

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

FACULTY OF TREATMENT AND PREVENTION

Evaluation materials on practice

"General medical practice"

(appendix to the work program of practice)

Specialty 05/31/01 General Medicine

1. List of competencies formed by practice

professional (PC):

Code and name of professional competence
PC-2 Examination of the patient to establish a diagnosis
PC-6 Maintaining medical records and organizing the activities of nursing staff

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

Name competencies	Types of assessment materials	number of tasks for 1 competency
PC-2 PK-6	Open type tasks: Control questions Situational tasks Skills	30 with sample answers

PC-2

Control questions:

1. List the indicators that are assessed during routine examination patients with hypertension at the outpatient stage of medical care.

Sample answer: hemoglobin and/or hematocrit; glucose and glycosylated hemoglobin; blood lipids: total cholesterol, LDL cholesterol, HDL cholesterol, triglycerides; potassium, sodium; uric acid; creatinine and estimated GFR; liver function indicators; urine analysis: microscopy of sediment, qualitative assessment of proteinuria with a test strip, albumin-creatinine ratio in a single portion of urine (optimal); ECG in 12 leads.

2. Specify basic screening for target organ damage, which, according to clinical recommendations, should be carried out in all patients with hypertension.

*Sample answer:*To identify cardiac damage, it is advisable for all patients record an electrocardiogram (ECG) with the calculation of LV hypertrophy indices. To identify kidney damage, the albumin-creatinine ratio in a single urine sample is assessed in everyone; creatinine and estimated GFR. To identify vascular damage, it is recommended to perform fundoscopy and calculate pulse pressure (PP) in the elderly.

3. List the necessary laboratory diagnostic tests for adults, recommended for patients diagnosed with bronchial asthma.

*Sample answer:*It is recommended to conduct a detailed general (clinical) blood tests for all patients during initial diagnosis and over time to assess eosinophilic inflammation; Study of the level of total immunoglobulin E in the blood during primary diagnosis and during follow-up; It is recommended to determine the level of specific immunoglobulins E in the blood (a study of the level of antibodies to antigens of plant, animal and chemical origin in the blood) or skin tests (skin tests of the reaction to allergens) during primary diagnosis and during follow-up.

4. List diagnostic tests for severe community-acquired pneumonia (PVP), aimed at confirming the diagnosis of pneumonia, assessing the prognosis, identifying exacerbation or decompensation of concomitant diseases, determining indications for hospitalization in the ICU.

*Sample answer:*to all patients with TVP, in addition to collecting anamnesis and routine physical examination is recommended:

- Survey radiography of the chest organs in the anterior direct and lateral projections [B].

- Pulse oximetry, and when $SpO_2 < 90\%$ - study of arterial blood gases (PO_2 , PCO_2 , pH, bicarbonates) [B].

- Detailed general blood test with determination of the level of red blood cells, hematocrit, leukocytes, platelets, leukocyte formula [B].

- Biochemical blood test (urea, creatinine, electrolytes, liver enzymes, bilirubin, glucose, albumin) [C].

- ECG in standard leads [D].

- To assess the prognosis for TVP, it is advisable to use the scale CURB/CRB-65 or pneumonia severity index PSI/PORT scale; the prognosis is unfavorable when

presence of > 3 points on the CURB/CRB-65 scale or belonging to risk class V according to the PSI pneumonia severity index/PORT scale [B].

Situational tasks

Task 1.

In a 48-year-old patient, against the background of exacerbation of bronchial asthma with the presence of a catheter in the subclavian vein for infusion therapy, within 2 weeks there was an increase in temperature to 38 - 39°C with chills. Treatment with ceftriaxone is ineffective. Against the background of fever, an episode of cerebral circulation disturbance was observed, which regressed within 4 days. During the examination: Hb - 95 g/l, ESR - 56 mm/hour; protein in urine 1.65%, red blood cells - 4 - 5 in p/zr; Heart rate 100 per 1 min, number of respirations 28 per 1 min. Hemorrhagic rashes on the skin of the lower extremities. Make a diagnosis and explain your answer. Which diagnostic method should be considered the most informative in this situation?

Sample answer: Fever, in combination with neurological disorders in a patient with a risk factor (the presence of an intravenous catheter), makes us primarily assume the development of infective endocarditis (IE). The incidence of IE in patients with intravenous catheters is 0.8 - 0.87%. Features of IE include vascular damage to many organs and systems (skin, kidneys, myocardium), which creates a clinical picture of widespread vasculitis. Against the background of vasculitis, microthrombosis occurs with laboratory signs of DIC syndrome. The most informative method for diagnosing IE is echocardiography, which allows visualization of vegetations measuring 2 - 3 mm.

Task 2.

Patient N., 49 years old, has been suffering from type 2 diabetes mellitus for 10 years. Works as a tractor driver-mechanic. She has been observed by an endocrinologist for three years. Receives 2 tablets of maninil. He came to the appointment with complaints of pain in the calf muscles, cold feet, pronounced paresthesia and a feeling of numbness in the fingers and toes, and decreased vision. On objective examination: the skin is of normal color. Pulsation in the limbs is preserved. The pulse is rhythmic, good filling, heart rate 76 per minute, blood pressure 125/80 mm Hg. Heart sounds are rhythmic and muffled. In the lungs, breathing is vesicular. The abdomen is soft and painless. The liver is at the edge of the costal arch.

Laboratory data: CBC: red blood cells - $3.45 \times 10^{12}/l$; HB - 128g/l; cp-0.85; leukocytes $7.4 \times 10^9/l$; ESR-8mm/h. Blood biochemistry: cholesterol - 7.6 mmol/l; total protein - 74 g/l; AST - 0.56 mmol/l; ALT - 0.34 mmol/l. Blood sugar: on an empty stomach from 8.6 - 10.4 mmol/l; Urine for sugar from the daily amount: volume 1.5 l, sugar 10 g/l, no acetone. Urinalysis: yellow color, acidic reaction, specific gravity 1015, few leukocytes in the field of view; no protein; no acetone.

Infrared thermography: thermal response from hands is symmetrical, cold distal 2/3 of both feet, asymmetry of fingers and dorsum of feet. Impaired peripheral circulation of the type of diabetic angiopathy with probable intravascular damage to the iliac vessels. Neurologist's conclusion: Reflexes in the arms and legs are reduced. There are no sensory disorders. Coordination and statics are not impaired. There is no evidence for polyneuritis. Oculist's conclusion: VIS OD - 0.9 VIS OS - 1.0 The optic discs are pink, the boundaries are clear. The walls of the arteries are compacted, the vascular pattern is slightly changed.

What complications of diabetes can you think about? What additional examination methods should be prescribed to clarify the diagnosis?

*Sample answer:*The patient develops diabetic angiopathy of the lower vessels limbs and diabetic retinopathy, as evidenced by characteristic complaints. It is necessary to perform rheovasography of the lower extremities. The patient should be consulted by a surgeon and subsequently be examined annually by a neurologist and an ophthalmologist 2 times a year.

Task 3.

Patient V., 23 years old, at 20-22 weeks of pregnancy, developed dry mouth, moderate thirst, and during control weighings at the gynecologist she did not gain enough weight. The consulting physician drew attention to the fasting blood sugar level - 9.0 mmol and glucosuria up to 5 g/l and recommended further examination.

There are three pregnancies in the anamnesis, two of which ended in miscarriages, one birth ended in the birth of a large fetus weighing 4 kg. 500 g. Heredity for diabetes is favorable.

Upon examination, the patient had satisfactory nutrition, height 162 cm, body weight 60 kg, no smell of acetone from the mouth. The thyroid gland on palpation is elastic, painless, diffusely enlarged to 1 degree. The skin is dark, with somewhat high humidity. Vesicular breathing in the lungs. Heart sounds are rhythmic, clear, sonorous. HELL

130/80 mmHg The tongue is clean and moist. The abdomen is increased in volume due to the uterus. The liver and spleen are not palpable. There is no peripheral edema.

Examination: UAC: Er. - $3.7 \times 10^{12}/l$; HB - 127g/l; cp-0.8; L. $7.6 \times 10^9/l$; b.-1%; e.-1%; nf - 6%; With. -48%; lf-36%; mon. -9%; ESR-17mm/h. Blood sugar: fasting at 8 o'clock - 10.2 mmol/l; 2 hours after a meal at 10:00-12.8 mmol/l; 13h-10.0 mmol/l; Biochemical blood test: total protein - 72 g/l; cholesterol - 7.6 mmol/l; B-lipoproteins - 6.8 g/l; prothrombin index 98%; AST - 0.58 mmol/l; ALT - 0.27 mmol/l. Diuresis 2l800ml. Urine for sugar from a daily amount of 10 g/l; Urinalysis: yellow color, acidic reaction, specific gravity 1027, few leukocytes in the field of view; protein - traces; acetone(+).

ECG - sinus rhythm with heart rate 98 per minute, otherwise without any features. The gynecologist's conclusion: the abdomen is soft, painless, enlarged due to the pregnant uterus. The abdominal circumference is 80 cm, the height of the uterine fundus is 21 cm. The fetal movement is felt well. The fetal heartbeat is muffled and rhythmic. There is no swelling. PV: the vagina is capacious, has given birth, the cervix is clean, milky discharge, the external os is closed. The uterus is enlarged up to 22 weeks of pregnancy, in normal tone.

What conditions of impaired carbohydrate tolerance can a woman have during pregnancy? Does the patient have a carbohydrate metabolism disorder, and if so, in what form? Formulate the correct clinical diagnosis. What additional methods are appropriate to clarify the diagnosis in this patient?

