biochemical index has the greatest diagnostic importance in this case?

- A. Blood creatinine
- B. Blood bilirubin
- C. Blood sodium
- D. Uric acid
- E. Fibrinogen

173. A 35 year old female patient suffering from cholelithiasis has broken her diet, and this caused an acute pain attack in the right subcostal are. The pain eased off on the third day, but the patient got progressing jaundice. What non-invasive diagnostic method should be applied?

- A. Endoscopic retrograde cholangiopancreatography
- B. Infusive cholecystocholangiography
- C. Test for bilirubin
- D. Duodenal probing
- E. Survey radiography of abdominal

46. A patient has been in a hospital. The beginning of the disease was gradual: nausea, vomiting, dark urine, cholic stools, yellowness of the skin and scleras. The liver is protruded by 3 cm. Jaundice progressed on the 14th day of the disease. The liver diminished in size. What complication of viral hepatitis caused deterioration of the patient's condition?

- A. Hepatic encephalopathy
- B. Meningitis
- C. Relapse of viral hepatitis
- D. Cholangitis
- E. Infectious-toxic shock

51. A 22 year old woman complained of right subcostal aching pain, nausea, and decreased appetite. She fell ill 2 months after appendectomy when jaundice appeared. She was treated in an infectious hospital. 1 year later above mentioned symptoms developed. On exam: the subicteric sclerae, enlarged fi- rm liver. Your preliminary diagnosis:

- A. Chronic viral hepatitis
- B. Calculous cholecystitis
- C. Gilbert's disease
- D. Acute viral hepatitis

55. A 52 year old patient with history of functional Class II angina complains of having intense and prolonged retrosternal pains, decreased exercise tolerance for 5 days. Angina is less responsive to nitroglycerine. What is the most probable diagnosis?

- A. IHD. Unstable angina
- B. Cardialgia due to spine problem
- C. IHD. Functional Class II angina
- D. Myocarditis
- E. Myocardial dystrophy

23. Five days after a total hip replacement a 72 year old woman becomes acutely short of breath, diaphoretic and hypotensive. Both lung fields are clear to auscultation and

percussion, but examination of the neck reveals mild jugular venous distension with prominent A waves. Heart sounds are normal. ECG shows sinus tachycardia with a new right bundle branch block and minor nonspecific ST – T wave changes. The most likely diagnosis is:

- A. Pulmonary thromboembolism
- B. Acute myocardial infarction
- C. Aortic dissection
- D. Pericarditis

21. A 56 year old man complains of fatigue, dyspnea on exertion and palpitations. He has had a murmur since childhood. Examination reveals a lift at the left sternal border, split S1, and fixed splitting of S2. There is a grade 3/6 midsystolic pulmonic murmur and a 1/6 middiastolic tricuspid murmur at the lower left sternal border. Chest x-ray shows right ventricular enlargement and prominent pulmonary arteries. ECG demonstrates atrial fibrillation with a right bundle branch block. The most likely diagnosis is:

- A. Arterial septal defect
- B. Coarctation of the aorta
- C. Patent ductus arteriosus
- D. Tetralogy of Fallot
- E. Ventricular septal defect

58. A patient, aged 49, complains of fever of 37, 5°C, heart pain, dyspnea. S1 is clapping; S2 is accentuated in the aortic area; opening snap, presystolic murmur can be auscultated. What is the most efficient examination for valvular disorder assessment?

- A. Echocardiography+DopplerEchocardiography
- B. Phonocardiography
- C. Ballistocardiogram
- D. Chest X-ray
- E. ECG

139. An 8 year old girl complains about joint pain, temperature rise up to 38°C, dyspnea. Objectively: the left cardiac border is deviated by 2,5 cm to the left, tachycardia, systolic murmur on the apex and in the V point are present. Blood count: leukocytes - $20,0 \cdot 10^9/l$, ESR - 18 mm/h. What sign gives the most substantial proof for rheumatism diagnosis?

- A. Carditis
- B. Arthralgia
- C. Leukocytosis
- D. Fever
- E. Accelerated ESR

136. A 30 year old woman ill with influenza felt palpitation and dull cardiac pain during moderate physical exercise. Objectively: Ps - 96 bpm, AP - 100/60 mm Hg. The first sound is quiet above the apex, soft systolic murmur is present. What complication is indicated by these clinical presentations?

- A. Acute viral myocarditis
- B. Acute allergic infectious myocarditis
- C. Idiopathic myocarditis
- D. Myocardiopathy
- E. Neurocirculatory dystonia

19. Adenosine triphosphate may be expected to convert which of the following arrhythmias to sinus rhythm?

- A. Paroxysmal supraventricular tachycardia
- B. Paroxysmal ventricular tachycardia
- C. Atrial fibrillation
- D. Atrial flutter
- E. Ventricular fibrillation

13. A patient who takes diuretics has developed arrhythmia as a result of cardiac glycoside overdose. What is the treatment tactics in this case?

