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PROPAEDEUTICS OF INTERNAL MEDICINE

SITUATIONAL TASKS

*for 2nd year students
speciality 221 «Dentistry»*

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The collection of situational tasks for the final control of students' knowledge before practical classes and independent work of students of the 2nd year was compiled in accordance with the program of the educational discipline "Propaedeutics of internal medicine", specialty "Dentistry". The purpose of the publication is to promote better assimilation of theoretical knowledge by students of the 2nd year of the Faculty of Medicine during preparation for practical classes and final module control.

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PREFACE

The author team of the Department of general practice - family medicine and internal diseases created this situational tasks, which is aimed at consolidating knowledge about the management of patients with various pathologies of internal organs in the practice of a dentist. The necessity of creating such a collection for the educational discipline "Propaedeutics of Internal Medicine" is due to the need to teach future dentists to recognize the most common diseases of internal organs based on external signs and anamnesis data, their complications that threaten the lives of patients, and to know the tactics of their management during dental interventions; to be able to evaluate the importance of somatic pathology for the occurrence and course of diseases of the oral cavity and the role of the pathology of the oral cavity in the development of somatic diseases.

Situational tasks for the final control of students' knowledge was developed in accordance with the requirements of the work program for the academic discipline "Propaedeutics of Internal Medicine" and based on the existing database of tests and situational tasks of the department and the addition of new author's material.

The publication will contribute to the preparation of 2nd year students for practical classes, final control by summarizing knowledge from the discipline "Propaedeutics of internal medicine" for the specialty 221 "Dentistry".

DISEASES OF THE CARDIOVASCULAR SYSTEM

1. Patient K., 35 years old, consulted a doctor about a cough with the release of a small amount of sputum with an admixture of red blood, which occurs during prolonged exertion, a feeling of palpitations, interruptions in the work of the heart.

On objective examination: The mucous membrane of the oral cavity is swollen, dry, pale with a cyanotic tint. In the area of the heart, a heart impulse is detected, a symptom of "cat's purring" in the diastole phase. The borders of the heart are expanded to the right and up. An increase in the first tone, a diastolic murmur is heard at the apex, and an emphasis of the second tone is heard at the pulmonary artery.

- A. What is your diagnosis?
- B. What rhythm disturbance is characteristic of this pathology?
- C. What can be detected when examining the pulse?
- D. What is the heart configuration of this patient?

Solution of the situational task:

- A. mitral stenosis
- B. atrial fibrillation
- C. pulse of small filling
- D. mitral configuration of the heart

2. A 20-year-old patient was admitted to the department with complaints of heart failure, shortness of breath, swelling of the legs, heaviness in the right hypochondrium. Medical history: He has been suffering from rheumatism since he was 12 years old, and was treated in a hospital. He experiences rhythm interruptions for six months.

Objective: Pale, cyanotic blush. Neck veins are swollen. The mucous membrane of the oral cavity is swollen, dry, pale with a cyanotic tint. Catarrhal stomatitis is noted. The pulse is arrhythmic, with reduced filling, 90 per minute. The borders of the heart are enlarged up and to the right, the rhythm is irregular, heart rate. 20 in 1 minute more often than the pulse. 1st tone is clapping, diastolic noise at the apex. The liver protrudes 5 cm from under the edge of the costal arch, painful on palpation. Swelling on the lower extremities.

- A. What is your diagnosis?

- B. Examination plan?
- C. Assess the stage of heart failure?
- D. What additional tone can be heard in this case?

Solution of the situational task:

- A. mitral stenosis
- B. echocardiography, ECG, phonokg
- C. HF 2a; 2c - with congestion in the lungs
- D. additional tone, quail rhythm, Graham-Still noise

3. The patient has sharp shortness of breath at rest, swelling of the legs. Pronounced cyanosis. The mucous membrane of the oral cavity is pale with a cyanotic shade. The jugular veins are dilated, swollen. A positive venous pulse is determined. A heartbeat is palpated. The borders of the heart are expanded to the right. When auscultating at the base of the xiphoid process, a systolic murmur is heard.

- A. What kind of heart damage can you think of?
- B. What size should this patient's liver be?
- C. What is the most likely sonority of the I tone in this case?
- D. What happened to the limits of absolute heart dullness?

Solution of the situational task:

- A. insufficiency of the 3-leaf valve
- B. increased
- B. weakening
- G. increased, shifted to the right

4. Patient I., 30 years old, turned to the doctor with complaints of shortness of breath during physical exertion, rapid fatigue. In the anamnesis - rheumatism.

Objectively: attention is drawn to the sharp pallor of the skin and mucous membranes of the oral cavity. The pulse is fast, high. Blood pressure 180/50 mm Hg. Visible shaking of the head, synchronous with heart contractions, positive Quincke capillary pulse, pulsation of carotid arteries. The apical impulse is shifted down and to the left, it is high and spilled. The left border of the heart is sharply expanded to the left. The aortic configuration of the heart is determined by X-ray

of the chest. The liver and spleen are not enlarged.

- A. Your possible diagnosis?
- B. What data will you receive during auscultation of the heart and blood vessels?
- A. Will the limits of absolute heart dullness change?
- D. Determine the stage of heart failure?

Solution of the situational task:

- A. insufficiency of the aortic valve
- B. 1 and 2 sound weakened, presystolic murmur, Flint's murmur at the apex; holodiastolic murmur on the aorta
- C. Yes, shifted to the left
- D. 1st stage

5. Patient Z., 31 years old, complains of shortness of breath at rest, swelling of the lower extremities, pain in the right hypochondrium. He has been suffering from rheumatic heart disease for 20 years.

During examination, pronounced acrocyanosis, swelling of the legs. Mild cyanosis of the mucous membrane of the oral cavity. Respiratory rate 30 per minute. In the lungs in the lower parts, there are small bubbling wet rales. The heart is enlarged in all directions. Ist tone at the apex is increased, systolic murmur. Accent IInd tone on the pulmonary artery. The pulse is small, 90 per minute. The liver protrudes 3 cm below the edge of the costal arch.

- A. Which heart lesion should be considered?
- B. What can be additionally heard during auscultation of the heart?
- V. What changes are most likely on the ECG in this case?
- D. Assess the stage of heart failure?

Solution of the situational task:

- A. mitral stenosis
- B. additional tone, quail rhythm, Graham-Still's noise
- C. Right shift, high and extended P, atrial fibrillation
- D. 2B

6. The patient is troubled by shortness of breath, pain in the region of the heart. On examination, pallor of the skin and mucous membranes of the oral

cavity, pulsation of the carotid arteries. The borders of the heart are enlarged to the left and down. A presystolic murmur is heard at the apex. On aorta the IInd tone is sharply weakened, diastolic noise is present. The pulse is fast, high, big. Blood pressure 140/90 mm Hg. On the ECG – shift to the left, signs of hypertrophy of the left ventricle. X-ray - enlargement of the left ventricle with an emphasized cardiac waist.

- A. What is your diagnosis?
- B. How to evaluate the presystolic murmur at the top of the heart?
- C. What is the configuration of the heart in this case?
- D. What will be the melodiousness of the I tone?

Solution of the situational task:

- A. aortic insufficiency
- B. Flint noise
- C. aortic
- D. weakened

7. Patient T., 40 years old, turned to a rheumatologist with complaints of chills, sweating, temperature rise during the month to 37.5-38.0°C. She has a history of rheumatism, mitral valve insufficiency, for which she is being treated by a rheumatologist.

Objectively: pallor of the skin with a moderate jaundice shade, scattered single petechial rash. The pulse is accelerated, rhythmic, satisfactory filling. The heart is dilated to the left - 2 cm outward from the mid-clavicular line, an apical impulse in the area of the 6th intercostal space. I tone on the apex is weakened, II tone is weakened on the aorta. A systolic murmur is heard at the apex and a diastolic one in the II intercostal space on the right. Blood pressure 150/60 mm Hg. Abdomen: moderately enlarged liver and spleen.

- A. What should the doctor suspect?
- B. What study should he prescribe to confirm the diagnosis?
- C. Give a description of the apical impulse?
- D. Is it possible in this case to have a symptom of Musse?

Solution of the situational task:

- A. secondary bacterial endocarditis
- B. Echo, blood for sterility

- C. spilled, shifted to the left
- D. yes, with aortic insufficiency

8. An emergency doctor was called to the patient K., 60 years old. The patient complained of a sharp pain behind the sternum, of a pressing nature, which spread to the left arm, neck, and jaw and increased sharply when moving.

Objectively: moderate pallor of the skin, frequent pulse. Heart: the left border is widened, the I tone is weakened at the apex, the II tone is increased at the pulmonary artery, tachycardia.

- A. What pathology of the cardiovascular system should the doctor think about?
- B. What additional research should he conduct?
- C. How to explain the radiation of pain?
- D. The reason for the strengthening of the II tone on the pulmonary artery?

Solution of the situational task:

- A. coronary syndrome
- B. ECG, cardiac enzymes
- C. spreading along the course of the vascular-nerve bundle
- D. 2 tone is increased due to spasm of the pulmonary artery

9. The patient complains of pain in the region of the heart that worsens with physical exertion. During the examination, pallor of the skin and mucous membranes of the oral cavity, high apical impulses are determined. The borders of the heart are shifted to the left and down. I tone on the apex and II tone on the aorta are weakened. Systolic murmur on the aorta. On the ECG, a leftogram, signs of left ventricular hypertrophy

- A. What kind of heart damage should be considered?
- B. What data will you get when examining the pulse?
- C. Where is the systolic murmur directed?
- D. What will happen to the heart waist?

Solution of the situational task:

- A. Aortic stenosis
- B. small filling
- C. on the vessels of the neck

D. is underlined

10. The patient came in with complaints of chest pain, accompanied by a feeling of "lack of air", general weakness. Pain is not relieved by taking nitroglycerin.

Objective: The skin is pale, wet, cyanosis of the mucous membrane of the oral cavity. The borders of the heart are enlarged to the left to the mid-clavicular line, tones are dull, arrhythmic. The pulse is 100 per minute, small. Blood pressure 90/60 mm Hg. On the ECG in the II and III leads, there is an arcuate elevation of ST, ventricular extrasystoles.

- A. What disease can you think of?
- B. Specify the stage of the disease?
- C. What complication did this patient have?

Solution of the situational task:

- A. acute myocardial infarction
- B. acute
- C. cardiogenic shock

11. Patient D., 23 years old, is bothered by shortness of breath and palpitations during normal physical exertion, attacks of inspiratory shortness of breath at night, hemoptysis, low-grade fever. History: rheumatism since 15 years old.

Objective: cyanosis of the lips, mild cyanosis of the mucous membrane of the oral cavity. "Mitral butterfly". The apical impulse is not palpable, a diastolic "cat's purr" is determined. The right border of relative heart dullness is located in the IV intercostal space 3 cm outward from the right edge of the sternum, the upper border is at the upper edge of the II rib, the left border is in the 5th intercostal space 1.5 cm inward from the midclavicular line. Auscultation: "quail" rhythm, the I tone at the apex is loud, clapping, accent of the II tone on the pulmonary artery. At the top - a diastolic murmur.

- A. Name the syndromes of damage to internal organs? Which heart valve is affected?
- B. What additional research methods are necessary to confirm the diagnosis?

Solution of the situational task:

- A. Syndrome of insufficient blood circulation. Mitral valve

stenosis syndrome.

B. To confirm the diagnosis, it is necessary to perform echocardiography, a study of the titer of antibodies to beta-hemolytic streptococcus, the level of proteins of the acute phase of inflammation, chest X-ray.

12. The patient is 18 years old, there are no complaints. A prophylactic examination revealed an extended, high, increased apical beat in the 5th intercostal space 1.5 cm outward from the midclavicular line. The left limit of relative cardiac dullness is shifted to the left by 1.5 cm from the mid-clavicular line, the upper limit is at the upper edge of the II rib. Auscultation: the rhythm of heart contractions is correct, the first sound is weakened, the accent of the second sound is on the pulmonary artery. At the apex, a systolic murmur is heard, which is directed to the left axillary region, the point of Botkin-Erb.