Sample answer: During pregnancy, the following options may occur: Impaired carbohydrate tolerance: renal glucosuria, gestational diabetes, decompensation of diabetes mellitus. A burdened obstetric history, clinical signs of decompensation of carbohydrate metabolism - thirst, poor weight gain, laboratory signs - fasting glycemia 9.0 mmol/l and glucosuria up to 5 g/l allow us to make a diagnosis: Mild diabetes mellitus in pregnant women. severity in the stage of decompensation. Additional examination methods: Glycemic profile during the day, assessment of kidney function tests. consultations with a neurologist, ophthalmologist. Instrumental methods for diagnosing microangiopathies: infrared thermography of extremities, etc.

Task 4.

Patient Sh., 56 years old, a driver, consulted a local physician with complaints of coughing attacks with suffocation in the early morning hours over the past week. During the day, a cough periodically bothers you, the sputum comes out poorly, and is yellowish in color; except

In addition, he notes discomfort when breathing during the period of exposure to strong odors of paint, perfume, car exhaust fumes, weakness, sweating, and low-grade fever.

From the anamnesis it is known that he has been suffering from chronic obstructive bronchitis for 7 years, and has suffered acute pneumonia twice in the last three years. Breathing discomfort upon contact with pollutants and gases has begun to occur over the past five years. Smoker for 20 years, hasn't smoked in recent years. Heredity is burdened with neurodermatitis, the father suffers, and the children have food allergies.

Upon objective examination: the condition is satisfactory, the skin is clean, of normal color; acrocyanosis, lymph nodes are not enlarged. The chest is emphysematous, percussion sounds with a boxy tint, breathing is weakened, dry whistling scattered rales in a small amount, respiratory rate -20 per minute. The pulse is rhythmic, satisfactory filling, increased to 90 per minute, blood pressure 140/90 mm Hg. Heart sounds are muffled, there are no murmurs. The tongue is clean and moist. The abdomen is painless and soft. The liver is at the edge of the costal arch. There is no peripheral edema.

Research results: UAC: NV - 14.8%, erythr. - $5.2 \times 10^{12}/l$, CP - 0.98; L- $7.6 \times 10^9/l$, eoz-8%; s-72%, l-20%, m-5%, ESR 20 mm/h. Biochemical blood test: cholesterol - 7.0 mmol/l; B-lipoproteins - 80 units; CRP - 8 mg/l, fibrinogen 13.11 mmol/l; total protein 77 g/l. Sputum analysis: gray mucosa, leukocytes up to 10 per sputum; Charcot-Leyden crystals, mycobacterium tuberculosis were not detected, microscopy of sputum identified Neisseria bacteria. Urinalysis: specific gravity 1015, acidic reaction, protein (-), sugar (-), leukocytes units. in p.z.

Spirography: VC-4.42L, VC-5.28L (77%); FEV-2.966l, Tifno test - 64%. Fluorography of the chest: The pulmonary fields are without focal and infiltrative changes, emphysematous, there is an increased pulmonary pattern in the lower lobes of both lungs, in the right sinus commissure.

Make a plan for examining the patient (laboratory, functional, instrumental studies, their sequence). Formulate a clinical diagnosis.

Reference answer: Plan examinations patient: ECG, ECHO KG, bronchodilator test, study of the level of total immunoglobulin E in the blood.

Bronchial asthma, infectious-allergic variant, moderate course. COPD, emphysematous type, exacerbation. Emphysema. DN -II Art.

Task 5.

Patient B., 74 years old, complains of general weakness, dizziness, episodes of short-term loss of consciousness that occur without previous symptoms, sudden interruptions in heart function, attacks of compressive pain in the chest without irradiation, occurring when walking a distance of more than 150 m and passing at rest. Attacks of compressive pain behind the sternum under significant loads (fast walking over distances of more than 1 km) began to bother me about 3 years ago and self-limited with rest. He was not examined or treated. Two months ago, infrequent interruptions in the work of the heart began to bother me, and therefore I occasionally took anaprilin with little effect; in addition, he noted the appearance of general weakness, dizziness, lost consciousness three times (the first time after taking 20 mg of anaprilin, then for no apparent reason), which was accompanied by minor injuries (abrasions and bruises). Chest pain began to occur with significantly less stress than before.

On examination: the condition is moderate. The constitution is hypersthenic. There is no swelling. RR 18 per minute, breathing with a hard tint in the basal regions, no wheezing. Heart: left border along the left midclavicular line, right border along the right edge of the sternum, upper border along the lower edge of the third rib. Heart sounds are somewhat muffled, there are no murmurs. Heart rate is 46 beats per minute, against the background of the correct rhythm, premature contractions are heard (up to 6 per minute), blood pressure is 130 and 80 mmHg. The abdomen is soft, painless in all parts, the liver is +1 cm along the right midclavicular line.

In an. blood Hb 13.7 g%, erythr. 4.2 million, leuk. 7.5 thousand, blood clot. 243 thousand, ESR 11 mm/hour, rev. protein 6.9 g%, alb. 4.2 g%, creatinine 1.2 mg%, urea nitrogen 18 mg%, total bilirubin 0.8 mg%, triglycerides 169 mg/dL, total cholesterol 328 mg/dL, LDL 197 mg/dL, glucose 113 mg%. In an. urine pH 6, sp. weight 1016, protein, sugar, no acetone, erythritol. 0-01 in sight, lake. single in the device.

Daily Holter ECG monitoring: sinus rhythm, daytime heart rate 42-117/min. (average 58/min.), heart rate at night 35-64/min. (average 50/min.). Ventricular polytopic extrasystole - total 2130, incl. 34 verses, 11 episodes of bigeminy; supraventricular extrasystole - 847 in total. Transient prolongation of the PQ interval to a maximum of 0.28 s., 13 episodes of AV block of the second degree, type 1 (Samoilov-Wenckebach periods), from 16 to 18 hours - repeated episodes of AV block 2:1 and 3:1 with a maximum pause of 3.2 s. ST-T analysis: ST segment depression up to 0.2 mV in the left precordial leads, which was accompanied by a note of pain.

Formulate and justify the clinical diagnosis for this patient. What additional studies and for what purpose should this patient be additionally performed as planned?

Sample answer: Presumable diagnosis: IHD: exertional angina III FC, atherosclerotic cardiosclerosis with rhythm and conduction disturbances: AV block of I-II degree (with episodes 2:1 and 3:1), ventricular and supraventricular extrasystole. Morgagni-Adams-Stokes syndrome. Atherosclerosis of the aorta, coronary and cerebral arteries. To determine further treatment tactics, the patient is shown coronary angiography; in addition, it is necessary to determine the lipid spectrum of the blood, conduct general and biochemical blood tests (to identify other metabolic disorders), a general urinalysis, ECHO-CG, repeated Holter monitoring after implantation of the pacemaker, and ultrasound scanning of cerebral vessels.

Task 6.

A 23-year-old patient, a driver by profession, consulted a therapist with complaints of "hungry" pain in the epigastric region 1.5 hours after eating, night pain that forced him to wake up and decreased after drinking soda or milk. In addition, there is constant heartburn, nausea, and vomiting at the height of pain with acidic gastric contents, which brings relief. He considers himself sick since the age of 18, when he periodically began to experience heartburn, especially after eating sour fruits and vegetables. A year later, in the spring, mild pain appeared in the epigastric region, occurring before lunch and disappearing after eating. The pain lasted 2-3 weeks and then disappeared on its own. Starting from the age of 20, pain of a similar nature occurred annually in the spring and autumn, then night pain joined, forcing the patient to wake up in the middle of the night and drink milk or take soda.

An outpatient examination carried out earlier revealed increased acidity levels; fluoroscopy of the stomach revealed signs of gastritis; an ulcerative "niche" was not identified. He was treated as an outpatient, tried to follow a diet, and for pain he took ranitidine 30 mg per day, but after the pain decreased, he stopped taking the drug. Periods of exacerbation, judging by the duration of the pain, took 2-3 weeks. The real exacerbation has been since the beginning of March and has lasted for 3 weeks and is accompanied by the above complaints, as well as vomiting of acidic contents at the height of pain, which brings relief. There was no blood in the vomit, and no melena was observed. During the exacerbation, I lost 5 kg due to food restrictions (I was afraid to eat because of the pain). Taking almagel did not bring relief.

Objectively: the condition is satisfactory. Subcutaneous fat tissue is developed satisfactorily. Breathing is vesicular, no wheezing. Heart sounds are clear, rhythmic, blood pressure is 110 and 70 mmHg, pulse is 64 beats. per minute rhythmic, satisfactory filling.

The abdomen evenly participates in the act of breathing; on palpation there is moderate local muscle tension in the epigastric region, pain in the pyloroduodenal zone, moderate diffuse pain in the epigastric region. The liver and spleen are not enlarged.

Blood test: red blood cells $-5.3 \times 10^{12}/l$, Hb-13.2 g%, leukocytes $-8 \times 10^9/l$, formula without features. Urease express method for Helicobacter pylori revealed infection of the mucous membrane (+++). During gastroduodenoscopy: the stomach contains a significant amount of fluid and mucus, the mucosa is hyperemic, the folds of the antral mucosa are hyperemic, tortuous, and pronounced bile reflux is observed. The duodenal bulb is deformed, a chronic ulcer is identified on the posterior wall, measuring 3 by 4 mm, its edges are raised and swollen.

Formulate a preliminary diagnosis. Draw up a plan for examining the patient, indicate what additional studies need to be carried out to make a diagnosis

Sample answer: preliminary diagnosis: Peptic ulcer Duodenum associated with Helicobacter pylory, exacerbation phase. Additional research methods: fecal occult blood analysis; pH measurements of gastric contents, ultrasound of the abdominal organs.

Task 7.

A 35-year-old patient consulted a physician with complaints of a periodic cough (more at night) with the release of a small amount of viscous mucous sputum, sometimes turning into an attack of suffocation (no more than 2 times a week), relieved by inhalation of salbutamol, and slight weakness. The patient considers himself to be about 5 years old when he began to notice nasal congestion, coughing attacks, often at night, and episodes of respiratory discomfort during physical activity. At the clinic, the condition was regarded as chronic bronchitis. In addition, over the last 5-6 years I began to notice intolerance to fatty and fried foods (dull aching pain in the right hypochondrium, nausea). Objectively: normosthenic build, vesicular, weakened breathing, a large number of dry wheezing sounds over the entire surface of the lungs. Heart sounds are rhythmic.

