FEDERAL STATE BUDGET EDUCATIONAL HIGHER EDUCATION INSTITUTION "ROSTOV STATE MEDICAL UNIVERSITY" MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

FACULTY OF TREATMENT AND PREVENTION

Appraisal Fund in the discipline "Faculty Therapy"

Specialty 05/31/01 General Medicine

1.**Interim certification form:**7th semester – test, 8th semester – exam 2.**Type of intermediate certification: Test:**

interview,**exam**: interview.

3. List of competencies formed by the discipline or in formation which discipline is involved

| professional (PC) 8.10 | |
|---|--|
| Code and name of professional competence | |
| PC-8 ability to determine tactics for managing patients with various | |
| nosological forms | |
| PC-10 Preparedness to provide medical care in case of sudden acute | |
| diseases, conditions, exacerbation of chronic diseases, not | |
| accompanied by a threat to the patient's life and not requiring emergency medical | |
| help | |

4.Stages of developing competencies in process of mastering the discipline

| Sections of the discipline | | Codes of formed competencies | | | |
|----------------------------|------------|------------------------------|--------|--|--|
| | | 0PK-8 | 0PK-10 | | |
| | Semest | er 7 | | | |
| Section 1 | | + | + | | |
| Section 2 | | + | + | | |
| Section 3 | | + | + | | |
| | Semester 8 | | | | |
| Section 4 | | + | + | | |
| Section 5 | | + | + | | |
| Section 6 | | + | + | | |
| Section 7 | | + | + | | |

5.Types of assessment materials in accordance with the competencies being developed

| Name | Types of assessment materials | | | |
|--------------|---|-----------|--|--|
| indicator | Current certification Interim certification | | | |
| achievements | | | | |
| (ID) | | | | |
| competencies | | | | |
| PC 8 | Tests Situational tasks Oral survey | interview | | |
| PC 10 | Tests Situational tasks Oral survey | interview | | |

6. Current control

Bush survey questions

1. Conduction disorders (blockades). Classification, pathogenesis. Peculiarities clinical manifestations. Diagnostic principles.

2. Emergency care for various rhythm and conduction disorders. Indications for surgical treatment methods.

3. Myocarditis. Etiology. Pathogenesis. Classification. Clinic Diagnostics. Treatment.

4. Cardiomyopathies. Classification. Clinic, diagnostics And treatment dilated cardiomyopathy. 5. Mitral insufficiency valve Etiology. Pathophysiology hemodynamic disorders. Clinic. Diagnostics. Indications for surgical treatment.

6. Aortic valve insufficiency. Etiology, hemodynamic features, clinical picture. Diagnostics. Forecast. Treatment. Indications for surgical treatment.

7. Mitral stenosis. Etiology. Pathophysiology of hemodynamic disorders. Clinic. Diagnostics. Complications. Indications for surgical treatment.

8. Stenosis of the aortic mouth. Etiology. Pathophysiology of hemodynamic disorders. Clinic. Diagnostics. Indications for surgical treatment.

9. Mitral valve prolapse. Causes. Hemodynamic disorders. Diagnostics.

10. General principles of treatment of acute rheumatic fever. Primary and secondary prevention. Clinical examination.

11. The procedure for providing medical care to the adult population in the field of "therapy" Order of the Ministry of Health of Russia dated November 15, 2012 No. 923n.

PK-8, PK-10 (7, 8 semester)Test control

List of test tasks for ongoing monitoring with standard answers.

1. Systolic murmur in the 2nd intercostal space on the right, conducted to the vessels of the neck, is characteristic of:

A) mitral insufficiency B) mitral stenosis,
C) aortic insufficiency, D) aortic stenosis,
D) combined mitral disease

2. Thrombolytic therapy is indicated for:

A) MI with ST segment elevation B) MI without ST segment elevation C) myocarditis

D) vasospastic angina E) stable angina

pectoris

3. Zofirlukast (erespal) is a receptor blocker:

a) histamine,

b) serotonin,

c) adrenaline,

d) leukotrienes,

e) acetylcholine.

4. Select the symptoms, the appearance of which poses a threat to the life of patients with attack of bronchial asthma:

A) discharge of "glassy" sputum,

B) tachycardia up to 120 per minute at the height of

the attack, C) remote wheezing on exhalation,

D) decreased breathing, tachypnea, pO2less than 60 mmHg,

D) agitation, hand tremors, extrasystole.

5. Which pathogen of pneumonia most often causes destruction? lungs?

A) pneumococcus B) streptococcus

B) staphylococcus D) legionella.

D) mycoplasma

6. Which element of sputum reliably indicates destruction lung tissue?
A) Charcot - Leiden crystals B)
Leukocytes
B) Kurshman spirals
D) Elastic fibers E) Red
blood cells

7. What types of stones can form in the gallbladder?

A) cholesterol

B) pigment

B) mixed

D) calcareous

D) all of the above are true

8. Pain during exacerbation of chronic acalculous cholecystitis:

A) sharp, cramping

B) dull, aching, worse after eating C)

radiating to the left side,

D) take on an encircling character

D) significantly worsen the quality of life of patients and turn them into bed patients

9. All of the above are used in the treatment of postcholecystectomy syndrome drugs, except

- A) but-shpy
- B) Motilium
- IN) omeprazole
- G) metoclopramide
- D) platiphylline

10. Sydenham's chorea refers to:

A) to major diagnostic criteria for ARF B) to minor diagnostic criteria for ARF C) to diagnostic criteria for myocarditis
D) to the diagnostic criteria for mitral stenosis E) to the diagnostic criteria for hypertension

Response standards.