- A. Increased potassium concentration in blood
- B. Increased sodium concentration in blood
- C. Reduced magnesium concentration in blood
- D. Increased calcium concentration in blood
- E. –

146. A 35 year old patient who suffers from chronic glomerulonephritis and has been hemodialysis-dependent for the last three years developed intermissions of heart activity, hypotension, progressing weakness, dyspnea. ECG showed bradycardia, atrioventricular block type I, high pointed waves T. The day before the flagrant violation of diet took place. What is the most probable cause of these changes?

- A. Hyperkalemia
- B. Hyperhydratation
- C. Hypokalemia
- D. Hyponatremia
- E. Hypocalcemia

196. A 46 year old woman who has been suffering from hypertension for 5 years was diagnosed with hypertensive crisis. She complains about palpitation, sense of head pulsation; heart rate is 100/min, AP is 190/100 mm Hg (haemodynamics is of hyperkinetic type). What medication should be the medication of choice?

- A. β -adrenoceptor blocker
- B. Adenosine pyrophosphate inhibitor
- C. Diuretic
- D. α -adrenoceptor blocker
- E. Dihydropyridine calcium antagonist

83. A 42 year old woman complains of dyspnea, edema of the legs and tachycardia during minor physical exertion. Heart borders are displaced to the left and S1 is accentuated, there is diastolic murmur on apex. The liver is enlarged by 5 cm. What is the cause of heart failure?

- A. Mitral stenosis
- B. Mitral regurgitation
- C. Tricuspid stenosis
- D. Tricuspid regurgitation
- E. Aortic stenosis

56. A 52 year old patient has hypervolaemic type of essential hypertension. Which of the following medications is to be prescribed either as monotherapy or in complex with other antihypertensive drugs?

- A. Hypothiazid
- B. Dibazol

- C. Clonidine
- D. Kapoten
- E. Nifedipin

78. A 34 year old patient after cold exposure. She complained of pain in her hand and knee joints, morning stiffness and fever up to 38°C. Interphalangeal, metacarpophalangeal and knee joints are swollen, hot, with reduced ranges of motions; ESR of 45 mm/h, CRP (+++), Waaler-Rose test of 1:128. What group of medicines would you recommend the patient?

- A. Nonsteroidal anti-inflammatory drugs
- B. Cephalosporines
- C. Tetracyclines
- D. Sulfonamides
- E. Fluorchinolones

48. A 14 year old patient complains of chest pain, temperature up to 38, 5°C, breathlessness. He had acute tonsillitis 2 weeks ago. He is in grave condition. The skin is pale. Heart borders are dilated, heart sounds are quiet. Above total heart area you can hear pericardium friction sound. Electrocardiogram: the descent of QRS voltage, the inversion T. The liver is enlarged by 3 cm. ESR - 4 mm/h, ASL - 0 - 1260, C-reactive protein ++++. Your diagnosis:

- A. Rheumatic pancarditis
- B. Rheumatic pericarditis
- C. Rheumatic myocarditis
- D. Rheumatic endocarditis
- E. Septic endocarditis

200. A 52 year old patient with disseminated vertebral osteochondrosis lifted a significant load that resulted in lumbar pain and pain along the sciatic nerve. Objectively: positive Lasegue's sign on the left, reduced Achilles reflex. What drug would be the most effective from the pathogenetic point of view?

- A. Diclofenac
- B. Aspirin
- C. Analgin
- D. Novocaine
- E. Spasmalgon

52. A nine year old child is at a hospital with acute glomerulonephritis. Clinical and laboratory examinations show acute condition. What nutrients must not be limited during the acute period of glomerulonephritis?

- A. Carbohydrates
- B. Salt
- C. Liquid
- D. Proteins
- E. Fats

16. Routine examination of an otherwise healthy child with a history of bronchial asthma reveals AP of 140/90 mm Hg. The most likely cause of the hypertension is:

- A. Renal disease
- B. Theophylline toxicity
- C. Chronic lung disease

D. Coarctation of the aorta

E. Obesity

26. A 38 year old man, previously in good health, suddenly develops severe abdominal pain radiating from the left loin to groin and accompanied by nausea, perspiration and the need for frequent urination. He is restless, tossing in bed but has no abnormal findings.