General blood test: Er - $4.0 \times 10^{12}/l$, Hb - 128 g/l, color. show - 0.89, L - $6.5 \times 10^9/l$, e. - 11, p. - 2, p. - 66, l. - 14, m. - 3, ESR - 14 mm/h. General analysis of sputum: light, viscous, 2-4 leukocytes in the field of view, no AFB detected. During the study of OVD: VC - 100% of N, FVC - 88%, FEV1 - 74%, MOS75 - 82%, MOS50 - 78%, MOS25 - 64% of N. After

taking 200 mcg of ventolin: VC - + 1% of N, FVC - + 8%, FEV1 - + 16%, MOS75 - + 12%, MOS50 - + 8%, MOS25 - + 24%.

What is your preliminary diagnosis? Determine the examination plan for the patient? Evaluate the data obtained from the FVD study. Evaluate spirometry and general blood test data.

Sample answer: Bronchial asthma, moderate course, exacerbation stage.

Examination plan: general blood and urine analysis, respiratory function test, obstruction reversibility test and bronchoconstrictor tests, chest x-ray, ECG, echocardiography. When conducting an FEV study, bronchial obstruction was revealed - a decrease in FEV1 to 74% of the required values, which indicates a moderate-severe course of the disease, an increase of + 16% indicates its reversible nature. In general, the blood test shows eosinophilia, which indicates the presence of atopy.

Task 8.

The patient, 52 years old, a worker, has been smoking a pack of cigarettes a day for about 35 years, drinks alcohol moderately, upon admission he complains of a cough with difficult-to-discharge mucopurulent sputum, shortness of breath with moderate physical exertion, weakness, low body temperature (37.4). He considers himself sick for several years, when he is old enough to notice an unproductive cough. Exacerbations 2-3 times a year, more often in the autumn-winter period and last 2-3 weeks, when the cough intensifies and the amount of sputum increases, sometimes low-grade fever occurs. In addition, for the last 5 years he has noted an increase in blood pressure to 170/90 mmHg, he was treated sporadically, and cannot indicate the names of the medications he is taking. On examination, the chest was expanded, percussion revealed a boxy sound, and upon auscultation, dry crepitations over the entire surface. RR 26/min, heart sounds slightly muffled, accent of the 2nd tone over the pulmonary artery, heart rate up to 90/min, blood pressure 160/80 mmHg. In the general blood test: Er - $5.2 \times 10^{12}/l$; Hb - 150 g/l; c.p. - 0.8; L - $7.5 \times 10^9/l$; e - 1; p - 6; s - 62; l - 27; m - 4; ESR - 1 mm/h. FVD: vital capacity - 94%, FVC - 91%, FEV1 - 57%, MOS75 - 72%, MOS50 - 48%, MOS25 - 44%. After taking 200 mcg of ventolin: VC - + 1% of N, FVC - + 4%, FEV1 - + 6%, MOS75 - + 12%, MOS50 - + 8%, MOS25 - + 12%.

Formulate a diagnosis. Interpret the obtained FVD data. Explain the feasibility of the test with Ventolin? Your plan for examining this patient.

Sample answer: COPD (chronic obstructive bronchitis, emphysema) in stage of exacerbation. Sop.: arterial hypertension stage II, degree 2, moderate risk.

When conducting an FEV study, bronchial obstruction was revealed: a decrease in FEV1 to 57% of the expected values, which, if this patient is suspected of having chronic obstructive bronchitis, corresponds to a moderate degree of severity. The bronchodilator test reveals the reversibility of bronchial obstruction.

Examination plan: chest x-ray, general sputum analysis, AFB, flora and sensitivity to antibiotics, FBS, ECHO CG.

Task 9.

A 28-year-old man consulted a local general practitioner with complaints of an increase in body temperature to 39.2 °C with chills, bleeding gums, the appearance of "bruises" on the skin for no apparent reason, and general weakness. Considers himself sick for 7 days, when the temperature increased, he took Paracetamol with a short-term effect. Weakness began to progressively increase, and bleeding began.

From the life history: he denies the presence of chronic diseases. Parents are healthy. Has a special secondary education and works as a technologist. Served in the army on a submarine.

Objectively: the condition is of moderate severity. Body temperature 37.5 °C. The skin is pale, with normal moisture. On the skin of the lower extremities - ecchymosis; petechiae on the skin of the shoulders, forearms; in the oral cavity there are single petechial elements. On auscultation, breathing is vesicular, respiratory rate is 19 per minute. Heart sounds are muffled, the rhythm is correct. Heart rate - 92 beats per minute. Blood pressure - 100/65 mm Hg. Art. The abdomen is soft and painless on palpation. The edge of the liver is palpated 1 cm below the edge of the costal arch, dimensions according to Kurlov are 16 × 10 × 9 cm. The spleen is palpated, elastic, painless, percussion dimensions 10 × 8 cm.

General blood test: erythrocytes - $2.3 \times 10^{12}/l$, HB - 78 g/l, platelets - $30 \times 10^9/l$, leukocytes - $28.9 \times 10^9/l$, blasts - 32%, myelocytes - 0%, young neutrophils - 0%, band neutrophils - 5%, segmented neutrophils - 38%, lymphocytes - 25%, ESR - 30.

What preliminary diagnosis can be made? What examinations need to be ordered to clarify the diagnosis?

Sample answer: Acute leukemia, debut. Hepatosplenomegaly. Anemia average degree of severity. Thrombocytopenia. Hemorrhagic syndrome.

The main studies to clarify the diagnosis are: general blood test (leukocytosis, presence of blasts, leukemic "failure", anemia, thrombocytopenia);

sternal puncture (20% or more blast cells in the myelogram); cytochemical study and immunophenotyping of blasts (determination of leukemia variant), cytogenetic study of bone marrow (determination of prognostically favorable and/or unfavorable cytogenetic defects); diagnostic lumbar puncture (to exclude neuroleukemia); Ultrasound of internal organs (to clarify the degree of leukemic infiltration of the liver and spleen).

Problem 10.

At an appointment with a local general practitioner in a clinic, a 61-year-old woman complains of the presence of painless tumor-like elastic formations on the side of the neck and in the axillary areas, as well as heaviness in the left hypochondrium when walking quickly, and increased sweating. The above complaints appeared about a year ago and gradually increased.

Objectively: general condition is satisfactory. The skin and visible mucous membranes are of normal color. Conglomerates of enlarged submandibular, cervical, axillary, inguinal lymph nodes are palpated; on palpation - elastic, painless, inactive, the skin over them is not changed, symmetrically enlarged - cervical and submandibular up to 2-3 cm, axillary up to 3-4 cm, inguinal up to 4 cm in diameter. In the lungs, breathing is vesicular, no wheezing is heard, respiratory rate is 18 per minute. Heart sounds are clear, heart rate is 78 beats per minute. Blood pressure - 120/80 mm Hg. Art. The abdomen is soft and painless. The edge of the liver does not protrude from under the edge of the costal arch. The spleen protrudes 2 cm from under the edge of the costal arch, the edge is elastic and painless.

Complete blood count: erythrocytes - $3.6 \times 10^{12}/l$, HB - 129 g/l, platelets - $200 \times 10^9/l$, leukocytes - $39 \times 10^9/l$, band neutrophils - 2%, segmented neutrophils - 2%, lymphocytes - 92%, monocytes - 4%, ESR - 30 mm/h, Botkin-Gumprecht shadows - 1-2 in the field of view.

What preliminary diagnosis can be made? What examinations need to be ordered to clarify the diagnosis?

Sample answer: Chronic lymphocytic leukemia, Stage II. Examination: biochemical blood tests. Sternal puncture (in the bone marrow puncture there is an increase in the number of lymphocytes of more than 30%), ultrasound of the abdominal organs (presence of splenomegaly, determine whether or not there is an increase in intra-abdominal and retroperitoneal lymph nodes). Chest X-ray (to determine if there is enlargement of the intrathoracic lymph nodes). Trephine biopsy, lymph node biopsy, bone marrow immunophenotyping (differential diagnosis with non-Hodgkin's lymphoma).

Problem 11.

Patient L. has been working as a teacher for 48 years and came to the clinic with complaints of pain in the metacarpophalangeal, proximal interphalangeal joints of the hands, wrist, shoulder, ankle joints, and metatarsophalangeal joints of the feet; weakness in the hands; morning stiffness until lunchtime; low-grade fever in the evenings, general weakness. From the anamnesis: he considers himself sick for about 3 months, when pain in the joints appeared. She did not seek medical help, was treated with non-steroidal anti-inflammatory ointments, without improvement. Over the past month, pain and swelling have appeared in the joints of the hands, feet, wrists and ankles, morning stiffness during the day, and low-grade body temperature. I lost 6 kg during my illness.

General condition is satisfactory. The skin is clean, cyanosis, and no edema. Peripheral lymph nodes are not enlarged. Breathing is vesicular, no wheezing. NPV – 18 per minute. Heart sounds are clear, the rhythm is correct. Heart rate – 78 beats per minute. Blood pressure - 120/70 mm Hg. Art. The abdomen is soft and painless. The liver is at the edge of the costal arch.

Local status: brushes are correct. II, III proximal interphalangeal joints and II, III metacarpophalangeal joints are painful and swollen. Pain in the wrist joints, shoulder joints. The grip of the right hand is 80%, the left hand is 70%. Assessment of well-being on a visual analogue scale (VAS) – 60 mm.

Examination.

Complete blood count: red blood cells – $3.5 \times 10^{12}/l$, hemoglobin – 131 g/l, leukocytes – $8.6 \times 10^9/l$, eosinophils - 1%, band neutrophils - 8%, segmented neutrophils - 55%, lymphocytes - 30%, monocytes - 6%, ESR - 54 mm/h.