G

2. А 3. А 4. G 5. IN 6. G 7. D 8. В 9. IN 10. A

PK-8, PK-10 (7,8 semesters) Situational tasks

Situational task 1

Patient Yu., 54 years old. Complains of headache, tinnitus. From the anamnesis it is known that for 10 years there has been high blood pressure. For six months, unstable blood pressure (fluctuations from 120/80 to 170/110 mm Hg), accompanied by headaches. My father has had hypertension since he was 50 years old. He has smoked a pack of cigarettes for 30 years. I was examined in a hospital 5 years ago and diagnosed with hypertension. He was treated irregularly, only taking Captopril during headaches. Yesterday I abused alcohol and went to bed late. This morning I noticed a headache, ringing in the ears, flashing spots before my eyes, and dizziness. In addition, nausea appeared and there was vomiting once, which did not bring relief. Objectively: the condition is satisfactory. Consciousness is clear. BMI – 32 kg/m2. Waist circumference (WC) – 106 cm. The face is hyperemic. Breathing in the lungs is harsh, there is no wheezing. NPV - 20 per minute. The heart sounds are sonorous, the rhythm is correct, the accent of the second tone is on the aorta. The left border of the heart is 1 cm outward from the midclavicular line. Heart rate - 90 beats per minute, blood pressure -190/120 mm Hg. Art. on both hands. The abdomen participates in breathing, is soft, painless, the liver does not protrude from under the costal arch. The symptom of tapping in the lumbar region is negative. There is no swelling. Physiological functions are not impaired. ECG conclusion: sinus rhythm with heart rate - 90 beats per minute, signs of left ventricular hypertrophy.

Questions: 1. Guess the most likely diagnosis.

2. Justify your diagnosis.

3. Draw up and justify a plan for further additional examination of the patient and justify it.

4. For subsequent therapy, would you recommend monotherapy or combination therapy? Justify.

Situational task 2

A 48-year-old patient woke up at night from pain in the epigastric region, accompanied by weakness, sweating, and nausea. Previously, I had not been bothered by pain and considered myself healthy. An attempt to relieve pain with a soda solution did not bring relief. After taking Nitroglycerin under the tongue, the pain decreased, but did not go away completely. Nausea, weakness, and sweating persisted. An ambulance was called in the morning. The ECG revealed a deep Q wave in leads III and aVF; the ST segment in the same leads is raised above the isoline, arched, and turns into a negative T wave; ST segment in leads I, a VL and V1 to V4 below the isoline.

Questions: 1. What is the most likely diagnosis for this patient? 2. Justify your diagnosis. 3. Make a plan for additional examination of the patient. 4. What are your further treatment tactics? 5. Specify contraindications to thrombolysis.

Situational task 3

A 45-year-old woman, a salesperson, came to the clinic with complaints of attacks of suffocation and shortness of breath after physical activity and spontaneous ones at night, and discomfort in the chest. I first became ill after severe pneumonia 11 years ago. Then the attacks recurred after physical activity and during colds. Attacks of suffocation were relieved by inhalation of Salbutamol (3-4 times a day). History: community-acquired 2-sided bronchopneumonia, acute appendicitis. He denies the presence of allergic diseases in himself and his relatives. There were no blood transfusions. There are no bad habits. Objectively: the condition is satisfactory, consciousness is clear. The skin and mucous membranes are clean, physiological in color. Tongue is wet. Lymph nodes are not enlarged. In the lungs: percussion – box sound, auscultation – hard breathing, dry wheezing throughout all pulmonary fields, whistling during forced exhalation. The respiratory rate is 18 per minute. The boundaries of the heart are not changed. Heart sounds are muffled and rhythmic. Blood pressure - 140/90 mm Hg. Art. Pulse – 69 beats per minute, good filling and tension. The abdomen is soft and painless. The liver and spleen are not palpable. Physiological functions are not impaired. Blood test: hemoglobin – 12.6 g/l, erythrocytes – 3.9×1012/l, leukocytes – 9.5×109/l, band neutrophils – 3%, segmented neutrophils – 63%, eosinophils – 5%, monocytes – 6%, lymphocytes – 13%; ESR - 19 mm/h. Biochemical blood test: total bilirubin - 5.3 μm/l; total protein - 82 g/l, urea - 4.7 mmol/l. Urinalysis: specific gravity - 1028, protein - negative, epithelium -1-3 in the field of view. Sputum analysis: mucous, odorless. Microscopy: leukocytes - 5-6 per field of view, eosinophils - 10-12 per field of view, bronchial epithelial cells, units. alveolar macrophages. VK - negative (3 times). Ro-graphy of the chest: increased transparency of the lung fields, flattening and low position of the diaphragm. The pulmonary pattern is enhanced. The roots of the lungs are enlarged, the shadow is intensified. The heart shadow is increased in diameter.

Questions: 1. State the supposed preliminary diagnosis. 2. Justify your diagnosis. 3. Make a plan for additional examination. 4. Make a differential diagnosis. 5. Make a treatment plan (name the necessary groups of medications).