A. Name the syndromes of damage to internal organs?

B. What additional research methods are necessary to confirm the diagnosis?

Solution of the situational task:

A. Mitral valve insufficiency syndrome.

B. Additional examinations are necessary to confirm the diagnosis: echocardiography, determination of the titer of anti-streptococcal antibodies, proteins of the acute phase of inflammation.

13. Patient D, 34 years old. During the last month, he has been bothered by a subfebrile temperature, periodically - chills and temperature rises up to 39.5 degrees, profuse sweat at night, weight loss by 4 kg. History: 1.5 months cholecystectomy due to phlegmonous cholecystitis.

Objective: condition of medium severity. The skin is pale, the color of "coffee with milk". Petechial rash on the skin of the body, hands and feet. Carotid dance. The apical pontum is dome-shaped in the 6th intercostal space along the front-axillary line. Auscultation: heart rhythm is correct, tachycardia. The first tone is weakened, the second tone is weakened on the aorta, a diastolic murmur is heard on the aorta, which is directed to the point of Botkin-Erb and to the apex of the heart. The pulse is high and fast, frequent. Blood pressure on both hands is 160/90 mm Hg.

A. Name the syndromes of damage to internal organs? Preliminary diagnosis?

B. What additional research methods are necessary to confirm the diagnosis?

Solution of the situational task:

A. Syndrome of bacteremia, toxemia, syndrome of endocardial damage, syndrome of aortic insufficiency. The diagnosis is bacterial endocarditis.

B. To confirm the diagnosis, it is necessary to perform echocardiography, blood cultures.

14. Patient L, 74 years old, complains of squeezing pains behind the sternum at the slightest physical exertion.

Objective: The skin is pale, the mucous membranes of the oral cavity are slightly cyanotic, the turgor and elasticity of the skin are reduced. Pulse - 62 per minute. The apical impulse is dome-shaped, in the 6th intercostal space along the front-axillary line. Auscultation: I tone on the apex is weakened, II tone is weakened on the aorta. A rough, scraping systolic noise is heard on the aorta, which is made on the vessels of the neck and in the interscapular area.

A. Name the syndromes of heart damage.

B. Preliminary diagnosis?

Solution of the situational task:

A. Aortic stenosis syndrome, angina pectoris syndrome.

B. CHD: stable angina pectoris, IV FC. Aortic stenosis.

15. Patient B, 36 years old, is concerned about shortness of breath during minor physical exertion, a feeling of interruptions in the work of the heart. History: 2 weeks ago - SARS.

About: the apical beat is palpated in the 5th intercostal space 2 cm outward from the midclavicular line, extended (3 cm). The left border of the heart in the 5th intercostal space is 2 cm outward from the midclavicular line. Auscultation: the I tone at the apex is weakened, the emphasis of the II tone is on the pulmonary artery. Heart rate - 84 per minute, arrhythmia. In the lower parts of the lungs, crepitation is heard, single wet, small, vesicular soundless rales. On the ECG,

single left ventricular extrasystoles, slowing of atrioventricular conduction (PQ interval = 0.26 sec.) Without loss of QRS complexes, biphasic T wave.

A. Name the syndromes of heart damage? Preliminary diagnosis?

B. What additional research methods are necessary to confirm the diagnosis?

Solution of the situational task:

A. Myocardial injury syndrome, arrhythmia syndrome, conduction disorder syndrome, circulatory failure syndrome. Previous diagnosis: Viral myocarditis. Ventricular extrasystole. AV-blockade of the 1st degree. HF IIA.

B. To confirm the diagnosis, it is necessary to perform echocardiography, determine the titers of antistreptococcal antibodies to rule out the rheumatic etiology of myocarditis, determine the titers of antibodies to the Coxsackie virus, ECHO, influenza A and B, and poliovirus, which most often cause myocarditis.

16. Patient R., 45 years old, suffers from headaches in the occipital, parietal, and temporal regions, more often in the morning. Periodically, on the background of stress, intense headaches occur, accompanied by nausea, flickering of flies in front of the eyes, dizziness.

When examining the oral cavity, hemorrhagic vesicles are found on the mucous membrane of the mouth and tongue. Blood pressure - 155/100 mm Hg. The pulse is high, solid - 60 per minute. The apical thrust is palpable in the 5th intercostal space 1.5 cm outward from the midclavicular line, wide, high, strong, resistant. The left border of relative cardiac dullness is shifted 1.5 cm outward from the midclavicular line. The first tone at the apex is weakened, the accent of the second tone is on the aorta.

A. Name the syndrome of damage to the circulatory organs, preliminary diagnosis.

B. What additional research methods are necessary to confirm the diagnosis?

Solution of the situational task:

A. Arterial hypertension syndrome. Preliminary diagnosis: Hypertensive disease of the 2nd stage, II stage.

B. It is necessary to perform additional methods to assess damage

to other target organs: examination of vessels of the eye fundus, dopplerography of vessels (aorta, cerebral, renal), examination of renal function tests, analysis of urine for protein and microalbuminuria.

17. A 58-year-old patient suffers from dull aching pains in the heart, weakness, low-grade fever in the evening. History: SARS 2 weeks ago.

Objective: The boundaries of the heart have not changed. During auscultation, weakening of all heart sounds. At the left edge of the sternum, a noise is heard without a clear connection with the phases of the heart's activity, which intensifies when the trunk is bent forward, and is not carried anywhere.

A. Name the syndromes of damage to internal organs, preliminary diagnosis?

B. Additional research methods to confirm the diagnosis?

Solution of the situational task:

A. Syndrome of pericardial damage. Preliminary diagnosis: fibrinous pericarditis.

B. To confirm the diagnosis – echocardiography.

18. Patient K, 48 years old, is bothered by squeezing pains behind the sternum, which first appeared 10 days ago during significant physical exertion. The pain radiates to the left shoulder, left arm, passes in peace in 5-7 minutes.

Objective: the patient is malnourished, BMI - 32. The apical impulse is not palpable. The left border of the heart is defined in the V between the ribs along the midclavicular line. Heart sounds are rhythmic, the first tone is weakened at the apex.

On the ECG at rest, there are signs of hypertrophy of the left ventricle. During daily monitoring, episodes of depression of the ST segment below the isoline > 2 mm in standard I, II and chest leads V3-6.

A. Name the syndromes of damage to internal organs, preliminary diagnosis?

B. Additional research methods?

Solution of the situational task:

A. Angina syndrome. Previous diagnosis: coronary artery disease,

angina that occurred for the first time.

B. It is necessary to perform echocardiography, bicycle ergometry; from laboratory methods - lipidogram, coagulogram, b/c blood analysis (glucose, electrolytes).

19. A 65-year-old patient complains of chest pain for the past 3 months. Pains of a compressive nature, occur when walking a distance of 50-100 m, radiate to the left shoulder and arm, are accompanied by a feeling of lack of air, last 10-15 minutes, are relieved by taking nitroglycerin after 1-2 minutes.

Objective: the left border of relative heart dullness is shifted to the left by 2 cm from the midclavicular line. The heart sounds are muffled, the first tone at the apex is weakened. The ECG shows depression of the ST segment below the isoline by 2 mm in the first standard, V4-6 chest leads.

A. Name the syndromes of damage to internal organs, preliminary diagnosis?

B. Additional research methods?

Solution of the situational task:

A. Angina syndrome. Previous diagnosis: coronary heart disease, stable angina pectoris, IV FC.

B. It is necessary to perform echocardiography, bicycle ergometry; from laboratory methods - lipidogram, coagulogram, b/c blood analysis (glucose, electrolytes).

20. Patient I., 65 years old, complains of strong squeezing pains behind the sternum, radiating to both hands, under the shoulder blades, and sharp weakness. The pain occurred during physical exertion, lasted for about an hour, nitroglycerin had no effect.

Objective: Condition is severe. The skin is pale, covered with cold sticky sweat, cyanosis of the lips and tip of the nose. When examining the oral cavity - desquamative glossitis, deep fissures of the tongue. Heart sounds are arrhythmic, dull. Heart rate - 88 per minute. Blood pressure - 100/70 mm Hg. On the ECG, there is an elevation of the ST segment above the isoline, which merges with the T wave in I, II standard leads and in V2-V4 chest leads, frequent left ventricular extrasystoles.

A. Name the syndromes of damage to internal organs, preliminary diagnosis?

B. What laboratory method can confirm the diagnosis?

Solution of the situational task:

A. Myocardial infarction syndrome, arrhythmia syndrome.
Preliminary diagnosis: coronary artery disease, acute myocardial infarction in the anterior-septal and apical regions. Ventricular extrasystole.

B. A troponin test should be performed to confirm the diagnosis.

21. A 66-year-old patient complains of sudden epigastric pain, nausea, vomiting twice, severe weakness, sweating. The pain lasts more than an hour and does not go away after taking antispasmodics and analgesics.

Objective: Moderate condition. There is pallor, cyanosis of the lips, cold sticky sweat on the forehead. When examining the oral cavity - desquamative glossitis, deep fissures of the tongue. The left border of relative cardiac dullness is shifted 1 cm to the left of the midclavicular line. The heart sounds are dull, rhythmic. The ECG revealed an elevation of the ST segment above the isoline in the III standard and AVF leads.

A. Name the syndromes of damage to internal organs, preliminary diagnosis?

B. What laboratory method can confirm the diagnosis?

Solution of the situational task:

A. Myocardial infarction syndrome. Preliminary diagnosis: coronary heart disease, acute myocardial infarction in the lower wall of the LV.

B. A troponin test should be performed to confirm the diagnosis.

22. A 74-year-old patient has been suffering from coronary heart disease for a long time, myocardial infarction 5 years ago. Shortness of breath and impending swelling on the legs have been bothering me for a long time. During the last seven days, the shortness of breath increased, appeared at rest, swelling of the legs does not go away, abdominal distension, heaviness in the right side under the ribs appeared.

Objective: condition of moderate severity, patient in orthopneic position, skin and sclera are jaundiced, acrocyanosis. The mucous membrane of the oral cavity is pale, with a cyanotic shade in the area of the palatal arches, the gum line.

Pronounced cyanosis of the lips and adjacent areas of the skin. Swollen neck veins, shortness of breath at rest - 28 per minute. Blood pressure - 100/70 mm Hg., pulse - 99 per minute, weak filling, rhythmic. The left border of relative heart dullness is shifted to the left by 2 cm. Heart auscultation: Heart sounds are rhythmic, dull. I tone is weakened at the apex, emphasis of II tone is on the pulmonary artery. When percussing the lungs - dullness on both sides of the angle of the shoulder blades. Over the areas of dullness, breathing is not audible, over the rest of the surface of the lungs, breathing is hard. Abdomen "frog-like", in the lateral flanks - dulling of percussion sound. The liver enters from under the costal arch by 5 cm, the edge is rounded, painful. Swelling of feet, legs, thighs.

A. Name the syndromes of damage to internal organs?

B. Explain the mechanism of symptoms and syndromes.

Solution of the situational task:

A. Chronic heart failure syndrome. Syndrome of insufficient blood circulation.

B. As a result of the transferred MI, there was remodeling of the myocardium, its hypertrophy, which was replaced by dilatation, therefore the left border of the heart was expanded and the heart sounds were dull. The contractility of the myocardium decreased, there were circulatory disorders in the form of blood stagnation in the small and large circles of blood circulation, anasarka. Compensatory neurohumoral reactions aimed at maintaining pressure and perfusion of internal organs increased myocardial dystrophy, caused salt and fluid retention in the body. Blood stagnation in the small circle of blood circulation and increased pressure in the pulmonary artery is indicated by the emphasis of the II tone on the pulmonary artery. Stiff breathing is associated with stagnation of blood in the small circle of blood circulation. A dull percussion tone below the angle of the shoulder blades is due to the effusion of transudate in the pleural cavities - hydrothorax. Congestion in the large circle of blood circulation is indicated by: swollen neck veins, enlarged liver, swelling of the legs, ascites.