Biochemical blood tests: glucose – 3.2 mmol/l, total bilirubin – 15 $\mu\text{mol/l}$, creatinine – 54 $\mu\text{mol/l}$; total protein - 76 g/l, albumin - 50%, globulins: α_1 – 6%, α_2 – 14%, β – 12%, γ – 17%, CRP – 17.2 mg, fibrinogen – 5.8 g/l, uric acid – 0.24 mmol/l (normal 0.16- 0.4 mmol/l).

Rheumatoid factor: ELISA - 62 IU/ml (normally up to 15 IU/ml). Antibodies to DNA are negative. ACCP >200 U/ml.

On x-rays of the hands and feet: the joint spaces are moderately narrowed at the level of the proximal joints of the hands. Single erosions are identified. The bone structure is changed due to epiphyseal osteoporosis at the level of the metacarpophalangeal joints, metatarsophalangeal joints, and single cyst-like lesions.

Guess the most likely diagnosis. Draw up and justify a plan for additional examination of the patient.

Sample answer: Seropositive rheumatoid arthritis, ACCP-positive, early stage, high degree of activity, erosive (radiographic stage 2), FC-2. The patient is recommended: chest x-ray (exclude lung damage), ultrasound examination of joints (synovitis, tenosynovitis) or MRI of joints (a more sensitive method for detecting synovitis at its onset rheumatoid arthritis than standard joint radiography).

Problem 12.

A 32-year-old man, when visiting a local general practitioner at a clinic, complains of loose stool mixed with blood up to 10 times a day, cramping pain in the lower abdomen before defecation, weight loss of 7 kg in 3 months.

From the anamnesis: blood in the stool and unformed stool have been bothering me for 3 months. The temperature did not rise. He denies contact with infectious patients and has not traveled outside the region. I smoked 1 pack of cigarettes a day for 10 years and stopped a year ago. Denies alcohol abuse or intravenous drug addiction. There are no relatives with gastrointestinal diseases. Works as a manager, no professional hazards.

Objectively: the condition is satisfactory. Temperature 36.7°C. The skin is pale and moist. Height – 175 cm, weight – 58 kg. There is vesicular breathing in the lungs, there are no adverse breath sounds. NPV – 18 per minute. On auscultation, the heart rhythm is correct, the tone ratio is normal, and there are no murmurs. Heart rate – 98 beats per minute. Blood pressure – 110/70 mm Hg. Art. (D=S). Upon examination, the abdomen is symmetrical and participates in the act of breathing. On palpation, it is soft and painful in the left flank and left iliac region. Liver according to Kurlov – 9×8×7 cm. Dimensions of the spleen – 6×4 cm. Urination is free and painless.

Complete blood count: erythrocytes – $2.7 \times 10^{12}/l$, Hb – 108 g/l, color index – 0.6, platelets – $270 \times 10^9/l$, leukocytes – $7.0 \times 10^9/l$, eosinophils – 1% , band neutrophils – 2%, segmented neutrophils – 65%, lymphocytes – 27%, monocytes – 5%, ESR – 22 mm/h. Coprogram: unformed feces, mucus +++, leukocytes – 10-15 per field of view, erythrocytes – 5-6 per field of view.

Fiber colonoscopy: the mucosa of the descending colon, sigmoid and rectum is diffusely hyperemic, bleeds easily upon contact with the colonoscope, the vascular pattern is blurred. Multiple erosions covered with fibrin were revealed in the rectosigmoid region.

Guess the most likely diagnosis. Draw up and justify a plan for additional examination of the patient.

*Sample answer:*Ulcerative colitis, left-sided lesion, acute course with gradual onset, moderate severity. Moderate anemia. The patient is recommended: a general urine test, biochemical blood tests (total protein, albumin, total bilirubin, direct and indirect bilirubin, glucose, total cholesterol, AST, ALT, alkaline phosphatase, GGT, potassium, sodium, creatinine, amylase, CRP, iron, TBL , ferritin), histological examination of colon biopsies, bacteriological examination of stool, detection of Clostridium difficile toxins A and B in stool, ultrasound of the abdominal cavity, FGS.

Problem 13.

Patient E., 23 years old, an auto mechanic, fell ill two weeks ago after hypothermia. The local general practitioner diagnosed acute tonsillitis. Amoxicillin therapy was recommended for a course of 10 days, but after 3 days, due to a significant improvement in well-being and normalization of body temperature, the patient stopped treatment. Two weeks after these events, the patient noted the appearance of swelling on the face, general weakness and malaise, decreased appetite, a headache, and urine became dark red in color and its quantity decreased. Along with the above symptoms, the patient was bothered by pain in the abdomen and lower back. When measuring blood pressure - blood pressure 140/90 mm Hg. Art.

On examination: the skin is pale. On auscultation of the lungs, breathing is vesicular, there are no adverse respiratory sounds, respiratory rate is 17 per minute. Heart sounds are muffled, the rhythm is correct. Blood pressure – 140 and 90 mm Hg. Art. Heart rate – 90 beats per minute. The abdomen is soft and painless. The dimensions of hepatic dullness according to Kurlov are 11×9×8 cm. Diuresis is 700 ml per day.

A laboratory study was carried out.

Complete blood count: Hb – 136 g/l, leukocytes – $10.8 \times 10^9/l$, ESR – 70 mm/hour. General urine analysis: relative density – 1025, proteinuria – 1.5 g/l, leukocytes – 14-15 per field of view, erythrocytes – completely cover the entire field of view. Biochemical blood test: total protein – 62 g/l, albumin – 39 g/l, cholesterol – 4.5 mmol/l, urea – 5.6 $\mu\text{mol/l}$, creatinine – 110 $\mu\text{mol/l}$, GFR – 79.4 ml /min/1.73 m² according to CKD-EPI, ASL-O titer – 1:1000.

Ultrasound of the kidneys: the kidneys are enlarged in size, the contours are smooth, the location is typical; the differentiation of the parenchyma layers is impaired, the echogenicity of the parenchyma is moderately increased; pyelocaliceal system without deformations and ectasia.

Guess the most likely diagnosis. State the patient's examination plan. *Sample answer:* Acute poststreptococcal glomerulonephritis. Nephritic syndrome. Arterial hypertension stage 1, risk 3.

Examination: titer antistreptococcal antibodies (ASL-O, antistreptohyaluronidase, antistreptokinase, anti-DNAase B, anti-NAD), CRP, serum complement level, anti-DNA antibodies. Urinalysis according to Nechiporenko, urine analysis according to Zimnitsky. A kidney biopsy, as a rule, is performed in case of an atypical course of OSGN to exclude other possible diseases, as well as in cases of late onset of the disease without a clear connection with a recent streptococcal infection. Search for foci of infection

Problem 14.

A 50-year-old patient consulted a local general practitioner with complaints of almost constant painful headaches that were not relieved by conventional antihypertensive drugs.

On examination: noticeably large palms and feet with thick toes (upon further questioning, she indicated that she could no longer wear dress shoes as before, since it was impossible to choose the right size). The head is large with large protruding ears and rough facial features. Obvious prognathism. The teeth are sparse. The tongue is big. Skin with numerous papillomas, greasy, with abundant hair of the male type. The heart, according to x-ray data, is enlarged. Blood pressure - 120/80 mm Hg. Art. Pulse is normal. The liver is also enlarged and painless.

Biochemical blood test: without significant deviations from the norm, blood glucose level - 6.3 mmol/l.

What is the most likely diagnosis for this patient? Make a plan for additional examination of the patient.

Sample answer: Acromegaly. Examination: determination of serum GH levels blood; bromocriptine test; test with thyreoliberin; determination of somatomedin C in the blood; X-ray examination of the skull, computed tomography or magnetic resonance imaging of the head.

Problem 15.

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, aVL and V1 to V4 below the isoline.

What is the most likely diagnosis for this patient? additional Make a plan examination of the patient.

*Sample answer:*IHD: acute Q-myocardial infarction in the area of the lower wall. Examination: clinical blood test; biochemical markers of myocardial necrosis; lipid profile, creatinine, blood glucose, coagulogram, ECHO-CG; KAG

Problem 16.

Patient V., 65 years old, came to the clinic with complaints of general weakness, poor appetite, difficulty swallowing, shortness of breath with minimal physical activity (getting out of bed, getting dressed), swelling of the legs, constant, slightly increasing in the evening.

History of the disease: he considered himself sick for about six months, when the above-described complaints began to appear. The local physician, having discovered yellowness and pallor of the skin, and an enlarged liver, referred the patient to the infectious diseases department of the hospital with suspected viral hepatitis.

On examination: the patient's condition is serious, significant pallor and moderate icterus of the skin and mucous membranes, puffiness of the face, swelling of the legs. Consciousness is clear, speech is slow. Lymph nodes are not enlarged. There is a small amount of moist rales in the lower parts of the lungs. The heart is enlarged 2 cm to the left of the left midclavicular line. Heart sounds are muffled, soft systolic murmur over all points. Pulse – 109 per minute, rhythmic. Blood pressure – 90/60 mm Hg. Art. The tongue is bright red, smooth, with cracks. The liver protrudes 3-4 cm from under the edge of the costal arch, sensitive to palpation. The edge of the spleen is palpated.

Neurological status: distal hyperesthesia, increased deep tendon reflexes, decreased muscle strength of the lower extremities.

ECG data: sinus rhythm, right bundle branch block. Negative T wave in leads V4-V6.

Blood test: erythrocytes - $1.0 \times 10^{12}/l$, hemoglobin - 40 g/l, MSM - 110 fL, leukocytes - $3.6 \times 10^9/l$, platelets - $150 \times 10^9/l$, reticulocytes - 0.1%, ESR - 23 mm/h, band neutrophils - 15%, segmented neutrophils - 48%, lymphocytes - 31%, monocytes - 4%, eosinophils - 2%, basophils - 0%, anisocytosis (macrocytosis), poikilocytosis, megalocytes, Jolly bodies, Cabot rings.