Situational task 4

A 35-year-old man consulted a local general practitioner with complaints of an increase in temperature to 37.6°C for five days and a cough with yellowish sputum. I took antipyretic drugs without much effect. Didn't take any other medications. Ten days before, he suffered from ARVI. No drug allergies are noted. There are no concomitant diseases. The patient's condition is satisfactory, respiratory rate is 19 per minute. The skin is clean and of normal color. On auscultation, a moderate amount of moist crepitating rales are heard in the lower posterior parts of the chest on the right; in other parts of the lungs, vesicular breathing is heard, there are no wheezes. Heart sounds are rhythmic, clear, 82 beats per minute, blood pressure - 120/70 mm Hg. Art. The abdomen is soft and painless on palpation in all parts. The liver and spleen are not enlarged. There is no dysuria. Symptom of tapping in the lumbar region

negative. X-ray of the chest organs in direct and lateral projections: infiltration is detected on the right in the 9-10 segments of the lower lobe.

Questions: 1. Guess the most likely diagnosis. 2. Justify your diagnosis. 3. Draw up and justify a plan for additional examination of the patient. 4. Name the groups of medications that you would currently recommend to the patient.

Justify your choice.Standard of specialized medical care for patients with moderate pneumonia dated December 29, 2012 No. 1658n5. The patient is scheduled to appear in two days to evaluate the effect of prescribed medications and possible correction of therapy. Choose further tactics for treating the patient and explain your choice.

Situational task 5

Patient K., 48 years old, an economist, consulted a local general practitioner with complaints of compressive pain behind the sternum and in the heart area, radiating to the left shoulder, occurring when walking 100 meters, sometimes at rest, relieved by taking 1-2 tablets of Nitroglycerin every 2 -3 minutes, shortness of breath, palpitations with little physical exertion. Heart pain first appeared about 5 years ago. She takes Nitroglycerin to relieve pain, Cardiket 20 mg 2 times a day to prevent heart pain, Aspirin 100 mg at night. I took statins for about two years, but have not taken them for the last two years. Over the past six months, exercise tolerance has decreased. The patient has been smoking for about 20 years, 1 pack per day. Heredity: father died at the age of 62 from myocardial infarction. General condition is satisfactory. Normosthenic constitution. There is no peripheral edema. Respiratory rate is 18 per minute, vesicular breathing in the lungs, no wheezing. The borders of the heart during percussion: right - the right edge of the sternum IV intercostal space, upper - III intercostal space, left - 1.0 cm medially from the left midclavicular line V intercostal space. Heart sounds are muffled, the rhythm is regular, the accent of the second tone is over the aorta. Heart rate – 82 beats per minute. Blood pressure - 135/80 mm Hg. Art. The liver and spleen are not palpable. The symptom of tapping in the lumbar region is negative. Blood lipids: total cholesterol -6.8 mmol/l; triglycerides – 1.7 mmol/l; high-density lipoprotein cholesterol – 0.9 mmol/l. ECG at rest: rhythm - sinus, heart rate - 80 beats per minute. EOS was not rejected. Single ventricular extrasystole. Echo-CG: thickening of the aortic walls. The thickness of the posterior wall of the left ventricle (PLW) is 1.0 cm; the thickness of the interventricular septum (IVS) is 1.0 cm. The heart chambers are not dilated. Left ventricular ejection fraction (EF) - 57%. No disturbances in local and global contractility of the left ventricle were detected. VEM test: when performing the first stage of the load, compressive pain appeared behind the sternum, accompanied by the appearance of depression of the ST segment up to 3 mm in I, II, V2-V6, which disappeared during the recovery period. Coronary angiography: stenosis in the third left coronary artery - 80%, in the third circumflex artery - 80%.

Questions: 1. Formulate a clinical diagnosis. 2. Justify the clinical diagnosis. 3. Name the main risk factors for atherosclerosis. 4. Prescribe non-drug and drug treatment. 5. Are there indications for surgical treatment in this case?

Sample answer to task 1:

1. Stage II hypertension, stage 3 arterial hypertension. Left ventricular hypertrophy. Risk 4 (very high). Uncomplicated hypertensive crisis. Obesity 1st degree. Smoking - 30 pack-years.

2. The diagnosis of "hypertension" (HD) was established on the basis of anamnesis (instability of blood pressure, the patient notes an increase in blood pressure for 10 years). The stage of hypertension was established based on the presence of target organ damage - hypertrophy of the left ventricle of the heart according to percussion examination of the boundaries of relative cardiac dullness, ECG. Establishing the degree of arterial hypertension (AH) is based on blood pressure values measured during admission. The risk level was determined based on the presence of stage 3 hypertension. Uncomplicated hypertensive crisis - a rapid increase in blood pressure to 180/120 mm Hg. Art. and higher with clinical symptoms, but not accompanied by acute clinically significant dysfunction of target organs. The diagnosis of stage 1 obesity was established based on BMI indicators. Smoking according to data

3. Physical examination: determination of the ankle-brachial index - to determine atherosclerotic lesions of the arteries. Laboratory tests: general blood test - assessment of general status; general urinalysis - assessment of kidney damage; blood creatinine to calculate glomerular filtration rate and assess kidney damage; fasting blood glucose – rule out diabetes; lipidogram - determination of dyslipidemia; urine test for UIA - assessment of kidney damage. Instrumental research: conducting 24-hour blood pressure monitoring to assess the stability of blood pressure increases and the daily blood pressure profile; performing an ECG in dynamics (LVH, ischemia); conducting ECHO-CG to assess myocardial wall thickness, LVMI, diastolic and systolic function; consultation with an ophthalmologist and ophthalmoscopy to assess the presence of hypertensive retinopathy (swelling of the optic nerve, hemorrhages and retinal exudates); duplex scanning of the carotid arteries to assess the thickness of the intima-media complex and search for atherosclerotic plaques; determination of pulse wave velocity (PWV) – assessment of damage to the arteries and aorta. If symptomatic hypertension is suspected, an examination to identify them is indicated.