23. A 33-year-old female patient was brought to the hospital with pronounced shortness of breath, hemoptysis, swelling of the lower extremities. History: mitral valve stenosis was diagnosed 12 years ago.

- A. Name the syndromes of heart damage.
- B. Describe the data of an objective examination of the patient, which can be detected during examination, percussion and auscultation of the heart.
- C. Determine the required scope of the examination.

Solution of the situational task:

- A. Mitral stenosis syndrome. Chronic heart failure syndrome.
- B. Examination: mitral butterfly (symmetrical cyanosis in the area of the cheeks and bridge of the nose). Palpation: epigastric pulsation; uneven pulse. An increase in the relative limit of cardiac dullness up and to the right (hypertrophy and dilatation of the left atrium and right ventricle) is determined by percussion. Auscultation: at the top of the heart, a clapping first sound is detected; after the second tone - the tone of the opening of the mitral valve; emphasis of the second tone on the pulmonary artery; a short mesosystolic murmur with presystolic amplification is heard at the apex, which does not go anywhere, intensifies when the patient is on the left side.
- C. It is necessary to conduct an echocardiogram and chest X-ray

24. A 47-year-old patient suffers from rheumatism, combined mitral heart defect with predominance of stenosis. Suddenly, the patient developed weakness in the right arm and right leg, impaired speech. The emergency physician found auscultatory data typical for combined mitral valve disease, atrial fibrillation, heart rate - 110 per minute, pulse - 85 per minute, pulse deficiency .

- A. Name the syndromes of damage to the cardiovascular system present in the patient.
- B. What is the reason for sudden clinical manifestations?
- C. What studies must be performed?

Solution of the situational task:

- A. Mitral valve damage syndrome (stenosis and insufficiency), arrhythmia syndrome (atrial fibrillation).

B. There was an acute violation of cerebral blood circulation. A possible source of blood clots is the left atrium, where they could have formed during atrial fibrillation.

C. It is necessary to appoint a consultation with a neurologist, a CT scan of the brain, and echocardiography.

25. A 35-year-old man turned to a cardiologist with complaints of chills, profuse night sweats, arthralgias, pain in the lumbar region, an increase in temperature during the month to subfebrile numbers with a periodic rise to 39.5°. History: at the age of 18, insufficiency was detected mitral valve.

Objective: the skin is pale, with a moderate yellowish tint. In the area of the conjunctiva - single petechiae. Pulse - 90 per minute, rhythmic. The apical impulse is palpated in the area of the 6th intercostal space along the front axillary line. The left border of the relative dullness of the heart is along the front axillary line. Heart tones are rhythmic. I tone at the top is weakened. A rough pansystolic murmur is heard at the top of the heart, which is carried to the left axillary region; the protodiastolic murmur on the aorta, at the point of Botkin-Erb, is made at the apex of the heart. Blood pressure - 150/40 mm Hg. Percussion: moderately enlarged liver and spleen.

A. Name the syndromes of damage to the cardiovascular system.

B. What studies must be prescribed to confirm the diagnosis?

Solution of the situational task:

A. Mitral valve insufficiency syndrome. Aortic valve insufficiency syndrome.

B. It is necessary to appoint a blood culture with determination of the sensitivity of the flora to antibiotics; echocardiography to detect bacterial vegetations on the leaflets of the mitral and aortic valves.

26. A 57-year-old patient complains of weakness, periodic throbbing headaches. She has a history of infectious endocarditis.

Objective: pallor of the skin, pulsation of the carotid arteries, shaking of the head in systole. The apical impulse is shifted to the left and down, wide, high, strong, resistant. Percussion: the left border of the relative dullness of the heart is 1

cm outward from the left mid-clavicular line. The diameter of cardiac dullness is 16 cm. The configuration of the heart is aortic. During auscultation of the heart, the II tone is sharply weakened on the aorta; a diastolic murmur is heard at the apex and aorta, at the point of Botkin-Erb.

A. In which syndrome of heart damage is this symptom observed?

B. What research methods should be prescribed to confirm this heart defect?

Solution of the situational task:

A. Aortic valve insufficiency syndrome.

B. For diagnosis - echocardiography.

27. A 37-year-old patient complains of shortness of breath with slight physical exertion, periodically notes an accelerated heartbeat. In the anamnesis - rheumatism.

Objective: cyanotic symmetrical blush on the face, slight cyanosis of the mucous membrane of the oral cavity. When assessing the pulse - "pulsus differens". When palpating the region of the heart, a heart impulse is determined, a symptom of diastolic "cat's purring" in the region of the apex. Percussion cardiac dullness shifted up and to the right. A three-part rhythm is heard during auscultation. I tone at the top is splashing. On the pulmonary trunk, the accent of the II tone is determined. At the top - a diastolic murmur.

A. What syndrome can it be? Name the most characteristic rhythm disturbance in this syndrome.

B. What studies must be conducted to verify the diagnosis?

Solution of the situational task:

A. Mitral stenosis syndrome. Arrhythmia syndrome. The most characteristic rhythm disturbance is atrial fibrillation.

B. To confirm the diagnosis – ECG, daily ECG monitoring, echocardiography.

28. Patient O, 63 years old, sought medical help with complaints of squeezing pain behind the sternum and in the heart region, which occurs after psycho-emotional and physical stress, radiates to the left arm, shoulder blade, is accompanied by the fear of death, passes at rest or when taking nitroglycerin through 2-3 minutes. From the anamnesis: increased blood pressure during 20 years (maximum figures 180/110 mm Hg, adapted to 130/80 mm Hg). The

squeezing pain behind the sternum has been bothering me for the past two years, it is relieved by taking nitroglycerin after 2-5 minutes. He has been smoking 12-15 cigarettes a day for 40 years.

Objective: increased nutrition. Xanthelasma on the eyelids, hemorrhagic vesicles on the mucous membrane of the mouth and tongue. Percussion, the borders of the heart are shifted to the left and down. The heart tones at the apex are weakened, the accent of the II tone over the aorta. Blood pressure 180/100 mm Hg, heart rate 78/min

A. Name the syndromes present in the patient.

B. What are the risk factors for the development of CHD in this case?

Solution of the situational task:

A. Signs of angina pectoris (CHD) and arterial hypertension syndrome.

B. Arterial hypertension, smoking, obesity.

29. Patient K., 36, has a fever up to 38.5 C, cough with rusty sputum, pain in the right half of the chest. On examination, the right half of the chest is lagging in the act of breathing, percussion dullness in the lower parts of the lungs along the paravertebral and scapular line from the 7th rib, auscultation – crepitation.

A.. What data indicate the syndrome of lobe compaction of lung tissue.

B. What is the reason for the appearance of the "rusty" color of the patient's sputum.

Solution of the situational task:

A. Data: lagging of the right half of the chest in the act of breathing, dulling of the percussion sound, the presence of crepitations indicate the syndrome of lobe compaction of the lung tissue.

B. The color of the sputum is due to the appearance of hemosiderin in the sputum in the stage of red burning in croupous pneumonia.

30. Patient A., 45 years old, with complaints of suffocation attacks during the flowering period of the poplars, during the examination revealed a barrel-shaped chest, a percussion box sound over the entire surface of the lungs, Krenig fields up to 8 cm, lowering of the lung borders by 1 cm along all lines. Auscultation – dry, whistling rales over the entire surface of the lungs.

A. What disease are indicated by complaints and physical examination data.

B. Specify the leading diagnostic method for bronchial obstruction syndrome in bronchial asthma.

Solution of the situational task:

A. Complaints (attacks of suffocation), physical examination data (barrel-shaped chest, box-shaped percussion sound, lowering of the lung borders on both sides, expansion of Krenig's fields, dry and wheezing wheezing) indicate the presence of bronchial asthma.

B. The leading diagnostic method is spirometry (to confirm the hypothesis of airflow limitation, it is important to reduce FEV₁, and the FEV₁/FLV ratio is less than 80%).

31. The patient complains of shortness of breath after a chest injury. On examination, the bulging of the intercostal spaces on the right and the lagging of this half of the chest during breathing. Percussion to level 3 rib tympanic sound. Auscultative absence of vesicular breathing on the right and breath sounds.

A. What pulmonary syndrome are indicated by the physical examination data.

B. What additional research is needed to confirm the physical examination data and establish a final diagnosis.

Solution of the situational task:

A. Findings on examination - bulging of the intercostal spaces on the right and lagging of this half of the chest during breathing, tympanic sound on percussion and the absence of respiratory sounds are signs of pneumothorax syndrome.

B. To confirm the diagnosis, an X-ray examination of the chest organs is necessary (absence of vessels in the peripheral parts of the lung on the side of the lesion; lung collapse; displacement of the mediastinum, change in the position of the diaphragm).

32. Patient N., 32 years old, 2 weeks after suffering an acute respiratory disease, pains in the right half of the chest, increasing during breathing, coughing and decreasing when lying on the affected side, weakness, dry cough and temperature rise to 37.8 °C. Objectively: lagging of the right half of the chest in the act of breathing. RR 24 per minute. In the lower parts of the lungs on the right, a

noise is detected, which is heard during inhalation and exhalation, does not change localization when coughing and persists during a test with imitation of breathing (when holding breath, the movement of the anterior abdominal wall causes a displacement of the leaves of the visceral pleura).

A. Specify the cause of pain in the right half of the chest.

B. Specify objective data that confirm the assumption about the cause of the patient's pain syndrome.

Solution of the situational task:

A. The cause of complaints of pain in the right half of the chest may be pleural damage.

B. Damage to the pleura confirms the presence of noise (pleural friction noise), which is heard during inhalation and exhalation and is preserved during the test with imitation of breathing.

33. Patient V., 58 years old, an engineer, came to the hospital's reception department with complaints of frequent irregular heartbeat, accompanied by shortness of breath with minor physical exertion, weakness, unpleasant sensations in the heart area, which occurred 2 hours ago while working on a summer cottage. Anamnesis: the feeling of palpitations, more often during exercise, has been noted over the past year. These episodes were short-lived and passed independently in a state of rest. During the analysis of the outpatient card for the past 2 years, a repeatedly elevated cholesterol content was noted (7.6 mmol/l - low-density lipoproteins predominate). Objectively: condition of medium severity, hypersthenic type of constitution. Vesicular breathing in the lungs, no wheezing, heart rate 19 per minute. The left border of the heart is in V intercostal space, along the mid-clavicular line. BP - 150/100 mm Hg. The pulse on the radial arteries is frequent, arrhythmic, frequency - 102 in 1 minute. Deficit pulse 10 in 1 min. Heart tones at the apex have an unstable sonority, arrhythmic, heart rate - 112 in 1 minute. The abdomen is soft, painless. The liver is not enlarged.

A. Make a preliminary diagnosis.

B. Plan for further examination of the patient.

Solution of the situational task:

A. CAD: rhythm disturbance in the type of paroxysmal atrial fibrillation (tachystolic form).

B. Follow-up plan: ECG, 24-hour Holter ECG monitoring, general blood count, general urine analysis, blood glucose, lipidogram, coagulogram, ultrasound of the heart, consultation with an ophthalmologist, consultation of endocrinologist.

34. Patient D., 55 years old, a teacher in a secondary school, went to see a cardiologist complaining of a feeling of interruptions in the area of the heart. Anamnesis: he has been experiencing similar sensations for about a year, however, during the last month, the interruptions have become more frequent, often accompanied by weakness and even dizziness. The appearance of interruptions is more often associated with physical stress. He also notes periodic bouts of squeezing pains behind the sternum during fast walking, occurring at rest. Objectively: the general condition is satisfactory, the skin is of normal color and moisture. Vesicular breathing in the lungs, no wheezing. BP - 140/95 mm Hg. Pulse - 74 in 1 min., arrhythmic. The borders of the heart are not changed. Heart sounds are muffled, arrhythmic - on the background of a regular rhythm, an extraordinary contraction or a longer interval between heart contractions is periodically determined, heart rate - 76 in 1 minute. The abdomen is soft, painless. The liver is not enlarged. Laboratory data and instrumental research methods: 1. General blood analysis - Hb - 144 g/l, l - $6.0 \times 10^9/l$, ESR - 4 mm/h. 2. AST - 5 units/l, ALT - 4 units/l, CI - 0, PTI - 102%, coagulation - - 8 min., cholesterol - 7.8 mmol/l (low-density lipoproteins predominate). 3. Blood sugar analysis - blood glucose - 4.5 mmol/l. 4. General analysis of urine - ud. weight - 1020, no protein, no sugar, p - 1-2 in p/zr. 5. ECG polytopic extrasystole

A. Make a preliminary diagnosis.

B. Plan of follow-up survey.

Solution of the situational task:

A. CAD: rhythm disturbance in the type of extrasystole (probably ventricular).

B. Follow-up plan: 24-hour Holter monitoring, echocardiography, cycle ergometry (treadmill test), ophthalmologist consultation.