Express the proposed preliminary additional diagnosis. Compose plan examination.

Sample answer: IN-12 deficiency anemia, grade III. Funicular myelosis. B-12 induced myocardial dystrophy, left ventricular hypertrophy, right bundle branch block, CHF II B - IIIA, FC III-IV (according to NYHA). Additional research: . Biochemical blood test with determination of bilirubin fractions (a type of jaundice), total protein; ECHO-cardiography (verification of the diagnosis of CHF); FEGDS (exclusion of pathology of the stomach and duodenum); feces on worm eggs (excluding diphyllbothriasis); studies of the level of vitamin B12 in the blood serum, levels of methylmalonic acid (normal - 70-279 nmol/l) and homocysteine (normal - 5-15 mmol/l) (their increase confirms the diagnosis of "B12 deficiency anemia"); bone marrow biopsy (leukemia excluded).

Problem 17.

A 32-year-old man, when visiting a local general practitioner at a clinic, complains of loose stool mixed with blood up to 10 times a day, cramping pain in the lower abdomen before defecation, weight loss of 7 kg in 3 months. From the anamnesis: blood in the stool and unformed stool have been bothering me for 3 months. The temperature did not rise. He denies contact with infectious patients and has not traveled outside the region. Denies alcohol abuse or intravenous drug addiction. There are no relatives with gastrointestinal diseases. Works as a manager, no professional hazards. Objectively: the condition is satisfactory. Temperature 36.7°C. The skin is pale and moist. Height - 175 cm, weight - 58 kg. There is vesicular breathing in the lungs, there are no adverse breath sounds. NPV - 18 per minute. On auscultation, the heart rhythm is correct, the tone ratio is normal, and there are no murmurs. Heart rate - 98 beats per minute. Blood pressure - 110/70 mm Hg. Art. (D=S). Upon examination, the abdomen is symmetrical and participates in the act of breathing. On palpation, it is soft and painful in the left flank and left iliac region. Liver according to Kurlov - $9 \times 8 \times 7$ cm. Dimensions of the spleen - 6×4 cm. Urination is free and painless. Complete blood count: red blood cells - $2.7 \times 10^{12}/l$, Hb - 108 g/l, color index - 0.6, platelets - $270 \times 10^{12}/l$, leukocytes -

7.0×10⁹ /l, eosinophils – 1%, band neutrophils – 2%, segmented neutrophils – 65%, lymphocytes – 27%, monocytes – 5%, ESR – 22 mm/h. Coprogram: unformed stool, mucus +++, leukocytes – 10-15 in the field of view, erythrocytes – 5-6 in the field of view
Fibercolonoscopy: the mucosa of the descending colon, sigmoid and rectum is diffusely hyperemic, bleeds easily upon contact with the colonoscope, the vascular pattern is blurred . Multiple erosions covered with fibrin were revealed in the rectosigmoid region.

Guess the most likely diagnosis. Draw up and justify a plan for additional examination of the patient. Which groups of drugs are indicated for treating a patient in this situation?

*Sample answer:*Ulcerative colitis, left-sided lesion, acute course with gradual onset, moderate severity. Moderate anemia. The patient is recommended: a general urine test, biochemical blood tests (total protein, albumin, total bilirubin, direct and indirect bilirubin, glucose, total cholesterol, AST, ALT, alkaline phosphatase, GGT, potassium, sodium, creatinine, amylase, CRP, iron, TBL , ferritin), histological examination of colon biopsies, bacteriological examination of stool, detection of Clostridium difficile toxins A and B in stool, ultrasound of the abdominal cavity, FGS.

Problem 18.

A 35-year-old patient came to the clinic with complaints of loose stools mixed with blood 5-6 times a day, increased body temperature up to 37.5 °C, weakness, dizziness, pain in the ankle, elbow, and shoulder joints. I fell ill about 2 months ago, when my body temperature increased and joint pain appeared. Several courses of antibacterial therapy were carried out, as a result of which loose stools appeared. Objectively: the skin is pale and clean. On palpation, the abdomen is soft, painful in the iliac regions. The liver does not protrude from under the edge of the costal arch. The dimensions of the liver according to Kurlov are 10×9×8 cm. The spleen is not palpable. In the general blood test: erythrocytes - 3.2 × 10¹² / l, hemoglobin - 61 g / l, leukocytes - 11 × 10⁹ / l, platelets - 350 × 10⁹ / l, ESR - 30 mm/h.

Formulate a preliminary diagnosis. Make a plan for additional examination. Formulate and justify your treatment plan.

*Sample answer:*Nonspecific ulcerative colitis, moderate severity. Plan additional examination - Fibercolonoscopy with biopsy (to exclude colon cancer, pseudomembranous colitis), irrigorrhaphy. To prescribe treatment in this case, it is necessary to obtain the results of fibrocolonoscopy.

Problem 19.

An 18-year-old patient consulted a local general practitioner with complaints of pain in the lumbar region, frequent urination, and chills.

From the anamnesis it is known that he often suffers from ARVI, periodically notes dull pain in the lower abdomen, against this background there is a low-grade fever; Sometimes there is painful urination.

On examination: the skin is of normal color, temperature is 37.8°C. In the lungs, breathing is vesicular, there are no wheezes. The number of respiratory movements is 20 per minute. Heart sounds are clear and rhythmic. Heart rate – 96 per minute. Pasternatsky's symptom is positive on both sides. Urination is frequent and painful. There is no swelling.

Complete blood count: hemoglobin – 114 g/l, erythrocytes – $4.5 \times 10^{12}/l$, leukocytes – $18.5 \times 10^9/l$, band neutrophils – 10%, segmented neutrophils – 70%, lymphocytes – 22%, monocytes – 9%, ESR – 28 mm/hour. General urine analysis: reaction - alkaline, protein - 0.06%, leukocytes - completely throughout the entire field of view, erythrocytes - 1-2 in the field of view, bacteria - a significant amount.

Ultrasound of the kidneys: the kidneys are located correctly, the size is at the upper limit of normal. The pyelocaliceal system is expanded on both sides.

Guess the most likely diagnosis. Specify additional research methods to clarify the diagnosis.

*Sample answer:*Chronic bilateral pyelonephritis, acute phase. It is necessary to perform a bacteriological examination of urine for the purpose of microflora typing; urine examination according to Zimnitsky (chronic pyelonephritis is characterized by a moderate decrease in the concentrating ability of the kidneys); determination of blood creatinine; if the values are normal, intravenous excretory urography is indicated (to assess the anatomical and functional state of the urinary tract).

Problem 20.

Patient N., 65 years old, came to the clinic with complaints of a worsening of his condition over the last 2 weeks: an increase in blood pressure to 150/100 mm Hg. Art., weakness, sweating, aching pain in the lumbar region, temperature rise to 37.8 ° C in the evening, slight pastiness of the eyelids and face in the morning. For the last 2 months he has been taking Diclofenac at a dose of 150 mg per day for joint pain (he suffers from osteoarthritis).

Blood test: ESR - 30 mm/h, leukocytes - 6500, HB - 112 g/l. Urine analysis: light yellow, transparent, 1003, acidic; protein - 0.33%; red blood cells - 5-6 per field of view; leukocytes - 10 in sight.

What is the possible cause of these clinical manifestations?

What additional studies will you prescribe to clarify the diagnosis? What will be your recommendations before receiving the results of the additional examination?

Sample answer: Possible reasons: nephrotoxic effect of diclofenac, the addition of a urinary tract infection, primary kidney damage (glomerulonephritis). Additional examination - Urinalysis according to Nechiporenko, bacteriological analysis of urine, ultrasound examination of the kidneys.

Problem 21.

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 there is vesicular breathing, 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. The symptom of tapping in the lumbar region is 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.

Guess the most likely diagnosis. Draw up and justify your treatment plan.

Sample answer: Community-acquired right-sided lower lobe pneumonia, lung flow. Respiratory failure (RF) 0 tbsp.

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.

Skills with performance standards

Skill 1. Describe the algorithm of actions when measuring blood pressure.

Skill performance standard:

1. Ask the patient to take a comfortable position (without crossing your legs, feet on floor, leaning on the back of a chair, hand on the table, palm surface up, shoulder at heart level).
2. Ask the patient about medications taken (including nasal and eye drops), smoking 1.5-2 hours before manipulation, physical activity before manipulation, drinking strong drinks (tea, coffee), including alcohol.
3. Select the appropriate cuff size by measuring the diameter of the shoulder.
4. Check the functionality of the tonometer by filling the cuff, observing arrow movement.
5. Expose the patient's arm and apply a blood pressure cuff, finding the place pulsation of the brachial artery, mark on the cuff to the area of pulsation of the brachial artery, 2-2.5 cm above the cubital fossa.
6. Install the pressure gauge at shoulder level to observe it
7. Apply the membrane of the stethoscope to the area of pulsation of the brachial arteries. With your other hand, close the bulb valve clockwise and pump air until the pulsation in the brachial artery disappears, then by 20 mm Hg. Art. above the pressure at which pulsation disappears.
8. Open the valve and slowly release air from the cuff
9. Repeat the measurement on the second hand

Skill 2. Describe the algorithm for taking an ECG.

Skill performance standard:

1. Greet the patient and introduce yourself.
2. Inform the patient the purpose and progress of the upcoming study, receive it consent to the procedure.
3. Warn the patient that before the study they should not take food.
4. Conduct (transport) the patient to the ECG room. If the condition The patient is seriously ill and cannot be transported; an ECG study is carried out in the patient's room.

5. Before the examination, the patient must sit for 10-15 minutes (lie down), calm down.

6. Offer (help) the patient to undress to the waist and expose the area shins.

7. Wash your hands as usual.

8. Performing the manipulation:

9. Place the patient on the couch.

10. If the skin has significant hairiness, moisten the areas where the electrodes are applied. soap solution, or apply electrode gel.