The most likely diagnosis is:

A. Leftsided renal colic

B. Herpes zoster

C. Sigmoid diverticulitis

D. Torsion of the left testicle

E. Retroperitoneal haemorrhage

42. A patient with acute respiratory viral infection (3rd day of disease) complains of pain in lumbar region, nausea, dysuria, oliguria. Urinalysis - hematuria (100-200 RBC in eyeshot spot), specific gravity - 1002. The blood creatinin level is 0,18 millimole/l, potassium level - 6,4 millimole/l. Make the diagnosis:

A. Acute interstitial nephritis

B. Acute renal failure

C. Acute glomerylonephritis

D. Acute cystitis

E. Acute renal colic

99. A 68 year old patient has been suffering from chronic pancreatitis for 35 years. During the last 5 years he has been observing abatement of pain syndrome, abdominal swelling, frequent defecations up to 3-4 times a day (feces are greyish, glossy, with admixtures of undigested food), progressing weight loss. Change of symptom set is caused by joining of:

A. Exocrine pancreatic insufficiency

B. Endocrine pancreatic insufficiency

C. Syndrome of lactase deficiency

D. Irritable bowels syndrome

E. Chronic enterocolitis

2 . A patient with unstable angina pectoris was given the following complex treatment: anticoagulants, nitrates, /alpha-adrenoblockers. However on the third day of treatment the pain still remains. Which investigation should be carried out to establish diagnosis?

A . Coronarography

B. Stress-echocardiogram

C. Test with dosed physical exercises

D. Esophageal electrocardiac stimulator

E . Myocardial scintigraphy

7 0 . A 64 y.o. patient has developed of squeering substernal pain which had appeared 2 hours ago and irradiated to the left shoulder, marked weakness.

On examination: pale skin, cold sweat. Pulse- 108 bpm, AP- 70/50 mm Hg, heart sound are deaf, vesicular breathing, soft abdomen, painless, varicose vein on the left shin, ECG: synus rhythm, heart rate is 100 bmp, ST-segment is sharply elevated in II, III aVF leads. What is the most likely disorder?

A . Cardiogenic shock

B. Cardiac asthma

- C. Pulmonary artery thromboembolia
- D. Dissective aortic aneurysm
- E. Cardiac tamponade

173. A patient had a myocardial infarction. He is overweight for 36%, AP is 150/90 mm Hg, blood sugar- 5,9 mmol/L, general cholesterol- 4,9 mmol/L, uric acid- 0,211 mmol/L. Which risk factor should be urgently eradicated during the secondary prevention?

- A. Obesity
- B. Arterial hypertension
- C. Hyperglycemia
- D. Hypercholesterolemia
- E. Hyperuricemia

136. A 60 y.o. patient experiences acute air insufficiency following of the venectomy due to subcutaneous vein thrombophlebitis 3 days ago. Skin became cyanotic, with grey shade. Marked psychomotor excitement, tachypnea, substernal pain. What postoperative complication has occurred?

- A. Thromboembolism of pulmonary artery
- B. Hemorrhage
- C. Hypostatic pneumonia
- D. Myocardial infarction
- E. Valvular pneumothorax

2. A 40 y.o. patient of rheumatic heart disease complains of anorexia, weakness and loss of weight, breathless and swelling of feet. On examination: t 39.0°C, pulse is 100/min. Auscultation: diastolic murmur in the mitral area. Petechial lesion at the clavicle; spleen was palpable, tooth extraction one month ago.

- A. Subacute bacterial endocarditis
- B. Recurrence of rheumatic fever
- C. Thrombocytopenic purpura
- D. Mitral stenosis
- E. Aortic stenosis

160. A 43 y.o. woman complains of shooting heart pain, dyspnea, irregularities in the heart activity, progressive fatigue during 3 weeks. She had acute respiratory disease a month ago. On examination: AP- 120/80 mm Hg, heart rate 98 bpm, heart borders +1,5 cm left side, sounds are muffled, soft systolic murmur at apex and Botkin's area; sporadic extrasystoles. Liver isn't palpated, there are no edema. Blood test: WBC- 6,7 *10⁹/L, sedimentation rate- 21 mm/hour. What is the most probable diagnosis?

- A. Acute myocarditis
- B. Climacteric cardiomyopathy
- C. Ischemic heart disease, angina pectoris
- D. Rheumatism, mitral insufficiency
- E. Hypertrophic cardiomyopathy

15. A 67 y.o. patient complains of palpitation, dizziness, noise in ears, feeling of shortage of air. Objectively: pale, damp skin. Vesicular respiration, respiratory rate- 22 per min, pulse- 200 bpm, AP- 100/70 mm Hg. On ECG: heart rate- 200 bpm, ventricular complexes are widened, deformed, location of segments ST and of wave T is discordant. The wave is not changed, superimposes QRST, natural conformity between and QRS is not present. What kind of arrhythmia is present?

- A . Paroxysmal ventricular tachycardia
- B. Sinus tachycardia
- C. Atrial flutter
- D. Ventricular extrasystole
- E . Atrial tachycardia

14 4 . A 35 y.o. male patient suffers from chronic glomerulonephritis and has been on hemodialysis for the last 3 years. He has developed irregularities in the heart activity, hypotension, progressive weakness, dyspnea. On ECG: bradycardia, 1st degree atrioventricular block, high sharpened T-waves. Before he had severely disturbed the drinking and diet regimen. What is the most likely cause of these changes?

- A . Hyperkalemia
- B. Hyperhydration
- C. Hypokalemia
- D. Hyponatremia
- E . Hypocalcemia