35. Patient Ch., 61 years old, an artist, complained of paroxysmal pain behind the sternum and in the left half of the chest, radiating to the hands, occurring during physical exertion, passing at rest for 3-4 minutes. He did not take nitrates. Medical history: since childhood, he was registered with a rheumatologist with a diagnosis of rheumatism with mitral heart disease. Pain in the heart began to bother me 2 years ago during physical exertion. Objectively: Satisfactory condition. Skin and mucous membranes of normal color. Vesicular breathing in the lungs. The borders of the relative dullness of the heart are extended to the left by 1.5 cm. Tones of the heart are muffled, rhythmic. Heart rate - 76 per minute. Blood pressure 105/60 mmHg. Additional studies: ECG at rest - sinus rhythm with a heart rate of 70 per minute. There are no ischemic signs. Clinical analysis of blood and urine without pathology. Blood cholesterol is 5.79 mmol/l. Echocardiography: no myocardial hypertrophy was detected, normal systolic function (FE - 60%), insufficiency of the mitral valve of the 1st century.

A. Make a preliminary diagnosis

B. Make a plan for follow-up examination to verify the diagnosis.

Solution of the situational task:

A. Preliminary diagnosis: coronary heart disease, angina pectoris 2-3 FC.

B. Necessary studies: bicycle ergometry or treadmill test, Holter ECG, lipidogram, blood glucose. If necessary, coronary angiography.

Commentary: according to the clinical picture, there is hidden coronary insufficiency, which can be verified by dosed physical exertion on the ECG with the help of bicycle ergometry, a treadmill test or a Holter ECG, which will reveal ischemic signs that are not detected at rest. Lipidogram and determination of glucose will allow to clarify the severity of atherosclerosis and rule out complications of CHD with diabetes. With severe angina pectoris 3-4 FC, especially when the therapy is ineffective, performing coronary angiography and endovascular surgical treatment.

DISEASES OF DIGESTIVE SYSTEM

1. A 26-year-old patient, a locksmith, was admitted to the hospital with complaints of a burning sensation and soreness of the tongue, pain in the epigastrium 2-3 hours after eating, night pains, relieved after taking soda, painful heartburn, belching, constipation. He has a history of alcohol abuse, smokes a lot, does not follow a diet.

Objective: soreness in the epigastrium, more due to slight muscle tension in this area. Acidity of gastric juice is increased.

- A. State a preliminary diagnosis?
- B. What are the pains that occur 2-3 hours after eating called?
- C. Name the risk factors of this disease?
- D. In what ways can the acidity of gastric juice be determined?

Solution of the situational task:

- A. Ulcer of the duodenum
- B. late pains
- C. helicobacter pylori, NSAIDs, alcohol
- D. titration, probing

2. A 53-year-old patient, an engineer, came to the clinic with complaints of lack of appetite, an aversion to meat food, a feeling of heaviness in the epigastric area, general weakness. For many years, he was observed for chronic gastritis. In the last 4-6 months, pain in the epigastric area has become permanent, he has lost 6 kg in weight.

Objective: pale, there is pain and tension of the abdominal wall in the epigastric region. When examining the oral cavity: the entire surface of the tongue is covered with a dense white coating. When examining the gastric juice of Achilles, stool is positive for occult blood.

- A. State a preliminary diagnosis?
- B. What can be found when examining the lymph nodes in this pathology?
- C. What is achillea?
- D. What is the name of fecal occult blood analysis, what is its diagnostic value and how is the patient prepared for this study?

Solution of the situational task:

- A. stomach cancer
- B. left supraclavicular lymph node may be enlarged
- C. there is no hydrochloric acid in gastric juice
- D. Gregersen, restrict food containing iron

3. A 42-year-old patient complains of aching pain, a feeling of fullness in the epigastric region, belching after eating, nausea, vomiting, poor appetite, diarrhea, bloating. The pain syndrome has been bothering me for 2 years.

Objectively: reduced nutrition, reduced skin turgor, coated tongue, soreness in the epigastrium. When examining the gastric juice, total acidity is 10, free hydrochloric acid is 0, after administration of 0.6 mg of histamine, free hydrochloric acid is 0. The reaction to lactic acid is negative. Gastroscopy shows pallor and thinning of the mucous membrane.

- A. What stomach pathology can you think of?
- B. Why is there a tendency to diarrhea with this pathology?
- C. What is the patient's body weight, if a simple histamine test was performed on her during the study of gastric juice?
- D. What does the presence of lactic acid in gastric juice indicate?

Solution of the situational task:

- A. chronic atrophic gastritis
- B. there are no gastric acid, microorganisms multiply and fermentation occurs
- C. 0.008 HIST. For 1 kg. Weight = 75 kg
- D. about the presence of fermentation rods

4. Patient R., 43 years old, pharmacist. He complains of hunger, late and night pains in the epigastric area, heartburn, belching, a feeling of "burnt" tongue, which intensifies closer to the evening. Appetite is preserved and even increased.

He has been sick since his youth, exacerbations often occur in the autumn season, he eats irregularly, he smokes a lot.

Objective: reduced nutrition, with superficial and deep palpation of the abdomen, soreness in the pyloroduodenal zone, acidity and secretion on an empty stomach and after stimulation - increased. Radiologically - a "niche" in the wall of

the bulb of the duodenum, there is hidden blood in the stool.

- A. What disease should be considered?
- B. Which belching is characteristic of increased acidity of gastric juice?
- C. Which defecation disorder is more common with this pathology?
- D. Name the possible complications of this disease?

Solution of the situational task:

- A. Ulcer of the DPK
- B. sour belching
- C. constipation
- D. perforation, stenosis of the pylorus

5. Patient B., 35 years old, a turner, went to the hospital with complaints of constant, aching pains of a girdling nature, radiating to the back, especially intense at night.

Objectively: tenderness during palpation of the epigastric area. The mucous membrane of the oral cavity is hyperemic. The tongue is coated with a yellow-white coating. In the blood - leukocytosis, a shift of the leukocyte formula to the left, an increase in ESR.

- A. Make a preliminary diagnosis?
- B. Name the dyspeptic disorders most characteristic of this pathology?
- C. What additional studies should be conducted in this case?
- D. What are the most frequent causes of the development of this pathology?

Solution of the situational task:

- A. acute pancreatitis
- B. nausea, vomiting, loose stools
- C. blood amylase, urine diastasis, ultrasound
- D. alcohol, injuries, diseases of the biliary tract, medications, vasculitis, penetration of the duodenum ulcer

6. A 48-year-old patient, an accountant, went to the polyclinic with complaints of intermittent spasm-like abdominal pain, chronic constipation, headache, irritability.

The results of the coprological examination revealed that the feces have a solid consistency, the shape of "sheep feces", the color is brown, and there is

mucus on the surface.

- A. What is your diagnosis?
- B. Name the main pathogenetic mechanism of this disease?
- C. What objective data will you receive during the examination of the gastrointestinal tract?
- D. What additional research methods will you prescribe to confirm the diagnosis?

Solution of the situational task:

- A. spastic colitis, intestinal irritation syndrome
- B. toxic effect of collotropic substances => autoaggression on the epithelium of the intestinal wall
- C. palpation: the abdomen is soft, but painful areas of the intestine are often found
- D. rectomanoscopy

7. Patient K., 44 years old, a worker, went to the polyclinic with complaints of a feeling of fullness and pain in the epigastrium, vomiting of food eaten the day before, general weakness, weight loss. According to the patient, it was established that he has been suffering from gastric ulcer since the age of 30. The last exacerbation was at the age of 33.

Objectively: dryness and flaking of the skin, turgor and elasticity are reduced. Plaque on the tongue is grayish-white in color. Peristalsis is visible in the stomach. A splash noise is determined during percussion.

- A. What is the most likely diagnosis?
- B. Highlight the main syndromes of this disease?
- C. What additional methods must be prescribed to confirm the diagnosis?
- D. Name the acute complications of peptic ulcer disease?

Solution of the situational task:

- A. - pyloric stenosis
- B. - dyspeptic
- C. - FGDS, X-ray with barium
- D. - bleeding, perforation, penetration, malignancy

8. Patient A., 36 years old, was admitted to the hospital with complaints of

pain in the right hypochondrium radiating to the epigastric region and under the right shoulder blade, low-grade fever. She has been ill for about 5 years, the deterioration occurred after eating fatty food.

On palpation, soreness at the point of the gall bladder, a positive phrenic symptom. During duodenal probing, a large number of leukocytes and epithelial cells are found in portion "B".

- A. What disease does the patient have?
- B. How can one get portion "B"?
- Q. What factors lead to this disease?
- D. In what cases is a positive Courvoisier symptom determined?

Solution of the situational task:

- A. Housing and communal services
- B. MgSO₄ 30%; warm => bubble test
- C. nutritional disorder, tank. infections, protozoan diseases,
- D. a palpable enlarged painless gallbladder, positive for mechanical obstruction of the outflow of bile below the bladder (most often – cancer of the head of the pancreas)

9. During the examination of the patient G., 48 years old, an increase in the abdomen was revealed, more pronounced in the lower part. The navel is bulging. On the skin of the chest telangiectasia, on the skin of the abdomen - dilated veins, ascites is determined. The liver is enlarged, dense, its edge is sharp, the surface is finely tuberos, painless on palpation. The mucous membrane of the oral cavity is pale pink with a cyanotic tint. The tongue is swollen, its lateral and ventral surfaces are cyanotic, the filiform papillae are atrophied. Anemia, leukopenia in the blood. Hepatitis B in the anamnesis.

- A. What disease should be considered?
- B. Highlight the main syndromes of this disease?
- C. What additional research methods will help to confirm your diagnosis?
- D. What factors lead to this disease?

Solution of the situational task:

- A. liver cirrhosis
- B. Hepatolienal syndrome - enlargement of the liver and spleen,

syndrome of portal hypertension

C. liver tests, coagulogram, ultrasound, liver biopsy

D. alcohol, viruses, medications, toxins

10. Patient 3., 68 years old, came in with complaints of lack of appetite, abdominal distension, sudden weight loss, constant pain in the right hypochondrium.

On examination, he is exhausted, the liver is lumpy and has a stony consistency. The dimensions of the liver according to Kurlov are 14, 12, 10 cm. In the blood, anemia, leukocytosis.

A. What should you think about?

B. What additional research methods can be used to clarify the diagnosis?

C. What complications of this disease do you know?

D. Name the normal dimensions of the liver according to Kurlov?

Solution of the situational task:

A. liver cancer

B. liver biopsy, blood test, laparoscopy

C. hepatic coma

D. normal dimensions according to Kurlov 10.9.8 cm

11. Patient P., 58 years old, came in with complaints of difficulty swallowing solid food, vomiting of undigested food, weight loss. A history of alkali poisoning.

During the examination - pallor of the skin, exhaustion.

A. What leading syndrome can be identified?

B. What is the origin of this syndrome - organic or functional?

Solution of the situational task:

A. Dysphagia syndrome.

B. This phenomenon of organic nature.

12. Patient G., 46 years old, complains of diarrhea up to 4 times a day, belting pains in the epigastrium, low-grade fever. In the anamnesis, he abuses alcohol, the day before the disease he consumed fried fatty meat.