4. The number of drugs prescribed depends on the initial blood pressure level and concomitant diseases. For example, with grade 1 hypertension and the absence of CVD, it is possible to achieve target blood pressure with monotherapy in approximately 50% of patients. In case of hypertension of 2 and 3 degrees, the presence of target organ damage, associated clinical conditions, diabetes mellitus and metabolic syndrome, in most cases a combination of 2 or 3 drugs may be required. Currently, it is possible to use 2 strategies for initial treatment of hypertension: monotherapy and low-dose combination therapy, followed by an increase in the amount and/or dose of the drug if necessary. Monotherapy at the start of treatment may be chosen for patients at low or intermediate risk. A combination of 2 drugs in low doses is prescribed to patients with a high or very high risk of cardiovascular disease. Monotherapy is based on finding the optimal drug for the patient; switching to combination therapy is advisable only if the latter has no effect. Low-dose combination therapy at the start of treatment involves the selection of an effective combination of drugs with different mechanisms of action. Each of these approaches has its own advantages and disadvantages. The advantage of low-dose monotherapy is that if the drug is successfully selected, the patient will not take another drug. However, the monotherapy strategy requires the doctor to painstakingly search for the optimal antihypertensive drug for the patient with frequent changes in medications and their dosages, which deprives the doctor and the patient of confidence in success, and ultimately leads to a decrease in patient adherence to treatment. This is especially true for patients with stage 1 and 2 hypertension, most of whom do not experience discomfort from increased blood pressure and are not motivated to treatment. In combination therapy, in most cases, the prescription of drugs with different mechanisms of action allows, on the one hand, to achieve target blood pressure, and on the other, to minimize the number of side effects. Combination therapy also makes it possible to suppress counterregulatory mechanisms of increased blood pressure. The use of fixed combinations of antihypertensive drugs in one tablet increases patient adherence to treatment. The disadvantage of combination therapy is that sometimes patients

having to take medicine that is not necessary. Patients with blood pressure≥160/100 mm Hg. Art., with a high and very high risk of cardiovascular complications, which our patient belongs to, full-dose combination therapy can be prescribed at the start of treatment. In 15–20% of patients, blood pressure control cannot be achieved using 2 drugs. In this case, a combination of 3 or more drugs is used

Sample answer to task 2:

1. IHD: acute Q-myocardial infarction in the area of the lower wall.

2. The diagnosis was made based on complaints of pain in the epigastric region, accompanied by weakness, sweating, nausea; medical history: after taking Nitroglycerin under the tongue, the pain decreased; data from a clinical laboratory study: the ECG recorded revealed a deep Q wave in leads III and aVF; The ST segment in the same leads is raised above the isoline, arched, and turns into a negative T wave.

3. Clinical blood test; biochemical markers of myocardial necrosis; Echocardiography; KAG.

4. Thrombolysis; PCI (BAP and stenting); anesthesia; antiplatelet agents; anticoagulants; Adrenergic blockers; statins.

5. Hemorrhagic rashes; aneurysm; taking POAG; pregnancy; neoplasms

Sample answer to problem 3:

1. Bronchial asthma, moderate, insufficiently controlled course. DN0.

2. The diagnosis was made on the basis of the patient's complaints of attacks of suffocation and shortness of breath after physical exertion and spontaneous at night, of chest discomfort; life history (attacks recur after physical activity and during colds; attacks of suffocation were relieved by inhalation of Salbutamol (3-4 times a day)); objective examination data (percussionbox sound in the lungs, auscultation - hard breathing, dry wheezing throughout all pulmonary fields, whistling during forced exhalation); data from laboratory methods (in sputum: eosinophils - 10-12 per field of view, leukocytes - 5-6 per field of view); data from instrumental research methods (increased transparency of the pulmonary fields, enhanced pulmonary pattern, enlarged roots of the lungs).

3. Study of the function of external respiration: spirometry (determination of forced expiratory volume in 1 second - FEV1 and forced vital capacity of the lungs - FVC). Bronchodilator test (test for reversibility of bronchial obstruction). Allergy examination (skin tests, determination of specific IgE in blood serum, inhalation provocative tests with allergens). Chest X-ray (to rule out an alternative diagnosis).

4. Chronic obstructive pulmonary disease is characterized by long-term previous smoking or the presence of other risk factors, a slow increase in respiratory symptoms, constant or intermittent coughing during the day, progressive shortness of breath, the presence of irreversible bronchial obstruction, and rarely sputum eosinophilia. Starts in middle age.

5. Diet: table No. 15. Low-dose inhaled glucocorticosteroids in combination with long-acting beta-2 agonists. Alternative: moderate-to-high-dose inhaled glucocorticosteroids or low-dose inhaled glucocorticosteroids in combination with antileukotriene receptors.

Inhaled β-2 agonists with rapid action when needed or a combination of low-dose inhaled glucocorticosteroids in combination with Formoterol.

Sample answer to problem 4:

1. Community-acquired right-sided lower lobe pneumonia, mild course. Respiratory failure (RF) 0 tbsp.

2. The diagnosis of "community-acquired pneumonia" was established on the basis of the patient's complaints of an increase in temperature to 37.6°C for five days, a cough with yellowish sputum, suffered the day before from an acute respiratory viral infection; identified during an appointment with a doctor during auscultation of local moist crepitating rales in the lower lobe of the right lung and infiltrative shadows during X-ray of the chest organs in 9-10 segments of the right lung, which is the most typical localization for pneumonia. The mild course of pneumonia was established on the basis of a moderate increase in body temperature to 37.6°C for 5 days, the absence of tachycardia, normal blood pressure, and involvement of two segments of the lungs on one side. There is no intoxication, no complications. Respiratory failure of 0 degree was established based on the absence of shortness of breath (heart rate - 22 per minute).