11. Place gauze pads soaked in solution under the electrodes sodium chloride.

12. Secure the plate electrodes over the gauze pads using rubber bands in the following order:

- red - right forearm,
- yellow - left forearm,
- green - left shin,
- black - right shin,

13. Place six (for multi-channel recording) chest straps on the chest electrodes using a rubber suction bulb in the following order:

- V1 - fourth intercostal space to the right of the sternum,
- V2 - fourth intercostal space to the left of the sternum,
- V3 - between V2 and V4,
- V4 - fifth intercostal space 1.5 cm medially from the left midclavicular line,
- V5 - fifth intercostal space along the left anterior axillary line,
- V6 - fifth intercostal space along the left midaxillary line,

14. Ask the patient to relax, breathe calmly and not move.

15. Turn on the device.

Skill 3. Describe the algorithm for preparing a patient for ultrasound of the abdominal organs (liver, gall bladder, pancreas, spleen).

Skill performance standard:

1. Explain to the patient the purpose, progress and preparation for the upcoming study, and obtain his informed consent for the procedure.

2. Explain to the patient the rules for preparing for the study:

- Exclude from diet for 2 – 3 days before the test, foods that cause gas formation (legumes, brown bread, cabbage, milk).
- For flatulence, recommend activated carbon tablets 4 times a day.
- The study is carried out strictly on an empty stomach, do not smoke, do not drink alcohol, do not take medications.

3. Ask the patient to repeat all the information, ask questions about the technique preparation, if necessary, provide written recommendations.

4. Inform what consequences will result from violating the recommendations.

5. Inform the patient the time and place of the study, the need to take your medical history and a towel (sheet or diaper) with you.

Skill 4. Describe the test procedure with 6 minute walk

Skill performance standard:

When conducting a 6-minute step test, the patient is given the task of walking as far as possible in 6 minutes (at his own pace along a measured [30 m] corridor marked 1 m apart), after which the distance traveled is recorded

1. The 6-minute walk test (6MW) should be performed in the morning. Patient should have a light breakfast 3-4 hours before the test, do not take cardiac medications, and do not smoke for at least 2 hours before the test.

2. To conduct the 6MX test in a 30 m long corridor, invisible patient markings every 3 m distance.

3. For 10 minutes before the 6MX test, the patient should calmly sit. At this time, you need to read out the following text to him: "In 6 minutes you need to cover as much distance as possible, and you cannot run or dash around. You will walk down the corridor back and forth. If shortness of breath or weakness occurs, you can slow down your walking pace, stop and rest. While resting, you can lean against the wall, then you need to continue walking. Remember, your goal is to walk the maximum distance in 6 minutes."

4. During the test, you can follow the patient without forcing his pace. walking. Every 60 seconds, the patient should be encouraged by saying in a calm tone the phrases: "Everything is fine" or "Good job, continue."

5. It is impossible to inform the patient about the distance traveled and the remaining time. If the patient slows down, you can remind them that they can

stop, rest, lean against the wall, and then as soon as he feels that he can walk, continue walking.

6. After 6 minutes, the patient should be asked to stop and not move until the distance traveled is measured.

7. It is necessary to measure the distance to the nearest 1 m, then offer the patient to sit down and observe him for at least 10 minutes.

8. Before the start and at the end of the test, exercise tolerance is assessed on a scale Borg, pulse, blood pressure and, if possible, blood oxygen saturation (if a pulse oximeter is available).

Skill 5. Describe the algorithm of actions of the local physician during the initial patient appointment

Skill performance standard: 1.

Greet the patient

2. Establish a trusting relationship with the patient

3. Wash your hands according to the hand washing technique, if necessary, put on a mask

4. Collect complaints

5. Collect anamnesis (life history, medical history, infectious diseases - epidemiological history, heredity, allergic history, gynecological history in women, incl. PM)

6. Assess the general condition and determine the patient's well-being

7. Conduct an objective examination of the patient

8. Assess psychoneurological status

9. Assess your body type

10. Examine the skin and visible mucous membranes

- evaluate the color and turgor of the skin
- determine the presence of edema
- palpate peripheral lymph nodes, mammary glands

11. Assess the functions of the musculoskeletal system (visual examination, palpation, determination of range of motion in joints)

12. Objectively examine the respiratory organs

• determine the shape of the chest, the participation of auxiliary muscles in act of breathing

- examine the pharynx

- determine NPV
- carry out palpation (voice tremor), percussion, auscultation of the lungs

13. Objectively examine the circulatory organs

- conduct a visual examination of the heart area
- measure blood pressure, heart rate
- carry out palpation, percussion, auscultation of the heart and blood vessels

14. Objectively examine the digestive organs

- examine the oral cavity (teeth, tongue)
- examine the abdominal area
- carry out palpation, percussion (including determining the size of the liver by

Kurlova and spleen), auscultation of the abdomen

15. Objectively examine the organs of the genitourinary system

- visual inspection, palpation, percussion of the kidney area
- frequency, pattern of urination, presence of nocturia
- presence of discharge from the genital tract
- in women: menstrual dysfunction, presence of discharge from

vagina, color, character

16. Wash hands after examination according to hand washing technique

17. Establish a preliminary diagnosis

18. Determine the necessary examination methods for staging final diagnosis in accordance with diagnostic and treatment protocols

19. Prescribe treatment in accordance with diagnostic and treatment protocols

20. Give preventive recommendations (preventive examination, preventive vaccinations, maintaining a healthy lifestyle

21. Set a date for re-inspection

22. Make a record of the examination in the outpatient card (form No. 025/y)

23. Fill out form No. 039/y

PK-6

Control questions:

Control questions

1. What is the maximum period for which the medical commission will

An organization may issue a certificate of incapacity for work if there is an obvious unfavorable prognosis.

Sample answer: until 4 months

2. Basic medical records used when providing care in the clinic.

Sample answer: form N 025/y "Medical record of a patient receiving medical care on an outpatient basis; form N 030/y "Control card of dispensary observation"; form N 030-13/y "Passport of the medical district of citizens entitled to receive a set of social services"; N 088/y form direction to ITU; form N 072/y "Sanatorium-resort card"; form N 070/y "Certificate for obtaining a voucher for sanatorium-resort treatment"; form N 086/y "Medical certificate (medical professional advisory opinion)".

3. Types of outpatient facilities. Definition of a clinic. Types of clinics.

Sample answer: outpatient clinics; clinics; antenatal clinics; health centers; paramedic and midwife stations; dispensaries. A polyclinic is a multidisciplinary medical and preventive institution designed to provide medical, including specialized, care to patients, and, if necessary, to examine and treat patients at home.

Types of clinics: according to the organization of work: combined with a hospital and not combined (independent); by territorial basis: urban and rural; by profile: general for servicing adults or children, dental and consultative and diagnostic.

4. What does the preventive focus of the clinic include? *Sample answer:* Sanitary educational work (formation of healthy lifestyle as a set of measures that allows maintaining and strengthening the health of the population and improving the quality of life). Dispensary work (a set of measures to promote a healthy lifestyle, prevention and early diagnosis of diseases, effective treatment of patients and their follow-up). Vaccination work (preventive vaccinations are carried out for children according to the appropriate vaccination calendar, for adults - at will and indications).

5. Define medical examination. List the studies included in the first stage of clinical examination aimed at screening for cancer.

Sample answer: Clinical examination is a set of measures aimed at active dynamic monitoring of the health status of the population, aimed at strengthening health and increasing working capacity, ensuring proper physical development and preventing diseases through a set of therapeutic and preventive measures. Studies aimed at cancer screening: examination by a paramedic (midwife), including taking a smear (scraping) from the surface of the cervix (external uterine pharynx) and the cervical canal for cytological examination (hereinafter referred to as a smear from the cervix) (for women aged 21 years to 69 years inclusive); fluorography of the lungs; mammography of both breasts (for women aged 39 to 75 years); clinical blood test; stool examination for occult blood (for citizens aged 48 to 75 years); Ultrasound of the abdominal and pelvic organs to exclude neoplasms for citizens aged 39 years and older with a frequency of 1 time in 6 years; examination; feces for occult blood (for citizens aged 48 to 75 years); PSA level in men over 45 years old once every 5 years.

Situational tasks

Problem 1

Worker U. was unable to work due to a fractured leg from January 29 to March 12, and from January 29 to February 12. was hospitalized, and then was treated by a surgeon at the clinic and was released from work for this period. Formalize his incapacity for work. Indicate the "Reason of disability" according to the two-digit code.

Sample answer: The patient is given a personal identification number 29.01 to 12.02 by the sole attending physician of the hospital, then with a note that he continues to be ill, issued by a /n by m/f by a surgeon by decision of the medical commission. "Cause of disability" according to the two-digit code 01 - disease.

Problem 2

Plasterer N. was hired at SMU No. 3 with a one-week probationary period on April 4. She fell ill with pneumonia on April 7 and was unable to work until April 29. Was treated in

clinic at your place of residence. Register her disability. Indicate the "Reason of disability", according to the two-digit code.

*Sample answer:*The patient is given a personal identification number 04/07 to 04/24 by the sole attending physician, then the I/n is extended from 04/25 to 04/29 by decision of the medical commission. "Cause of disability" according to the two-digit code 01 - disease.

Problem 3

Employee K., while on leave without pay from May 20 to May 30, suffered from catarrhal tonsillitis from May 22 to May 26, during the same period her 10-year-old child was injured and was treated at the trauma center from May 26 to June 19 inclusive. How to register a citizen's incapacity for work?

*Sample answer:*The patient is given a personal identification number 20.05 to 30.05 by the sole attending physician, closes on 30.05. "Cause of disability" according to the two-digit code 01 - disease. Next, a personal identification document is opened by a pediatrician, indicating "Cause of disability" according to the two-digit code 09 - for caring for a sick family member, for a period of 7 to 15 years to 15 k/d, then by the conclusion of a medical commission for a longer period.