Objectively: The mucous membrane of the oral cavity is hyperemic. The tongue is coated with a yellow-white coating. The abdomen is distended, pain during palpation over the entire front abdominal wall, more in the left hypochondrium. Upon deep palpation, the sigmoid colon is painful, spastically shortened, and grumbles.

A. Preliminary diagnosis? What symptoms are pathognomonic for this pathology?

B. What coprogram data will confirm the preliminary diagnosis?

Solution of the situational task:

A. Acute pancreatitis. Pathognomonic symptoms: belting nature of pain, soreness in the left half of the abdomen, characteristic diarrhea.

B. Polyfaecalia and steatorrhea.

13. Patient R., 47 years old, came in with complaints of sharp, "dagger" pain in the epigastrium, which arose suddenly after drinking alcohol, one-time vomiting of stomach contents, without relief.

Objective: the patient lies on his side with his knees pulled up to his chest, the abdomen is sharply painful upon palpation in the epigastric area and in the pyloroduodenal areas. Examination of the oral cavity - the tongue is covered with white plaque.

A. Previous diagnosis?

B. What other symptoms can be detected during palpation of the anterior abdominal wall?

Solution of the situational task:

A. Gastric ulcer disease. Perforation of the ulcer.

B. Protective muscle tension and a positive symptom of peritoneal irritation can be detected

14. Patient N., 47 years old, a teacher, went to the hospital with complaints of acute pain in the right hypochondrium with radiation to the right scapula, vomiting with bile, a change in the color of urine (the color of beer) and discolored stool.

History: acutely ill, after eating fatty food.

Objective: hypersthenic, slight ictericity of the sclera and mucous membranes of the soft palate. Fever. When palpating the abdomen, there is a positive Ortner's symptom, tension of the muscles of the anterior abdominal wall.

Laboratory indicators: increased total bilirubin due to the direct fraction, alkaline phosphatase - increased. Urine analysis: urobilin - negative, bilirubin +++. Stercobilin stool - neg.; Clinical blood analysis: leukemia. -15.1, ESR-25 mm / h.

A. Previous diagnosis?

B. What is the nature of jaundice?

Solution of the situational task:

A. Gallstone disease, cholecystitis. Hepatic colic.

B. Jaundice has a mechanical character.

15. A 50-year-old man complained of constant pain in the epigastrium that worsened after eating, nausea, abdominal distension, and weight loss of 5 kg. Pain in the epigastrium bothers for 3 months, sharply increases after eating, which caused the refusal to eat at the height of the pain and progressive weight loss. Additionally, it was established that for 12 years he has been drinking alcohol almost daily in the amount of 200 - 250 ml of strong spirits, smoking 1 - 2 packs of cigarettes per day.

A. What is the preliminary diagnosis.

B. What diseases should be differentially diagnosed.

C. What studies should be conducted to clarify the diagnosis.

Solution of the situational task:

A. Chronic pancreatitis.

B. Alcoholic liver disease. Gastric ulcer disease and stomach cancer.

C. Amylase of blood and urine, lipase, general blood analysis (number of leukocytes), ultrasound of abdomen, FGDS, exocrine secretory function of pancreas (coprogram, elastase I in feces).

16. A 30-year-old woman turned to a gastroenterologist at the polyclinic at her place of residence with complaints of pulling pain and heaviness in the right hypochondrium and epigastric region, which occur mainly after eating, nausea, bitterness in the mouth. The specified complaints first appeared in the last trimester of pregnancy and disturbed for 10 months. Adherence to the diet (exclusion of fatty, fried and spicy dishes) did not bring significant relief. Objectively: palpatory

sensitivity in the area of the right hypochondrium, weakly positive Ortner's symptom.

A. Preliminary diagnosis and which diseases should be differentially diagnosed.

B. What studies should be conducted to clarify the diagnosis.

Solution of the situational task:

A. Biliary dysfunction; differential diagnosis of chronic stoneless cholecystitis, chronic obstructive pulmonary disease, functional dyspepsia.

B. Clinical and biochemical analyzes of blood: bilirubin, fractions, AST, ALT, GHTP, alkaline phosphatase, clinical urinalysis, ultrasound of abdominal organs (zone of interest - gall bladder), FGDS with examination of the large duodenal papilla.

17. A 53-year-old man consulted a doctor due to difficulty in swallowing solid food. For 10 years, they have been worried about heartburn, increased salivation, belching air and eaten food. He did not seek medical help. He stopped the heartburn with soda, occasionally taking Almagel or Maalox. Over the past year, heartburn has become less of a concern, but dysphagia has arisen and worsened. The condition is satisfactory. Nutritional status is lowered. Hypersthenic body type. The skin is pale pink. Thyroid gland, lymph nodes are not palpable. Breathing is harsh, carried out over the entire surface of the chest. RR 16 per minute. Tones of the heart are rhythmic, muffled. AD 120/70 mm Hg., pulse 65 per minute. The tongue is moist, coated with a white coating. The abdomen is soft, painless. The liver is not palpable. The spleen is not palpable. There are no swellings.

A. What is the preliminary diagnosis.

B. What studies should be conducted to clarify the diagnosis.

Solution of the situational task:

A. Gastroesophageal reflux disease, it is necessary to rule out cicatricial stricture of the esophagus and/or esophageal cancer.

B. Clinical analysis of blood, ferritin, transferrin, blood serum iron, stool analysis for occult blood, FGDS, X-ray examination of the esophagus with barium suspension.

DISEASES OF RESPIRATORY SYSTEM

1. The patient is bothered by pain in the left side when breathing, coughing. Cough with a small amount of mucous sputum. Body temperature is 37.6°C.

Objective: The left half of the chest lags behind in the act of breathing. A dull tympanic tone is determined by percussion on the left of the VI rib. Breathing is weakened vesicular in this area. Sripitatio redux, pleural friction noise along the anterior axillary line is heard. Voice tremors and bronchophonia are increased.

- A. What pathological process can you think of?
- B. What is the mechanism of formation of crepitation?
- C. How to explain the weakening of vesicular breathing over the affected area of the lung?
- D. What will appear on the X-ray of the lungs?

Solution of the situational task:

- A. lower lobe pneumonia on the left
- B. the alveolus is clogged with a small amount of exudate
- C. syndrome of compaction of lung tissue
- D. local blackout

2. The patient suffers from severe shortness of breath at the slightest movement, dry, runny cough.

Objective: The left half of the chest lags behind in the act of breathing, the intercostal spaces are smoothed. Voice tremor to the left of the 1V rib along all topographic lines is not performed. When percussing this area, an absolutely dull sound is determined. During auscultation, breathing in this area is not heard, bronchophony is not performed. Traube space is not defined.

- A. What pathological syndrome can you think of?
- B. What additional research methods will help in making a diagnosis?

Solution of the situational task:

- A. hydrothorax
- B. puncture, X-ray

3. The patient suddenly developed severe pains in the left half of the chest, cough, copious hemoptysis, body temperature rose to 38.2°C.

Objective: The left half of the chest is somewhat behind in the act of breathing. When percussing on the left along the middle and back axillary lines from V to VII rib, there is a dulling of lung sound. When auscultating under this area, a muffled breath sound with a bronchial tone is heard, crepitation and the noise of friction of the pleura along the posterior axillary line. Voice tremors and bronchophonia immediately increased.

- A. What pathological process in the patient are you thinking about?
- B. What explains the increase in vocal tremor and bronchophonia over the affected area?
- B. Which of the additional research methods is the most important for confirming the diagnosis?
- D. What changes in the general blood test are most likely?

Solution of the situational task:

- A. pneumonia
- B. syndrome of compaction of lung tissue
- B. x-ray
- G. ESR increased, leukocytosis, anemia

4. The patient has been bothered by a cough with a small amount of mucous sputum in the morning, for the past 5-6 years.

About: The chest cell is equally involved in the act of breathing. Pulmonary tone is determined by percussion on symmetrical areas. During auscultation, breathing is vesicular over both lungs, scattered dry, buzzing rales are heard, isolated small and medium-sized voiceless moist rales. Voice tremors and bronchophonia have not changed.

- A. What pathological process can you think of?
- B. Which risk factor is the most typical for this pathology?
- C. Name the mechanism of formation of dry rales?
- D. What changes later develop in lung tissue?

Solution of the situational task:

- A. COPD stage 1
- B. bronchitis, smoking
- B. when air passes through the bronchi, where there is thick sputum

G. emphysema, pulmonary heart, bronchial obstruction

5. The patient is bothered by attacks of suffocation that occur suddenly, more often at night. Shortness of breath during an attack is mainly expiratory in nature, the cough is dry.

Objective: The patient's breathing is quite loud, additional muscles are involved in the act of breathing. The chest is expanded. With percussion, a slightly boxy tone is determined. During auscultation, vesicular breathing is weakened in the lower lateral parts, hard in the rest. Breathing is muffled by many whistling dry wheezes. Voice tremors and bronchophonia are weakened.

- A. What pathological process are you thinking about?
- B. What does the box tone of the percussion sound indicate?
- C. What is the name of wheezing that can be heard at a distance?
- D. Name the macro- and microscopic features of sputum in this disease?

Solution of the situational task:

- A. bronchial asthma
- B. increasing the airiness of lung tissue
- C. remote
- D. sputum is thick, vitreous

6. The patient has severe shortness of breath at rest.

Objective: The left half of the chest lags behind in the act of breathing. Voice tremor to the left of the III rib along all topographic lines is not performed. Percussion to the left of the III rib along all topographic lines reveals a loud, low tympanic sound. During auscultation on the left in the same area, breathing is not heard, bronchophony is not performed.

- A. What pathological process can you think of?
- B. Name the possible reasons for the development of this pathology?
- C. Describe the tympanic sound?
- D. Is the Traube space preserved in this situation?

Solution of the situational task:

- A. closed pneumothorax
- B. rupture of the visceral pleura, injuries
- C. a loud sound that occurs over a hollow organ or cavity

D. there is a zone of clear sound between the parenchymatous organs, in this case – no

7. The patient is bothered by a cough with mucus-purulent sputum. Body temperature is 37.8 °C.

About: Chest cell of the correct shape, takes an active part in the act of breathing. A low lung tone is heard on percussion over both lungs. During auscultation, breathing is harsh, moist medium-caliber, voiceless rales, single scattered rales that buzz. Bronchophonia and vocal tremor have not changed.

- A. What pathological process are you thinking about?
- B. Which type of respiratory noise is hard breathing, give its characteristics?
- C. Why in this case wet rales will be silent?
- D. Can the data of vocal tremor and bronchophonia not coincide?

Solution of the situational task:

- A. acute bronchitis
- B. vesicular, in which inhalation = exhalation
- C. because they are formed in small and medium bronchi
- D. may not coincide with the formation of a cavity in the lung

8. The patient's cough worsens in the morning on the left side, a large amount of purulent liquid sputum is easily expectorated. Anamnesis: For many years, he often treated inflammation of the lungs, bronchitis.

Objective: fingers in the form of drumsticks. The chest cell on the right is somewhat behind in the act of breathing. With percussion on the right, in the area from VII to IX ribs along the posterior axillary and scapular lines, the tympanic tone is determined. During auscultation in the same area, breathing is bronchial, large-bubbled, moist rales. Voice tremors and bronchophonia are increased.

- A. What pathological process can you think of?
- B. How to explain the increase in vocal tremor and bronchophonia over the affected area?
- C. Why does sputum leave better on the left side and what is the name of this position?
- D. What additional research methods will confirm the diagnosis?

Solution of the situational task:

- A. bronchiectasis or abscess
- B. syndrome of compaction of lung tissue
- C. forced, because the left bronchus is shorter and wider
- D. x-ray, bronchography

9. The patient is bothered by a cough with the separation of mucous sputum. Body temperature is 38.2°C.

Objective: The chest cell is of the normal shape, both of its halves equally participate in the act of breathing. With comparative percussion to the right of the angle of the scapula (from VI to IX rib), a section of muffled sound is determined. In the same area, mixed breathing, moist fine-bubble sounding wheezes are heard. Voice tremors and bronchophonia are increased.