3. The patient is recommended a general blood test and general sputum analysis, a biochemical blood test (urea, creatinine, liver enzymes, electrolytes) in order to assess the severity of pneumonia and decide on the advisability of hospitalization of the patient; sputum smear bacterioscopy with Gram stain for preliminary assessment of the causative agent of the disease.

4. Semi-synthetic penicillins or modern macrolides. The causative agent of community-acquired pneumonia in 50% of cases is pneumococcus. The choice was due to the good sensitivity of pneumococcus to drugs of these groups. The most preferred drug is Amoxicillin tablets. Initial therapy with Azithromycin is possible due to its effect on pneumococcus and atypical flora.

5. Therapy remains unchanged with normalization of temperature and reduction of wheezing in the lungs. If the temperature persists, the initially prescribed antibiotic should be replaced with respiratory fluoroquinolones (Levofloxacin or Moxifloxacin tablets), which act on gramnegative and atypical flora. Continue the prescribed therapy for 3-5 days after stable normalization of temperature, in general no more than 10 days. If there is clinical and/or epidemiological evidence of mycoplasma or chlamydial etiology of the disease, continue therapy for up to 14 days. The next visit is in a week to assess the condition and conduct a control X-ray of the lungs. Hospitalization of the patient in the absence of positive dynamics or the presence of complications.

Sample answer to problem 5:

1. IHD: Angina pectoris III FC. CHF stage I II FC.

2. The diagnosis of "IHD: FC III angina pectoris" was made on the basis of: the nature of the pain compressive, the localization of pain - behind the sternum, irradiation - to the left shoulder, the conditions for the occurrence of pain - connection with physical activity (pain occurs when walking up to 500 m, sometimes at rest - this is typical for FC III angina), pain relief with Nitroglycerin - within 2-3 minutes. He has been experiencing pain in the heart for 5 years, and for the last six months there has been a decrease in exercise tolerance, therefore, angina pectoris is stable. Diagnosis of stage I CHF. FC II" was assigned on the basis that symptoms of CHF (shortness of breath, palpitations) appear with moderate physical activity; at rest, hemodynamics are not impaired. 3. Age: men over 45 years old, women over 55 years old or with early menopause; smoking; arterial hypertension: blood pressure >140/90 mm Hg. Art. or continuous use of antihypertensive drugs; diabetes mellitus type II: fasting blood glucose more than 6.0 mmol/l; abdominal obesity: waist circumference in men >94 cm, in women >80 cm; familial hyperlipidemia according to medical history: type IIa, IIb, or III; chronic kidney disease: chronic renal failure with a decrease in GFR < 60 ml/min or glomerulonephritis, tubulointerstitial nephritis, pyelonephritis.

4. Non-drug treatment of coronary artery disease: impact on risk factors - low-cholesterol diet, smoking cessation, sufficient physical activity. Pharmacotherapy: Nitroglycerin - to relieve an attack of angina + 1) drugs that improve quality of life: antianginal therapy: a) first-line drugs: β-blockers, slow calcium channel blockers; b) second-line drugs: long-acting nitrates (Kardiket 20 mg 2 times a day, Monocinqueretard 50 mg 1 time a day), If channel blockers (Coraxan 5 mg 2 times a day), potassium channel activators (Nicorandil 10-20 mg 3 times a day), cytoprotectors (Trimetazidine 7 mg 2 times a day), slow sodium current blockers (Ranolazine 5000 mg 2 times a day); 2) drugs that improve the prognosis of the disease: antiplatelet agents (Acetylsalicylic acid 75-100 mg per day), lipid-lowering drugs (Rosuvastatin 10 mg once a day or Atorvastatin 20 mg once a day), ACE inhibitors (Perindopril - 8 mg once a day day).

5. This patient has indications for surgical treatment. This is evidenced by coronary angiography data: stenosis in the third left coronary artery - 80%, in the third circumflex artery - 80%. For one- and two-vessel lesions with normal left ventricular ejection fraction, percutaneous transluminal coronary angioplasty and stenting are indicated.

7. Interim certification

Test PC-8 PC-10. Interview

List of questions for intermediate certification

1. Deforming osteoarthritis. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostic criteria. Treatment. 2.

Rheumatoid arthritis. Pathogenesis. Classification. Clinical picture. Diagnostic criteria. Treatment.

- 3. Gout. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostic criteria. Treatment.
- 4. Chronic gastritis. Etiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.

5. Peptic ulcer of the stomach and duodenum. Etiopathogenesis. Clinic. Diagnostics. Complications.

6. Treatment of peptic ulcer of the stomach and duodenum. Mode. Diet. Medications and physiotherapeutic methods. Prevention.

7. Chronic pancreatitis. Etiology. Pathogenesis. Clinic. Laboratory-

instrumental diagnostic criteria. Treatment. 8.

Functional bowel diseases. Definition, classification.

Clinic, differential diagnosis with inflammatory bowel diseases. 9.

Ulcerative colitis. Etiology. Pathogenesis. Clinical features. Diagnostic criteria. Complications. Treatment.