Problem 4

Mechanic L., during his regular work leave from October 1 to October 30, was treated on an outpatient basis by a general practitioner from October 14 to October 28 for an exacerbation of chronic gastritis. Does he have the right to receive a certificate of incapacity for work? If yes, then register his incapacity for work.

*Sample answer:*The patient has the right to receive I/n due to the fact that the period disability coincided with the period of the next labor leave. The personal identification number will be issued by the attending physician alone from 10/14 to 10/28.

Problem 5

Worker I. was hospitalized for an exacerbation of gastric ulcer from April 15 to May 2. He was discharged with improvement, but remained incapacitated for health reasons and required outpatient treatment until May 14. Formalize his incapacity for work.

*Sample answer:*The patient is given a personal identification number 15.04 to 29.04 by the sole attending physician of the hospital, then, by decision of the medical commission of the hospital, extended from 30.04. until 02.05, then with the mark "continues to be ill", a continuation of the treatment is issued by a doctor at the outpatient stage based on the conclusion of the medical commission of the clinic from 03.05. to 14.05.

Problem 6

Tokar D. was released from work by the clinic surgeon due to phlegmon of the right hand from March 5 to 10. On March 8, the patient's condition worsened, and he was urgently hospitalized in the hospital, where he remained until March 26. Started work on March 27. Register a citizen's incapacity for work.

*Sample answer:*The patient is given a personal identification number 05.03. until 10.03, due to the deterioration of the patient's condition and hospitalization of the patient in the hospital on 08.03, the patient must be issued a duplicate of the primary I/n from 05.03. to 03/07, with a note that he continues to be ill, then the hospital extends the medical period from 03/08 to 03/19, then, based on the conclusion of the medical commission, it is extended from 03/20 to 03/26.

Problem 7

Worker P. was injured on Sunday - a sprain of the left ankle joint and was incapacitated from May 16 to May 28. Document the patient's incapacity for work. Indicate the "Reason of disability" according to the two-digit code.

*Sample answer:*The patient is given a personal identification number 16.05 to 28.05 by the sole attending physician. "Cause of disability" according to two-digit code 02 - injury.

Problem 8

Cook N. was in the surgical department of the city hospital from September 7 to September 18 due to exacerbation of chronic calculous cholecystitis, September 10. cholecystectomy was performed. The patient was discharged from the hospital with improvement, but remained disabled and required outpatient treatment until October 1. How to register a citizen's incapacity for work?

*Sample answer:*The patient is issued a personal identification document by the hospital 09/07 to 09/21, then, based on the conclusion of the medical commission, the I/n is extended from 09/22 to 01/10.

Problem 9

A paramedic working independently at a remote medical and obstetric station (FAP) in a rural area was approached by a livestock farm worker with dyspeptic complaints. The paramedic issued a certificate of incapacity for work from 9.08 to 18.08. Did the paramedic have the right to issue sick leave? How to properly register a citizen's incapacity for work?

Sample answer: A paramedic working in a FAP has the right to issue a personal identification number individually for up to 10 days. Due to the patient's incapacity for work from 09.08 to 18.08, the period of incapacity for work is 10 days, the paramedic did not violate his rights.

Problem 10.

A 54-year-old man visited a general practitioner for the first time for medical examination. He denies having any chronic illnesses and is not taking any medications. His father died at the age of 74 from acute myocardial infarction. His mother is alive, currently 80 years old, receiving treatment for hypertension. He has a younger brother and sister, for whom he claims that they do not suffer from any chronic diseases. The patient does not smoke, does not drink alcohol, and has never used drugs. He leads a sedentary lifestyle, works as a financial advisor, and does not exercise. An objective physical examination reveals no deviations from the norm in all organs and systems. Heart rate – 80 beats per minute, blood pressure – 127/82 mmHg, respiratory rate 18 per minute. Height 170 cm, body weight 86 kg, body mass index (BMI) 29.8 kg/m², waist circumference 98 cm.

Questions: 1. What additional studies should be carried out for this patient as part of the first stage of clinical examination (after a survey to identify chronic non-infectious diseases and risk factors for their development, anthropometry and blood pressure measurements)?

2. What studies need to be carried out to identify the total cardiovascular risk for this patient?

3. What studies are carried out within the first and second stages of clinical examination? aimed at screening for cancer pathology in this patient?

Sample answer: 1 Determination of levels of total cholesterol in the blood, glucose in the blood, determination of the absolute total cardiovascular risk, ECG, fluorography of the lungs, clinical blood test, general urine test, fecal occult blood test, measurement of intraocular pressure.

2. Blood pressure measurement (screening for hypertension) and lipid testing (cholesterol) blood (screening for dyslipidemia).

3. As part of the first stage of medical examination, fluorography of the lungs and stool examination for occult blood, as part of the second stage, esophagogastroduodenoscopy, colonoscopy or sigmoidoscopy, blood test for the level of prostate-specific antigen (PSA).

Task eleven.

A 45-year-old man undergoes a preventive medical examination as part of a medical examination. He has no complaints, no history of chronic diseases. The survey revealed that the patient has bad habits (smoking), eats irrationally and leads a sedentary lifestyle. On examination: satisfactory condition, increased nutrition. BMI – 32 kg/m². The skin is clean and of normal color. In the lungs there is vesicular breathing, no wheezing. Heart sounds are clear and rhythmic. Heart rate – 72 beats per minute, blood pressure – 150/90 mm Hg. (does not take antihypertensive drugs). The abdomen is soft and painless on palpation in all parts. The liver and spleen are not enlarged. There is no dysuria. The symptom of tapping in the lumbar region is negative. There is no swelling. In the tests: total cholesterol - 5.6 mmol/l, blood glucose 4 mmol/l. ECG - signs of left ventricular hypertrophy.

Questions: 1. Guess the most likely diagnosis. 2. Justify your diagnosis.

3. Determine the patient's health group. Justify your answer.

4. Does the patient need to be referred to the second stage of medical examination? Which Is an examination necessary? Justify your answer.

Sample answer: 1. Stage II hypertension, stage I hypertension, risk 3. Stage 1 obesity. Hyperlipidemia.

2. The diagnosis of "hypertension (HD)" was established on the basis of increased Blood pressure, ECG data (left ventricular hypertrophy (LVH)). The stage of hypertension and the risk of cardiovascular complications (CVC) are established based on the presence of asymptomatic target organ damage (heart) and the absence of clinically significant diseases of the cardiovascular system and chronic kidney disease. Diagnosis of obesity I degree" is determined by BMI.

3. Health group IIIa, because the patient has hypertension requiring dispensary observations.

4. The patient must be sent to the second stage of medical examination to clarify diagnosis. As part of the 2nd stage of medical examination, the patient is shown a determination of the lipid spectrum of the blood, since he has an elevated level of total cholesterol and duplex scanning of the brachiocephalic arteries, since three risk factors for the development of chronic non-infectious diseases (CNCDs) have been identified: hypertension, hypercholesterolemia, obesity.

Task12.

A 39-year-old man undergoes a preventive medical examination as part of a medical examination. Complaints of periodic cough in the morning with a small amount of mucous sputum. The patient has a history of frequent acute respiratory viral infections, bronchitis, and denies chronic diseases. There is a long history of smoking (smoker index – 21 packs/years). On examination: satisfactory condition, normosthenic physique. BMI – 24 kg/m². The skin is clean and of normal color. In the lungs, breathing is vesicular, there are no wheezes. Heart sounds are clear and rhythmic. Heart rate – 70 beats. per minute, blood pressure – 120/80 mm Hg. The abdomen is soft and painless on palpation in all parts. The liver and spleen are not enlarged. There is no dysuria. The symptom of tapping in the lumbar region is negative. There is no swelling. In the tests: total cholesterol - 4.8 mmol/l, blood glucose 5.2 mmol/l. ECG is normal. Absolute cardiovascular risk (SCORE) = 1% (low).

Questions:

1. Determine the patient's health group. Justify your answer.
2. Does the patient need to be referred to the second stage of medical examination? Which Is an examination necessary? Justify your answer.
3. Create a plan for individual preventive counseling. *Sample answer:* 1. Health group I, because the patient has a low total cardiovascular risk and has no diseases that require dispensary observation by a local therapist.

2. The patient must be sent to the second stage of medical examination to clarify diagnosis because the patient has clinical symptoms (cough with sputum) and risk factors for developing COPD (smoking). As part of the 2nd stage of medical examination, the patient is indicated for spirometry.

3. The patient should be advised to quit smoking, because smoking is the main one risk factor for COPD development. In addition, it is necessary to vaccinate against influenza and prevent ARVI, because viral infections provoke exacerbation of COPD. Methods for preventing ARVI - hardening, balanced nutrition, adequate sleep, hygiene; use of vitamin therapy.

Task13.

The patient is 57 years old. According to the patient, there is no history of chronic diseases. Questionnaire – complaints of increased blood pressure. Smoking, poor diet, low physical activity. Objectively - blood pressure is 160/90 mm Hg. (does not take antihypertensive drugs) TC 6.2 mmol/l, glucose 4.0 mmol/l, body mass index

32.0 kg/m². ECG without changes. Urinalysis is normal.

Questions: 1. Determine your health group.

2. Further tactics for patient management.

*Sample answer:*1. Health group – IIIa, since the patient has a chronic non-disease. 2. Brief preventive consultation with a local doctor and referral at the 2nd stage of clinical examination - blood lipid spectrum (hypercholesterolemia); in-depth preventive counseling (individual or group) in the medical prevention department on smoking cessation, balanced nutrition, dyslipidemia, reduction of excess body weight, low physical activity.

Problem 14.