- A. What pathological process are you thinking about?
- B. Explain the mechanism of the occurrence of fine-vesicular rales?
- C. What data will you get when examining sputum?
- D. What research method will confirm the diagnosis?

Solution of the situational task:

- A. pneumonia lower lobe right
- B. when passing air through a liquid or semi-liquid secretion
- C. neutrophils, erythrocytes, epithelial cells, macrophages
- D. radiograph

10. The patient is bothered by a cough with green sputum, which is released throughout the day.

Objective: Chest cell of the correct shape, takes an active part in the act of breathing. Percussion on the left under the clavicle from II to IV ribs along the midclavicular line reveals a tympanic tone, breathing in this area is amphoric, wet rales. Bronchophonia and vocal tremor immediately increased sharply.

- A. What pathological process are you thinking about?
- B. What kind of breathing noise is amphoric breathing?
- C. Describe the tympanic percussion sound?
- D. What data will you get when examining sputum?

Solution of the situational task:

- A. abscess with an opening into a bronchus

B. bronchial

V. sonorous, heard over an empty surface

G. leukocytes, erythrocytes, epithelial cells

11. Patient T., 35 years old, is bothered by fever (38-39°C), cough with rusty sputum, pain in the chest on the left under the shoulder blade when coughing and deep breathing, weakness, increased sweating, decreased appetite.

Objective: lagging of the right scapula region in breathing. When palpating below the 6th rib on the right between the posterior axillary and paravertebral lines, increased voice tremor; above the same zone - a dull percussion sound; during auscultation, bronchial respiration and pleural friction noise are heard.

A. Name the syndrome of damage to the respiratory organs, the previous diagnosis?

B. Additional research methods to confirm the diagnosis.

Solution of the situational task:

A. Syndrome of segmental compaction of lung tissue. Preliminary diagnosis: left-sided pneumonia.

B. To confirm the diagnosis: chest X-ray, general analysis of sputum, bacterial culture of sputum.

12. Patient V., 80 years old, complains of dyspnea of a mixed nature with slight physical exertion, weakness.

Objective: Cyanosis of the lips. The chest cell is barrel-shaped. The upper borders of the lungs are shifted up 5 cm above the clavicles on both sides, the Krenig fields are expanded up to 9 cm. The lower borders are shifted down by 1 rib along all lines. Box percussion sound. During auscultation - weakened vesicular breathing. At rest, the RR is 23 per minute.

A. Name the syndromes of damage to respiratory organs?

B. What additional research methods may be used to confirm the diagnosis?

Solution of the situational task:

A. Syndrome of increased airiness of lung tissue (emphysematous), respiratory failure syndrome.

B. To confirm the diagnosis, it is necessary to perform an x-ray of the lungs, spirometry, determine the partial pressure of oxygen and carbon dioxide in the blood.

13. Patient B, 30 years old, who abuses alcohol, complains of an increase in temperature up to 39.5°C, chills in the evening, profuse sweat, sharp weakness, decreased appetite, pain under the right shoulder blade during deep breathing.

History: sick for 5 days, took NSAIDs independently, did not seek medical help.

Objective: Condition is difficult. Reduced nutrition. The skin is moist, hot. The left half of the chest lags behind in the act of breathing. With comparative percussion, a dull percussion sound is determined below the angle of the scapula from the posterior axillary line to the paravertebral line. There, breathing is sharply weakened, sonorous fine-vesicular moist rales are heard.

On the radiograph of the lungs on the left in the projection of the 10th segment, there is a homogeneous obscuration of a rounded shape with indistinct contours.

A. Name the syndromes of damage to respiratory organs?

B. Preliminary diagnosis?

Solution of the situational task:

A. Pulmonary tissue compaction syndrome of an inflammatory nature. It is possible - the presence of a cavity in the lung tissue.

B. Previous diagnosis: right-sided pneumonia. lung abscess (?).

14. Patient O, 38 years old, complains of chest pain on the left side in the axillary region; cough with discharge of a large amount of sputum (about 500 ml per day), purulent in nature, with an unpleasant smell; temperature 37.7°C, weakness, increased sweating, decreased appetite.

Objective: when examining the chest, the lag of the left half in the act of breathing is determined; on the left in the axillary region increased vocal tremor; percussion tone - tympanitis below the 6th rib from the front to the back axillary lines; bronchial breathing is heard immediately.

A. Name the syndrome of damage to the respiratory organs, the preliminary diagnosis.

B. Additional research methods to confirm the diagnosis.

Solution of the situational task:

A. Syndrome of the presence of a cavity in the lungs.

B. Preliminary diagnosis: abscess of the left lung.

15. Patient D, 45 years old, is bothered by attacks of difficulty breathing, more often at night. Before the attack, there is a sore throat, a dry, hacking cough, it becomes difficult to breathe, especially difficult exhalation.

But during an attack: RR - 28 per minute, auxiliary muscles are involved in the act of breathing, difficult exhalation. The voice tremor is weakened over the entire surface of the lungs, the percussion tone is boxy, during auscultation, the vesicular breath is weakened, a large number of dry whistling rales over the entire surface of the lungs.

A. Name the syndromes of damage to respiratory organs, preliminary diagnosis.

B. Additional research methods to confirm the diagnosis.

Solution of the situational task:

A. Bronchial obstruction syndrome, hyperventilation syndrome, acute respiratory failure syndrome. Preliminary diagnosis: bronchial asthma.

B. To confirm the diagnosis, it is necessary to perform spirometry with a broncholytic test.

16. Patient K, 20 years old, is bothered by a low-grade fever, a feeling of heaviness in the left half of the chest, shortness of breath with minor physical exertion, and more difficult breathing.

Objective: the left scapula lags behind in the act of breathing. On palpation: on the left, below the angle of the scapula, there is no voice tremor, on percussion - a dull percussion sound below the oblique line, starting from the 5th rib along the posterior axillary line to the spinous process of the 9th thoracic vertebra; above it - a dull tympanic sound, when auscultating below this line: breathing is sharply weakened, above the line - bronchial.

A. Name the syndromes of damage to respiratory organs, preliminary diagnosis.

B. Additional research methods to confirm the diagnosis.

Solution of the situational task:

A. Syndrome of the presence of fluid in the pleural cavity, syndrome of compression atelectasis of the lung, syndrome of respiratory failure. Preliminary diagnosis: left-sided exudative pleurisy.

B. To confirm the diagnosis, it is necessary to perform an X-ray of the chest cavity, a pleural puncture with an examination of the pleural fluid.

17. Patient T, 55 years old, is bothered by a cough with mucous sputum with blood streaks, low-grade fever, lack of appetite, weight loss of 9 kg over the past 6 months. History: more than 30 years of smoking (a pack of cigarettes per day).

Objective: underweight: height - 184 cm, weight - 59 kg, BMI - 17.5. Percussion: on the right below the 4 ribs from the edge of the sternum to the mid-axillary line of blunting, auscultation - breathing is sharply weakened. On the radiograph, on the right in the projection of the middle bronchus of the right lung, there is a rounded shadow with uneven contours up to 4 cm in diameter. During bronchoscopy, a bumpy mass was found in the middle bronchus on the right formation that bleeds when in contact with the bronchoscope.

A. Name the syndromes of damage to respiratory organs, preliminary diagnosis.

B. Additional research methods to confirm the diagnosis.

Solution of the situational task:

A. Pulmonary tissue compaction syndrome due to obturation atelectasis of the middle lobe of the right lung. Preliminary diagnosis: central cancer of the right lung.

B. To clarify the diagnosis - a biopsy of the neoplasm with histological examination.

18. Patient G, 58 years old, is bothered by a cough with a small amount of mucous sputum, more often in the morning; shortness of breath during normal physical exertion. In the cold season, the cough intensifies, sometimes with mucous-purulent sputum, subfebrile temperature periodically disturbs. Anamnesis: morning cough with sputum has been bothering for 3 years. Over the past six months, he notes the appearance of shortness of breath when climbing to the second floor and when walking quickly. He has been smoking a pack of cigarettes a day since he was 18, works as a construction worker, and his work involves frequent hypothermia.

Objective: Skin of normal color. The frequency of breathing at rest is 18. The chest cell is cylindrical in shape. Voice tremor is symmetrically weakened on both sides. Box percussion sound. Respiratory vesicular weakened, single dry whistling wheezing.

- A. Name the syndromes of damage to respiratory organs, preliminary diagnosis.
- B. Additional research methods to confirm the diagnosis.

Solution of the situational task:

- A. Syndrome of bronchial obstruction and increased airiness of lung tissue. Previous diagnosis: COPD.
- B. To confirm the diagnosis, it is necessary to perform X-ray OGK, spirometry with a broncholytic test.

19. Patient C, 40 years old, complains of shortness of breath that appeared suddenly, pain in the left half of the chest under the shoulder blade, temperature 38°C, hemoptysis. History: during the week and the day before, she was bothered by pain in the right leg, swelling of the right foot.

Objective: Varicose veins of the lower extremities; the right leg in the area of the lower leg is increased in diameter; swelling of the right foot; painful palpation of the calf muscle. The chest cell is of the correct shape, the left half lags behind a little in breathing, the vocal tremor is increased on the left below the 7th rib in the axillary region, there is a dulling of the percussion sound, bronchial breathing is heard, fine-bubble wet rales.

- A. Name the syndromes of damage to respiratory organs, preliminary diagnosis.
- B. What additional research methods may be used to confirm the diagnosis.

Solution of the situational task:

- A. Syndrome of segmental compaction of lung tissue. Previous diagnosis: PE.
- B. To confirm the diagnosis, it is necessary to determine the level of D-dimer in the blood, chest X-ray, CT-angiopulmonography, ECG, echocardiography, dopplerography of blood vessels of the lower extremities.

20. Patient M, 38 years old, complains of dry cough, temperature of 37.7°C, weakness, increased sweating, headache, pain in muscles and joints. Anamnesis: I became acutely ill after hypothermia.

Objective: The chest is of the normal shape, both halves are equally involved in breathing. Voice trembling is carried out symmetrically in all parts of the lungs. Percussion tone is clear pulmonary over the entire surface of the lungs. Breathing is hard, there are no wheezing.

- A. Name the syndromes of damage to respiratory organs, preliminary diagnosis.
- B. Additional research methods to confirm the diagnosis?

Solution of the situational task:

- A. Syndrome of acute inflammation of the bronchial mucosa. Preliminary diagnosis: acute bronchitis.
- B. To confirm the diagnosis, it is necessary to perform chest X-ray.

21. Patient I., 56 years old, who suffers from hypertension, after taking bisoprolol developed swelling of the lips, tongue, hoarseness, a feeling of lack of air, difficulty breathing (mainly on inhalation).

Objective: The patient is excited, trying to take deep breaths. Breathing is loud, stridorous. Cyanotic skin, swelling of the lips and tongue. Neck veins are swollen. Heart sounds are rhythmic, clear, heart rate - 100 per minute.

- A. Name the syndromes of damage to the respiratory organs.
- B. Preliminary diagnosis.

Solution of the situational task:

- A. Laryngeal obstruction syndrome, acute respiratory failure syndrome.
- B. Preliminary diagnosis: Quincke's edema with damage to the larynx, laryngeal stenosis, acute respiratory failure.

22. Patient A, 57 years old, complains of a cough with mucous-purulent sputum with blood streaks, more often in the morning, shortness of breath during physical exertion, weakness, sweating, low-grade fever, reduced appetite, weight loss. Anamnesis: In childhood, frequent acute respiratory infections, repeated foci of pneumonia. He has smoked 1-1.5 packs of cigarettes a day for more than 20 years.

Objective: Reduced nutrition, fingers - in the form of drumsticks, nails - clock bases. Diffuse cyanosis. Chest cell of the correct shape. Voice tremor is increased on the left below the angle of the scapula, percussively there is a dulled tympanic sound, bronchial breathing, sonorous mesenteric rales are heard.

- A. Name the syndromes of damage to respiratory organs, preliminary diagnosis.