10. Crohn's disease. Clinic. Diagnostics. Complications. Treatment.

11. Glomerulonephritis. Etiopathogenesis. Clinic. Diagnostics. Treatment.

12. Acute glomerulonephritis. Etiology. Pathogenesis. Clinical and diagnostic features. Outcomes. Complications. 13. Chronic glomerulonephritis. Etiology. Pathogenesis. Clinical picture.

Diagnostic methods. Outcomes. Complications.

14. Treatment and prevention of chronic glomerulonephritis.

15. Treatment of acute glomerulonephritis, emergency care for acute renal failure.

16. Chronic kidney disease. Definition of the concept. Etiology. Pathogenesis.

Classification. Laboratory and instrumental criteria for diagnosis.

17. Chronic renal failure. Treatment. Indications for the use of hemodialysis, peritoneal dialysis, kidney transplantation. Prevention.

18. Anemia. Classification. Clinical criteria. Picture of blood and sternal puncture.

19. Anemia. Clinical criteria for diagnosis. Laboratory diagnostics.

20. Iron deficiency anemia. Etiology. Pathogenesis. Kinika. Hematological characteristics.

21. Treatment of iron deficiency anemia.

22. Acute leukemia. Clinical and hematological characteristics. Complications.

23. Acute lymphoblastic leukemia. Clinical criteria for diagnosis. Hematological characteristics. Complications.

24. Treatment of acute leukemia. Medical examination and rehabilitation.

25. Acute myeloblastic leukemia. Clinic. Hematological characteristics. Complications.

26. Chronic myeloid leukemia. Clinic. Hematological characteristics. Treatment. Medical examination and rehabilitation.

27. Chronic lymphocytic leukemia. Clinic. Hematological characteristics.

Complications. Treatment. Medical examination and rehabilitation.

Exam

PC-8 PC-10. Interview

List of questions for intermediate certification

- 1. The procedure for providing medical care to the adult population in the field of "therapy" Order of the Ministry of Health of Russia dated November 15, 2012 No. 923n.
- 2. Atherosclerosis. Epidemiology. Clinic. Laboratory and instrumental diagnostics. Treatment. Prevention.
- 3. Hypertension. Pathophysiological criteria. Classification. Clinic. Diagnostics. Complications.
- 4. General principles of therapy for hypertension. Classification of antihypertensive drugs. Primary and secondary prevention. Clinical examination.
- 5. Medication treatment sick hypertensive illness. Differentiated approach to the selection of antihypertensive therapy.
- 6. Hypertensive crises. Concept, classification, emergency therapy.

7. Symptomatic arterial hypertension. Classification. Differential diagnosis. Treatment.

- 8. IHD. Risk factors. Classification. Prevention.
- 9. IHD. Instrumental diagnostic methods. Load tests.
- 10. Clinical variants of angina pectoris. Characteristics of functional classes of stable angina pectoris. Treatment.
- 11. Unstable angina. Classification of clinical forms. Diagnostic criteria. Treatment.

- 12. Acute coronary syndrome. Definition. Etiopathogenesis. Diagnostics. General principles of management of patients with ACS.
- 13. Principles of non-drug and drug therapy for angina pectoris.

14. Myocardial infarction. Epidemiology. Pathogenesis. Clinical forms. Differential diagnosis.

- 15. Clinical variants of the onset of myocardial infarction. Pathogenesis of the main clinical syndromes. ECG criteria for acute myocardial infarction.
- 16. Acute myocardial infarction. Laboratory and instrumental diagnostics.
- 17. Principles of treatment of uncomplicated acute myocardial infarction.

18. Late complications of myocardial infarction. Clinical symptoms and diagnostic methods.

- 19. Treatment of early complications of myocardial infarction (acute left ventricular failure, cardiogenic shock).
- 20. Cardiogenic shock. Classification. Clinic. Diagnostics. Severity criteria. Providing emergency assistance.
- 21. Classification of heart rhythm disturbances. Features of clinical manifestations. Principles for diagnosing cardiac arrhythmias.
- 22. Conduction disorders (blockades). Classification, pathogenesis. Features of clinical manifestations. Diagnostic principles.
- 23. Emergency care for various rhythm and conduction disorders. Indications for surgical treatment methods.
- 24. Myocarditis. Etiology. Pathogenesis. Classification. Clinic Diagnostics. Treatment.

25. Cardiomyopathies. Classification. Clinic, diagnosis and treatment of dilated cardiomyopathy.

- 26.The procedure for providing medical care to patients with cardiovascular diseases. Order of the Ministry of Health of Russia dated November 15, 2012 No. 918n
- 27. Mitral valve insufficiency. Etiology. Pathophysiology of hemodynamic disorders. Clinic. Diagnostics. Indications for surgical treatment.
- 28. Aortic valve insufficiency. Etiology, hemodynamic features, clinical picture. Diagnostics. Forecast. Treatment. Indications for surgical treatment.
- 29. Mitral stenosis. Etiology. Pathophysiology of hemodynamic disorders. Clinic. Diagnostics. Complications. Indications for surgical treatment.
- 30. Stenosis of the aortic mouth. Etiology. Pathophysiology of hemodynamic disorders. Clinic. Diagnostics. Indications for surgical treatment.
- 31. Mitral valve prolapse. Causes. Hemodynamic disorders. Diagnostics.
- 32. General principles of treatment of acute rheumatic fever. Primary and secondary prevention. Clinical examination.
- 33. Acute rheumatic fever. Diagnostic criteria. Clinical course options. Signs of process activity.
- 34. Chronic heart failure. Reasons for development. Pathogenesis. Diagnostic criteria. Classification.
- 35. Chronic heart failure. Treatment. Prevention of exacerbations.
- **36.**Standard of specialized medical care for heart failure dated December 24, 2012 No. 1554n.
- 37. Deforming osteoarthritis. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostic criteria. Treatment.
- 38. Rheumatoid arthritis. Pathogenesis. Classification. Clinical picture. Diagnostic criteria. Treatment.