The patient is 51 years old. History of arterial hypertension. Questioning – complaints of pain in the heart area, suspicious of angina pectoris, prolonged cough with sputum production. Smokes, low physical activity. Objectively - blood pressure is 118/70 mm Hg. (does not take antihypertensive drugs). TC 7.4 mmol/l, glucose 5.0 mmol/l, body mass index 22.0 kg/m². ECG without changes. Total cardiovascular risk – 5% (high).

Questions: 1. Determine the health group. 2.

Further tactics for patient management.

*Sample answer:*1. Health group – 2, since the patient does not have enough data to establish a chronic non-disease.

2. Due to the suspicion of exertional angina, chronic obstructive pulmonary disease indicates the need to refer the patient to the 2nd stage of medical examination. Stage 2 of medical examination will include: treadmill test, cardiac ultrasound, lipidogram, ultrasound of the BCA. Then conduct in-depth preventive counseling (individual or group) in the medical prevention department on smoking cessation, dyslipidemia, and low physical activity.

Problem 15.

Here is a 63-year-old patient whose clinical examination revealed the following risk factors: smoking, excess body weight, low level of physical activity. Blood pressure level is 120/70 mmHg, total cholesterol is 5 mmol/l. The absolute risk on the SCORE scale is 10%.

Question: What is the main purpose of clinical observation in this case? *Sample answer:*Reducing the risk of developing cardiovascular complications.

Problem 16.

The patient is 39 years old. There is no history of chronic diseases or injuries. Questioning – the presence of neurological complaints, poor nutrition, smoking. Objectively - blood pressure is 132/84 mm Hg. (does not take antihypertensive drugs) TC 6.4 mmol/l, glucose 6.5 mmol/l, body mass index 34.2 kg/m². ECG without changes. The total cardiovascular risk is less than 1% (low).

Questions: 1. Determine the health group. 2. Your further tactics. 3. List risk factors.

Sample answer: 1. Health group – I, since the patient does not have CND and the total cardiovascular risk is less than 1% (low).

2. Tactics - Brief preventive consultation with a local doctor and referral to stage 2 of clinical examination - consultation with an endocrinologist, lipid spectrum, glycated hemoglobin (or glucose tolerance test). Then conduct in-depth preventive counseling (individual or group) in the medical prevention department (smoking, obesity, hypercholesterolemia, hyperglycemia).

3. Risk factors: hypercholesterolemia, hyperglycemia, obesity, smoking.

Problem 17.

The patient is 57 years old. History of gastric ulcer, last exacerbation 2 years ago. Osteochondrosis of the cervical spine without exacerbation. Questioning – complaints of abdominal pain, weight loss, smoking. Objectively - blood pressure is 128/70 mm Hg. TC 3.8 mmol/l, glucose 4.0 mmol/l, body mass index 17.5 kg/m². ECG without changes. The total cardiovascular risk is 4% (moderate).

Questions: 1. Determine your health group. 2. Your further tactics. 3. List the risk factors.

Sample answer: 1. Health group – III, so the patient has a history of chronic diseases (gastric ulcer)

Suspicion of the presence of a tumor in the stomach (pain, weight loss). 2.

Tactics - Brief preventive consultation with a local doctor and referral to stage 2 of clinical examination - esophagogastroscopy. Then conduct in-depth preventive counseling (individual or group) in the medical prevention department (smoking, moderately increased cardiovascular risk).

3. Risk factors: smoking.

Problem 18

Patient K. was treated in a hospital in the therapeutic department from June 21 to July 26. Upon discharge from the hospital, according to the prognosis of the attending physician, the patient was unable to work as of July 29.

1. For what period will a certificate of incapacity for work be issued?
2. Who should sign the certificate of incapacity for work when the patient is discharged?

from the hospital?

Sample answer:

1. A certificate of incapacity for work must be issued for the entire period of stay in the hospital, that is, from 21.06. to 26.07. and for the period after discharge from the hospital from July 27. until 29.07. inclusive.

2. The certificate of incapacity for work is signed by the sole attending physician, more 15 days – Chairman of the VK.

Problem 19

A 32-year-old locksmith workshop worker has been on sick leave since January 5 due to a lower limb injury. to 7.08. The prognosis for intensive rehabilitation is favorable.

1. Do doctors at a municipal treatment and preventive hospital have the right to institutions to extend the certificate of incapacity for work and further?

2. If the certificate of incapacity for work is extended, then who has the right to do so? do?

3. What is the maximum period for which the certificate can be extended in this case? disability?

4. What needs to be done after the maximum issuance period has expired certificate of incapacity for work, if the state of incapacity remains?

Sample answer:

1. Yes, since the prognosis of the disease and restoration of working capacity favorable.

2. VK

3. Up to 10 months.

4. Upon expiration of the maximum period for extending the certificate of incapacity for work the patient, by decision of the VC, must be sent to the ITU bureau.

Problem 19

A 10-year-old child fell ill with acute parotitis on February 8. and was on outpatient treatment until 29.02. The child was cared for by his father, an insurance company employee.

1. Will a certificate of incapacity for work be issued to care for a sick child?
father?
2. For how long will a sick leave certificate be issued to care for a patient?
a child?
3. What are the features of obtaining a certificate of incapacity for care?

Sample answer:

1. Yes.
2. From 8.02. to 29.02, if the child needs care according to the decision of the VK.
3. The certificate of incapacity for work issued for care must indicate reason for disability, code 09.

Problem 20

A 23-year-old woman gave birth to twins. Pregnancy, childbirth and the postpartum period proceeded normally. There were no complications from the newborns.

1. From what week of pregnancy will a certificate of incapacity for work be issued?
connections with pregnancy, upcoming birth and the postpartum period?
2. For how long will the certificate of incapacity for work be issued?

Sample answer:

1. From the 28th week.
2. The total duration of the prenatal and postnatal period, for which a certificate of incapacity for work will be issued, will be 194 calendar days (84 before childbirth and 110 after).

Skills with performance standards

Skill 1

Develop a follow-up plan for a patient diagnosed with coronary artery disease: FC II exertional angina. Post-infarction atherosclerosis (NOS).

- Sample answer:*
1. Consultation with a cardiologist 2 times a year; 1. Consultation with a local therapist 2-4 times a year;
 2. ECG once every 3 months;
 3. Daily Holter ECG monitoring once a year;

4. Heart ultrasound once every 6 months;
5. Study of blood lipid spectrum once every 6 months.

Skill 2

Develop a follow-up plan for a patient diagnosed with: Bronchial asthma, moderate, controlled.

*Sample answer:*1. Consultation with a general practitioner once every 3 months; 2.

Consultation with a pulmonologist once every 6 months;

3. Consultation with an allergist once every 6 months;

4. UAC once every 6 months;

5. Study of general sputum analysis once a year;

6. Immunoglobulin E study once a year;

7. FLG 1 time per year;

8. Spirometry once a year;

Skill 3

Method of filling out a health resort card.

*Sample answer:*1. Account form N 072/y A "sanatorium-resort card" is issued by a medical organization providing medical care on an outpatient basis;

2. The card is filled out on paper and (or) in the form of an electronic document a medical worker with secondary medical education upon presentation by the patient of a voucher for sanatorium-resort treatment;

3. The Card form consists of a Card and a return (cut-off) coupon;

4. When filling Cards :

4.1. Points 1-4 Cards are filled out on the basis of a document certifying patient's identity.

4.2. Paragraphs 6-13 , highlighted in gray, are filled in only for citizens, eligible to receive a set of social services. Guidelines for filling out these items are located on the reverse side of the "Certificate for obtaining a voucher for sanatorium-resort treatment" (account form N 070/y , provided for in Appendix No. 11 to the order of the Ministry of Health of Russia dated December 15, 2014 N 834n).

Item 7 is completed only if the patient lives in a territory located near the border of another subject of the Russian Federation, indicating the code of this subject of the Russian Federation.

Paragraphs 15-17 are filled out on the basis of the medical record of a patient receiving medical care on an outpatient basis (registration form N 025/y , provided for in Appendix No. 1 to the order of the Ministry of Health of Russia dated December 15, 2014 N 834n), with mandatory coding of diagnoses according to ICD-10. When issuing a Card, the results obtained during a medical examination (medical examination) can be used.

Paragraphs 18-21 are filled out on the basis of the submitted voucher for sanatorium and resort treatment.

5. The card on paper is certified by a medical professional with an average medical education (for a person entitled to receive a set of social services, the Card is certified by the signature of the head of the department or the chairman of the medical commission) and the seal of the medical organization, the imprint of which identifies the full name of the medical organization.

6. The card in the form of an electronic document is signed using reinforced qualified electronic signature medical worker with secondary medical education.

7. Points 1-10 return (cut-off) coupon Cards are filled out by the attending physician sanatorium and resort organization. The coupon is certified by the signatures of the attending physician and the chief physician of the sanatorium-resort organization and is certified by the seal of the medical organization, the imprint of which identifies the full name of the medical organization.

Skill 4

Algorithm for registering a patient at a dispensary.

Sample answer: 1. An introductory epicrisis about registration and a schedule of examinations is filled out in the medical record of an outpatient patient;

2. Then the patient must be included in the clinical observation log;
3. Draw up a dispensary observation card, form N030/y;
4. Draw up a dispensary observation plan for the calendar year;
5. Fill out the epicrisis at the end of each calendar year;
6. At each clinical examination: identify complaints, specific symptoms, conduct an objective examination, assess physical development, and conduct a series of examinations necessary for this nosology.

Skill 5

Develop a follow-up plan for a patient diagnosed with chronic pyelonephritis.

Sample answer: 1. OAM once every 6 months

2. AM according to Nechiporenko, with determination of the degree of bacteriuria, the presence of active leukocytes, sensitivity to antibacterial drugs once every 6 months.

3. UAC once every 6 months.

4. If an exacerbation is detected, hospitalization is carried out. At

In an inactive course, monitor the state of blood pressure.

5. Examination by an ophthalmologist once a year

6. Consultation with a nephrologist once a year

7. Examination by a general practitioner 1-2 times a year.