B. Additional research methods to confirm the diagnosis?

Solution of the situational task:

A. Syndrome of the presence of a cavity in the lung. Previous diagnosis: bronchiectasis.

B. To confirm the diagnosis, it is necessary to perform bronchography of the lungs.

23. A 68-year-old patient complains of a cough with discharge of purulent sputum with an unpleasant putrid smell up to 150-200 ml per day, more often in the morning. The discharge of sputum increases when the patient is on the left side. Ill for several years. Recently - increasing weakness, reduced work capacity, low-grade fever.

Objective: fingers in the form of drumsticks, emphysematous chest, the right half of the chest lags behind in breathing.

A. Name the disease accompanied by such a cough.

B. What auscultatory changes should be expected?

Solution of the situational task:

A. Such a cough is characteristic of bronchiectasis.

B. When auscultating above the zone of bronchiectasis, you can listen to bronchial breathing, persistent moist rales - medium- or large-vesicular, depending on the size of the bronchiectasis.

24. Based on the given sputum analysis, establish a preliminary diagnosis:

The character is mucous, viscous.

There is no smell.

Leukocytes - 12-15 in field of vision. Neutrophils - 20%, lymphocytes - 50%, eosinophils - 30%.

Bronchial epithelial cells - 3-4 in field of vision.

Kurshman's spirals are single.

Charcot-Leyden crystals - 5-6 in field of vision.

Solution of the situational task:

Bronchial asthma.

25. Based on the given sputum analysis, establish a preliminary diagnosis:

The character is muco-purulent.

The color is gray-yellow.

There is no smell.

Leukocytes - 40-50 in field of vision. Neutrophils - 20%, lymphocytes - 70%, eosinophils - 10%.

Elastic fibers were found in large quantities.

Bacterioscopy revealed acid-resistant bacteria.

Solution of the situational task:

Pulmonary tuberculosis.

26. Based on the given sputum analysis, establish a preliminary diagnosis:

The character is serous-purulent, when standing, it is divided into 3 layers.

There is no smell.

Leukocytes - 60-80 in field of vision. Neutrophils - 72%, lymphocytes - 8%.

Erythrocytes - 10-20 in field of vision.

Elastic fibers, cholesterol crystals, Dietrich plugs were found.

Solution of the situational task:

Lung gangrene.

27. A 39-year-old man turned to his family doctor complaining of a cough with mucus-purulent, odorless sputum, mostly in the morning. The described complaints bother me for 10 years, intensify in the spring-autumn period, and at the same time, shortness of breath appears when walking quickly.

From the anamnesis: smokes from the age of 17 up to 10-15 cigarettes per day.

A. What disease is characterized by such a cough?

B. Describe the possible changes during the examination of the patient.

Solution of the situational task:

A. Such a cough is characteristic of COPD.

B. The initial stage of the formation of a barrel-shaped chest will be observed, the voice tremor may be weakened in the lower parts of the lungs, the percussion tone may be the same with a box tone, breathing - vesicular weakened.

DISEASES OF THE ENDOCRINE SYSTEM

1. Patient K., 34 years old, came to the polyclinic with complaints of apathy, memory impairment, constant drowsiness, and reduced work capacity. During the examination, pallor of the skin with a jaundiced tint is noted. The skin is dry, cold, flaky. The tongue is swollen, teeth marks are visible on the edges. When examining the heart, bradycardia and muffled heart sounds are noted. High level of cholesterol in the blood.

- A. Make a preliminary diagnosis?
- B. What BP is characteristic of this pathology?
- C. What research should be conducted to confirm this diagnosis?
- D. What is the name of the severe form of this pathology?

Solution of the situational task:

- A. hypothyroidism
- B. low BP
- C. blood for hormones T3, T4, TSH
- D. myxedema

2. Patient K., 27 years old, was brought to the hospital by ambulance in an unconscious state. A pen for injecting insulin was found in the patient's pocket. During the examination, paleness and moisture of the skin, increased muscle tone, convulsions, dilated pupils, the tone of the eyeballs is not changed. The pulse is frequent, tones are muffled, blood pressure 130/80 mm pt.st.

- A. Make a preliminary diagnosis?
- B. Name the most frequent reasons leading to this complication?
- C. Your tactics?
- D. What precedes the development of this complication (describe the clinic)?

Solution of the situational task:

- A. hypoglycemic coma
- B. type 1 diabetes, insulin overdose, physical exertion
- C. introduction of 40% glucose before the onset of consciousness
- D. cold sweat, feeling of hunger, fear, aggression

3. Patient D., 45 years old, turned to the district therapist with complaints of sweating, severe tremors in the whole body, constant palpitations, decreased taste sensitivity, frequent loose stools. During the examination, the patient's fussiness, general exhaustion, pronounced exophthalmos attract attention. Blood pressure 160/70 mm Hg. Art., tachycardia 130 per minute, heart sounds are loud, systolic murmur at the apex. When examining the oral cavity, there are signs of angular cheilitis.

- A. Make a preliminary diagnosis?
- B. What rhythm disturbances are most common in this pathology?
- C. Explain the origin of the systolic murmur at the apex of the heart?
- D. What additional studies should be conducted?

Solution of the situational task:

- A. hyperthyroidism
- B. tachi form of AF
- C. due to increased load on the circulatory system
- D. T3, T4, TSH

4. Patient L., 54 years old, turned to a dermatologist with complaints of skin itching, pustular skin lesions. Periodically dry mouth, thirst. Objectively: increased nutrition. The tongue is dry, the papillae are desquamated. There are signs of angular cheilitis. Skin with traces of scratching, multiple pustular rashes on the skin of the abdomen, thighs.

- A. What disease can you think of?
- B. What additional methods of examination must be carried out?
- C. What late complications are possible with this disease?
- D. In what case is it necessary to conduct a glucose tolerance test?

Solution of the situational task:

- A. DM type 1
- B. blood glucose, glucose tolerance test
- B. micro- and macroangiopathy, nephropathy, retinopathy, neuropathy
- G. in any case

5. Patient V., 19 years old, was brought by ambulance with complaints of pronounced dryness in the mouth, thirst (drinks up to 15 liters of liquid), frequent, profuse urination, shortness of breath. These complaints appeared 2 weeks ago after the flu and steadily increased. Weight loss is 10 kg. Objectively: inhibited, reduced nutrition, dry skin, reduced turgor, rubeosis on the face, tongue dry, coated with a brown coating. Breathing is frequent, noisy, the surrounding air smells of acetone. Blood pressure 100/50 mm Hg.

- A. Name a possible diagnosis?
- B. What additional studies should be conducted?
- C. Tactics of management of this patient?
- D. What is the name of the described breathing pattern (type)?

Solution of the situational task:

- A. Type 1 diabetes mellitus, ketoacidosis
- B. ketone bodies, blood glucose
- C. short-acting insulin, rehydration, electrolyte balance therapy
- D. Kussmaul breathing

6. Patient S., 46 years old, was admitted to the hospital with complaints of weakness, sweating, numbness of the lips and tongue, feeling of trembling in the body, general restlessness. Deterioration of well-being during the day. Suffers from type 2 diabetes for a year, takes metformin. She did not eat anything during the day.

Objective: The general condition is difficult. During the examination, convulsions developed, she lost consciousness. The skin is moist. Pupils are wide, do not react to light. Breathing is superficial. No pathology was detected on the part of the internal organs. Breathing rate 20/minute. The pulse is rhythmic, 84/minute, satisfactory filling and tension. Blood pressure 100/60 mm Hg. Abdomen is soft, painless. Liver according to Kurlov 9-8-7 cm. No edema. ECG: sinus rhythm 80 in 1 minute, RII > RI > RIII. Blood analysis: glucose 2.0 mmol/l, creatinine 0.009 mmol/l. Urine analysis: specific gravity 1009, no protein, no sugar.

- A. What emergency condition has developed in the patient?
- B. Emergency help?

Solution of the situational task:

A. Hypoglycemic coma.

B. Severe hypoglycemia (in a person who is unconscious or has impaired consciousness and cannot swallow) → IV infusion of 20% glucose solution (0.2 g glucose/kg body weight (1 ml/kg), in the future - infusion of 10% glucose solution until the moment of recovery of consciousness, which will allow the patient to consume carbohydrates. In case of difficulties with IV access in case of severe hypoglycemia in patients with diabetes of the 1st type, enter glucagon 1 mg IV or IV (if there is no improvement, it can be repeated after 10 minutes); in patients with type 2 diabetes, caution should be exercised, do not prescribe it for hypoglycemia induced by oral drugs (can activate the secretion of endogenous insulin); contraindicated after alcohol consumption.

7. Patient L., 26 years old, complains of general weakness, fatigue, drowsiness, chills, a sharp decrease in work capacity, weight gain, menstrual cycle disorders (weak periods with interruptions). She considers herself ill for about 1 year.

Objective: General condition of moderate severity. The skin is pale, dry, hair is brittle. Swelling of the face with weak facial expressions. The tongue is swollen, teeth marks are visible on the edges. The language is slow. The thyroid gland is enlarged due to both lobes, it is visible during inspection, dense and painless during palpation. No pathology was detected on the part of the respiratory system. Pulse 58/minute. Blood pressure 100/60 mm Hg. Abdomen normal. Liver according to Kurlov 9-8-7 cm, the edge is soft, painless, sharp. The spleen is not enlarged.

A. What is the leading clinical syndrome?

B. What studies must be conducted to confirm the diagnosis?

Solution of the situational task:

A. Hypothyroidism.

B. It is necessary to conduct an ultrasound of the thyroid gland, determine the level of TSH, T3, T4, AB-TPO in the blood.

8. Patient D., 34 years old, complains of a feeling of rapid heartbeat, shortness of breath, an increase in body temperature to 37.2-37.8°C, pain in the heart region, poor sleep, increased irritability, reduced work capacity, weight loss. He has been sick for about 2 years. Medical history: she consulted doctors at her place of residence, was treated for hypertension, hysteria, and early menopause.

Objective: The patient is malnourished, the skin is moist. When examining the oral cavity, there are signs of angular cheilitis. Small tremor of the fingers. Graefe and Moebius symptoms are positive. The enlargement of the thyroid gland is visually determined mainly due to the right lobe. On palpation, the gland is soft. Pulse 118 in 1 minute, arrhythmic. Blood pressure 150/60 mm Hg. The limits of the relative dullness of the heart are normal. Tones are loud, tachycardia, emphasis of the II tone over the pulmonary artery, systolic murmur over the apex and in Botkin's point. ECG: P wave is absent, R-R intervals are different.

A. What is the leading clinical syndrome?

B. Are instrumental and laboratory research methods necessary to confirm the diagnosis?

Solution of the situational task:

A. Hyperthyroidism.

B. It is necessary to conduct an ultrasound of the thyroid gland, determine the level of TSH, T3, T4, AB-TPO, AB-rTTH in the blood.

9. Patient V., 26 years old, brought to the clinic unconscious. Thirst, poor appetite, headache, weakness appeared after the ARVI. The day before - abdominal pain, repeated vomiting and loss of consciousness. History: Type 1 diabetes for 5 years.

Objective: the general condition is serious, without consciousness. Breathing is deep, noisy, 32/minute, the smell of acetone from the mouth. The skin is dry. The tongue is dry, red. Pulse 120/minute, low filling and tension. Blood pressure 95/60 mm Hg. On palpation, the abdomen is soft. General blood analysis: glucose 25.4 mmol/l, creatinine 0.12 mmol/l. Urinalysis: glucose 6.2%, protein 0.9 g/l, specific gravity 1025.

A. What emergency condition has developed in the patient?

B. What can be a provoking factor (triggers) for the development of this emergency?

Solution of the situational task:

A. Ketoacidotic coma.

B. Trigger factors: interruption of insulin therapy (for example, due to a disease of the gastrointestinal tract that led to abstinence from food) or its incorrect use, infections (bacterial, viral, fungal), acute cardiovascular diseases (myocardial infarction, ischemic stroke), late diagnosis of type 1 diabetes, pancreatitis, alcohol abuse, pregnancy, all conditions that lead to a sudden increase in the need for insulin.