39. Gout. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostic criteria. Treatment.

- 40.Standard of specialized medical care for primary coxarthrosis; rheumatoid arthritis, gout with damage to the hip joints; osteonecrosis and cysts of the femoral head dated December 20, 2012 No. 1132n.
- 41. Pneumonia. Definition. Etiology, pathogenesis, clinical and morphological characteristics of pneumonia.
- 42. Main clinical syndromes of pneumonia, variants of course (acute, protracted). Diagnostic criteria for pneumonia.
- 43. Principles of antibacterial therapy for pneumonia and the choice of antibiotic depending on the expected etiology of pneumonia. Symptomatic treatment of pneumonia.
- 44. Outcomes of pneumonia. Recovery criteria, prognosis. Clinical examination. Primary and secondary prevention.Standard of specialized medical care for patients with moderate pneumonia dated December 29, 2012 No. 1658n
- 45. Bronchial asthma. Definition, etiology and pathogenesis. The role of endogenous, exogenous, professional factors.
- 46. Features of bronchial obstruction syndrome in bronchial asthma (reversibility of bronchial obstruction). Diagnostic criteria for bronchial asthma (respiratory function test value).
- 47. Classification of bronchial asthma. Severity of the course, complications.
- 48. Principles of treatment of persistent bronchial asthma. Prevention. "Asthmatic School"
- 49. Exacerbation (attack) of bronchial asthma, definition, diagnosis and treatment.
- 50. Asthmatic status. Definition, diagnostic criteria and treatment.
- 51. Chronic obstructive pulmonary disease. Definition. Etiology, pathogenesis of COPD. The importance of risk factors.
- 52. Main clinical syndromes of chronic obstructive pulmonary disease.
- 53. Classification of chronic obstructive pulmonary disease. Clinical picture depending on severity, risk groups A, B, C, D.
- 54. Principles of treatment of stable chronic obstructive pulmonary disease. Primary and secondary prevention of COPD.
- 55. Treatment of chronic obstructive pulmonary disease in the acute phase.
- 56. Chronic gastritis. Etiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
- 57. Peptic ulcer of the stomach and duodenum. Etiopathogenesis. Clinic. Diagnostics. Complications.
- 58. Treatment of gastric and duodenal ulcers. Mode. Diet. Medications and physiotherapeutic methods. Prevention.
- 59. Chronic pancreatitis. Etiology. Pathogenesis. Clinic. Laboratory and instrumental criteria for diagnosis. Treatment.
- 60. Functional bowel diseases. Definition, classification. Clinic, differential diagnosis with inflammatory bowel diseases.
- 61. Ulcerative colitis. Etiology. Pathogenesis. Clinical features. Diagnostic criteria. Complications. Treatment.
- 62. Crohn's disease. Clinic. Diagnostics. Complications. Treatment.
- 63. Glomerulonephritis. Etiopathogenesis. Clinic. Diagnostics. Treatment.
- 64. Acute glomerulonephritis. Etiology. Pathogenesis. Clinical and diagnostic features. Outcomes. Complications.
- 65. Chronic glomerulonephritis. Etiology. Pathogenesis. Clinical picture. Diagnostic methods. Outcomes. Complications.
- 66. Treatment and prevention of chronic glomerulonephritis.
- 67. Treatment of acute glomerulonephritis, emergency care for acute renal failure.
- 68. Chronic kidney disease. Definition of the concept. Etiology. Pathogenesis. Classification. Laboratory and instrumental criteria for diagnosis.

- 69. Chronic renal failure. Treatment. Indications for the use of hemodialysis, peritoneal dialysis, kidney transplantation. Prevention.
- 70. Anemia. Classification. Clinical criteria. Picture of blood and sternal puncture.
- 71. Anemia. Clinical criteria for diagnosis. Laboratory diagnostics.

72. Iron deficiency anemia. Etiology. Pathogenesis. Kinika. Hematological characteristics.

- 73. Treatment of iron deficiency anemia.
- 74. Acute leukemia. Clinical and hematological characteristics. Complications.
- 75. Acute lymphoblastic leukemia. Clinical criteria for diagnosis. Hematological characteristics. Complications.
- 76. Treatment of acute leukemia. Medical examination and rehabilitation.
- 77. Acute myeloblastic leukemia. Clinic. Hematological characteristics.
- Complications.
- 78. Chronic myeloid leukemia. Clinic. Hematological characteristics. Treatment. Medical examination and rehabilitation.
- 79. Chronic lymphocytic leukemia. Clinic. Hematological characteristics. Complications. Treatment. Medical examination and rehabilitation.

8. Description of indicators and criteria for assessing competencies at the stages of their formation, description of assessment scales

| | Levels of competency development | | | |
|----------|--|---|---|--|
| | Threshold | Sufficient | High | |
| Criteria | Competence formed. Demonstrated threshold, satisfactory sustainable level practical skill | Competence formed. Demonstrated enough level independence, sustainable practical skill | Competence formed. Demonstrated high level independence, high adaptability practical skill | |

Competency assessment indicators and rating scales

| Grade | Grade | Rated "good" | Excellent rating |
|------------------------|------------------------------|-----------------------|-----------------------|
| "unsatisfactory" | "satisfactorily" | (passed) | (passed) or |
| (not accepted) or | (passed) or | or sufficient | high level |
| absence | satisfactory | level | development |
| formation | (threshold) | development | competencies |
| competencies | level of development | competencies | |
| | competencies | | |
| failure to | student | student | student |
| student | demonstrates | demonstrates | demonstrates |
| on one's own | independence in | independent | ability to |
| demonstrate | application of knowledge | application | full |
| knowledge when solving | skills and abilities to | knowledge, skills and | independence |
| assignments, lack | solve educational | skills at | in choosing a method |
| independence in | tasks in full | solving tasks, | solutions |
| application of skills. | According to | similar | non-standard |
| Absence | sample given | samples that | assignments within |
| confirmation | teacher, by | confirms | disciplines with |
| availability | tasks, solution | Availability | using |
| formation | of which there were | formed | knowledge, skills and |
| competencies | shown | competencies for | skills, |
| indicates | teacher, | higher | received as in |
| negative | it should be considered that | level. Availability | development progress |
| development results | competence | such competence | given |
| academic discipline | formed on | on sufficient | disciplines and |
| | satisfactory | level | adjacent |
| | level. | indicates | disciplines |
| | | sustainable | should be considered |
| | | fixed | competence |
| | | practical | formed |
| | | skill | at a high level. |

Evaluation criteria for the test

| | Descriptors | | | |
|--------------|---|---|---|--|
| Mark | strength of knowledge | ability to explain the essence of phenomena, processes, do conclusions | logic and subsequence _{answer} | |
| passed | solid knowledge of the basic processes of the studied subject area, the answer differs in depth and completeness of the topic; possession terminological apparatus | ability to explain essence, phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples | logic and subsequence ^{answer} | |
| not accepted | insufficient knowledge subject matter being studied areas, unsatisfactory | weak analysis skills ^{phenomena,} processes, events, inability to give | lack of logic and consistency ^{answer} | |

| disclosure of the topic; weak knowledge of basic issues of theory, Allowed serious mistakes in | reasoned answers given the examples are wrong | |
|---|---|--|
| content of the answer | | |

Criteria for evaluating forms of control:

Interviews:

| | Descriptors | | | |
|-----------------------------------|---|--|---|--|
| Mark | strength of knowledge | ability to explain the essence of phenomena, processes, do conclusions | logic and subsequence _{answer} | |
| Great | strength of knowledge, knowledge of basic processes subject matter being studied areas, the answer differs in depth and completeness disclosure of the topic; possession terminological apparatus; logic and consistency answer | high skill explain the essence phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples | high logic and subsequence ^{answer} | |
| Fine | solid knowledge of the basic processes of the studied subject area, differs in depth and completeness of the topic; possession terminological apparatus; free mastery of monologue speech, but one or two inaccuracies in the answer are allowed | ability to explain essence, phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples; however one or two inaccuracies in the answer are allowed | logic and subsequence answer | |
| satisfactory ^{really} | satisfactory process knowledge subject matter being studied areas, answer, different insufficient depth and completeness of the topic; knowledge of basic questions theory. Allowed several errors in content of the answer | satisfactory ability to give reasoned answers and provide examples; satisfactorily formed analysis skills phenomena, processes. Several are allowed errors in content answer | satisfactory logic and subsequence ^{answer} | |
| will not satisfy really | poor knowledge of the subject area being studied, shallow opening Topics; poor knowledge basic theoretical issues, poor analysis skills phenomena, processes. Serious errors in content | inability to give reasoned ^{answers} | lack of logic and consistency ^{answer} | |

Test control grading scale:

| percentage of correct answers | Marks |
|-------------------------------|----------------|
| 91-100 | Great |
| 81-90 | Fine |
| 71-80 | satisfactorily |
| Less than 71 | unsatisfactory |

Situational tasks:

| | Descriptors | | | |
|-----------------------------------|---|--|---|--|
| Mark | understanding Problems | analysis situations | skills solutions situations | professional thinking |
| Great | ^{complete} implication problems. All requirements, submitted to adania, completed | high benefit analyze situation, draw conclusions | high benefit select method solutions problems faithful solution skills situation | high level professional thoughts |
| Fine | complete implication problems. All requirements, submitted to adania, completed | benefit analyze situation, draw conclusions | benefit select method solutions problems faithful solution skills situation | residual level professional thoughts. drops one or two precision in the answer |
| satisfactory ^{really} | astastic implication problems. majority requirements declared to adania, completed | satisfactory Naya benefit analyze situation, draw conclusions | satisfactory skills solutions situation | residual level professional thoughts. falls more a bunch of inaccuracies in reply |
| will not satisfy really | misunderstanding problems. legs requirements, submitted to I hope not completed. No Tveta. Did not have experiments to solve hello | izkaya benefit analyze situation | insufficient solution skills situation | missing |

CHECKLIST FOR EXAMINATION PROCEDURE

(checklist for the second (commission) retake in case if the study of the discipline ends with a test, a differentiated test, exam)

| No. | Examination event* | Points |
|---|--------------------|--------|
| 1 | Interview | 100 |
| Total maximum number of points for the examination100 | | |
| proc | edure: | |

*Specific types, stages of the examination procedure, points for each stage are indicated, based on a maximum of 100 points in total for the examination procedure.