10. Patient S., 62 years old, with complaints of dry mouth, polyuria up to 3 liters per day, underwent a glucose tolerance test, where blood sugar is determined on an empty stomach and 2 hours after a glucose load.

A. What disease do the patient's complaints indicate.

B. What level of glucose will be used to confirm the diagnosis.

Solution of the situational task:

A. Complaints of the patient about dry mouth, polyuria up to 3 liters may indicate diabetes.

B. According to the results of the glucose tolerance test, a glucose level of more than 11 mmol/l confirms the diagnosis of diabetes.

11. Two weeks after the sea travel, patient N., 32 years old, complained of: palpitations during exercise and at rest, irritability, weight loss (by 3 kg over the past 2-3 months) against a background of good appetite and increased body temperature up to 37.5°C. During the physical examination, the following deviations from the norm were revealed: pulse 115 per minute, rhythmic, heart rate 115 per minute. Blood pressure 145/80 mm Hg. The thyroid gland during inspection and palpation is enlarged, displaceable, painless, elastic in consistency, mobile during swallowing. Mari's symptom (small tremor of the hands) is noted.

A. Specify a possible reason for the patient's complaints.

B. Specify the leading diagnostic method.

Solution of the situational task:

- A. A possible cause of the patient's complaints is a diffuse toxic goiter.
- B. The leading diagnostic method is a hormonal examination with the determination of thyroid hormones (thyroid-stimulating TSH, thyroxine-T₄, triiodothyronine-T₃).

12. Patient N., 65 years old, complained of weakness, decreased work capacity, chills, drowsiness, decreased memory, decreased body temperature to 35.5 °C during 2 months during physical examination: pulse 50 per minute, heart rate 50 per minute. Blood pressure 110/70 mm Hg. On examination and palpation, the thyroid gland is enlarged, displaceable, painless, dense-elastic consistency, mobile during swallowing. Mari's symptom (small tremor of the hands) is negative. Teeth marks on the tongue, dry skin of the elbows.

- A. Specify a possible reason for the patient's complaints.
- B. Specify the leading diagnostic method.

Solution of the situational task:

- A. A possible cause of the patient's complaints is hypothyroidism.
- B. The leading diagnostic method is a hormonal examination with determination of thyroid hormones (thyrotropin-stimulating hormone, thyroxine-T₄, triiodothyronine-T₃).

13. Patient F., 60 years old, complains of: weakness, dry mouth, constant thirst (polydipsia), frequent and copious urination (polyuria), alimentary - constitutional obesity of the 1st degree (BMI 32 kg/m²), decreased turgor was revealed skin, there is no smell of acetone from the mouth.

- A. Specify a possible reason for the patient's complaints.
- B. Specify the leading diagnostic method.

Solution of the situational task:

- A. A possible cause of the patient's complaints is diabetes.
- B. The leading diagnostic method is the determination of blood glucose, in particular, the oral glucose tolerance test, where blood sugar is determined on an empty stomach and 2 hours after a glucose load. The appearance of blood sugar above 11 mmol/l is a sign of diabetes.

DISEASES OF HEMATOPOIETIC ORGANS

1. A 25-year-old young man complains of sore throat when swallowing, bleeding gums, weakness, sweating. Sick for 2 weeks. Pale, palpable moderately enlarged anterior cervical and posterior cervical lymph nodes. The pharynx is hyperemic, there are ulcerative-necrotic plaques on the tonsils and the back of the tongue, the gums are loose. No pathology was detected on the part of the internal organs. The temperature is 37.3°C. In the blood: Hb - 70 g/l, leukocytes - 10 thousand, blast cells - 76%. ESR - 27 mm/h.

A. What is your diagnosis?

B. Describe the lymph nodes in this pathology?

C. What is leukemic gap?

D. Name additional research methods that are necessary to confirm this disease?

Solution of the situational task:

A. acute leukemia

B. enlarged

C. the number of blast cells exceeds 10-20% with a characteristic gap in the number of young cells between blast and mature elements

D. sternal puncture

2. Patient, 63 years old, complains of weight loss, weakness, shortness of breath. An increase in cervical and axillary lymph nodes was detected. The latter are painless, mobile. When examining the oral cavity, there is an increase in the tonsils. Blood analysis: Hb - 82 g/l, erythrocytes - 3.7 million, leukocytes - 117 thousand, lymphocytes - 62%, mostly mature forms. ESR - 19 mm / h.

A. What is your diagnosis?

B. Name the possible etiological factors of the disease?

- C. What are Botkin-Gumprecht shadows?
- D. Is suppuration of lymph nodes possible with this disease?

Solution of the situational task:

- A. chronic lymphocytic leukemia
- B. radiation, heredity
- C. half-destroyed nuclei of lymphocytes
- D. yes, because there is a violation of immunity

3. The patient complains of general weakness, loss of working capacity, poor appetite. She considers herself a patient for 7 years. A general examination revealed the patient's sharp exhaustion, her stomach was significantly enlarged, more so in the upper part. During its palpation, a sharp increase in the liver and especially the spleen is determined. In the blood: HB - 90 g/l, erythrocytes - 2.5 million, leukocytes - 400 thousand, eosinophils - 7%, basophils - 6%, blasts - 1%, promyelocytes - 3%, myelocytes - 6%, young neutrophils - 10%, rod-nuclear - 17%, segmentonuclear - 35%, lymphocytes 10%, monocytes - 5%. Platelets - 90 thousand ESR - 42 mm / h.

- A. What is your diagnosis?
- B. What is the name of an increase in the liver and spleen?
- C. In what diseases is there an increase in the spleen?
- D. What additional research methods will confirm your diagnosis?

Solution of the situational task:

- A. chronic myeloleukosis
- B. hepatosplenomegaly,
- C. acute and chronic liver damage
- D. trepanobiopsy

4. Patient B., 52 years old, suffers from hemorrhoids. For a long time, he notes frequent rectal profuse bleeding. Currently, he complains of rapid fatigue, general weakness, dizziness, tinnitus. When examining the patient, pallor of the

skin and mucous membranes is noted, teeth marks on the cheeks along the line of their connection, swelling of the face, lower legs. The borders of the heart are not changed, during auscultation, a systolic murmur is detected at the apex. When examining blood - a decrease in the number of Hb, erythrocytes, a decrease in the color indicator. Erythrocytes are reduced in size. The number of reticulocytes is increased.

- A. How to explain the change in the patient's blood?
- B. How to explain the presence of a systolic murmur at the top of the heart?
- C. What is sideropenic syndrome?
- D. Name the normal level of Hb and erythrocytes in peripheral blood?

Solution of the situational task:

- A. chronic posthemorrhagic iron deficiency anemia
- B. change in the rheological properties of blood
- C. reduction of iron in plasma
- D. Hb in males 132-164 g/l, females 115-145, er. m $3.9-4.9 \times 10^{12}$, f $4.0-5.2 \times 10^{12}$

5. A 37-year-old patient complains of weakness, dizziness, darkening of the eyes, paresthesias in the feet and unsteady gait. During the examination, a certain yellowness of the skin was revealed, the tongue was smooth, shiny ("lacquered" tongue). The liver protrudes from under the edge of the costal arch by 4.5 cm. In the blood: Hb -70 g/l, CI - 1.4, leukocytes - 4.5 thousand, ESR - 12 mm/h. During gastroscopy, atrophic gastritis, during the study of gastric juice - achilles.

- A. What is your diagnosis?
- B. Name the most frequent causes that lead to this disease?
- C. What variant of anisocytosis is characteristic of this pathology?
- D. What are "Jolly bodies" and "Cabot rings"?

Solution of the situational task:

- A. B12 deficiency anemia
- B. atrophic gastritis, resection of the stomach

C. microcytosis,

D. Jolly bodies - remnants of normoblast nuclei, Cabot rings - remnants of the nuclear envelope

6. Patient G, 75 years old, with anemia, has impaired gait, sharply reduced knee and Achilles reflexes, impaired bladder function. During the examination, a certain yellowness of the skin was revealed, the tongue was smooth, shiny ("lacquered" tongue).

A. Which anemia should be considered? What are the described lesions of the nervous system called?

B. What color indicator will be in the blood test?

Solution of the situational task:

A. B 12-deficiency anemia. Funicular myelosis

B. Color index greater than 1.05.

7. Patient A, 44 years old, complains of weakness, "flickering of flies before the eyes", dry mouth, thirst. Considers himself sick for 6 days after eating spicy, fatty food, alcohol. In the anamnesis - gastric ulcer with frequent seasonal exacerbations.

Objective: pallor of the skin and mucous membranes of the oral cavity. Pulse 55/minute, weak filling and tension, blood pressure 90/50 mm Hg. In the blood analysis, erythrocytes $3.0 \times 10^{12}/l$, hemoglobin 100 g/l, color index 1.0, reticulocytes 28%, leukocytes $12 \times 10^9/l$.

A. Preliminary diagnosis?

B. What auscultatory heart changes can be detected?

Solution of the situational task:

A. Acute posthemorrhagic anemia. Gastric ulcer disease. Bleeding from an ulcer defect

B. Amplification of the first tone at the 1st and 4th points of auscultation. Systolic functional murmur at all points.

8. Patient O, 55 years old, turned to her family doctor with complaints of general weakness, tinnitus, "flickering of flies in front of her eyes", desire to eat chalk.

Objective: paleness of the skin with a greenish tint, dry skin, peeling. When examining the oral cavity: pallor of the mucous membranes, on the cheeks - impressions of the teeth along the line of their connection, Hair is brittle, falling out. Nails with transverse stripes. Heart sounds are increased, systolic soft blowing noise at all points, which increases after physical exertion.

In the blood analysis, erythrocytes are $2.0 \times 10^{12}/l$, hemoglobin is 50 g/l.

A. Preliminary diagnosis?

B. What color indicator will be in the blood test?

Solution of the situational task:

A. Iron deficiency anemia.

B. Color index 0.75.

9. Patient D., 46 years old, was admitted to the hematology department with complaints of headaches, visual impairment, pain in the heart area and behind the sternum of the type of angina pectoris, itching of the skin. In the general blood analysis - a sharp increase in blood viscosity.

A. Preliminary diagnosis?

B. What can be detected during palpation of the abdominal cavity?

Solution of the situational task:

A. Erythremia.

B. Hepatosplenomegaly.

10. Patient E., 58 years old. By chance, the blood analysis revealed: leukocytes $12 \times 10^9/l$, myelocytes 6%, metamyelocytes 10%, rod-nuclear cells 22%, segmentonuclear cells 40%, eosinophils 13%, basophils 8%, monocytes 1%, erythrocytes $3.0 \times 10^{12}/l$, hemoglobin 100 g./l, platelets $160 \times 10^9/l$.

A. Previous diagnosis?

B. What indicators in the general blood count indicate a preliminary diagnosis?

C. What method can confirm the preliminary diagnosis?

Solution of the situational task:

A. Chronic myeloid leukemia.

B. Shift of the leukocyte formula to the left, eosinophil-basophil association.

C. Sternal puncture.

DISEASES OF THE GENITO-URINARY ORGANS

1. Patient I., 50 years old, was taken by ambulance to the therapeutic department with complaints of a sharp, sharp pain in the area of the kidneys, radiating down the abdomen and portal vein. The pain worsens with the slightest movement and lasts 2-3 hours. Urination during an attack is accelerated, difficult, painful. There have been two similar attacks over the past year. At the end of the attack, red urine appears.

Objectively: pallor of the skin, forced position. Mr. Pasternatskyi's case is sharply positive. There are a lot of erythrocytes and salt in the urine.

- A. What process should the doctor think about first of all?
- B. What additional research methods will confirm his opinion?
- C. What is the presence of erythrocytes in urine called and for which diseases is it characteristic?
- D. What can provoke the emergence of a similar clinical situation?

Solution of the situational task:

- A. urolithiasis
- B. 3-cup test, ultrasound, pyelography
- C. hematuria, glomerulonephritis
- D. taking diuretics, sports

2. Patient M., 45 years old, turned to the doctor with complaints of severe swelling all over the body. By morning, the swelling increases. Anamnesis: 3 years before the development of the disease, for 6 years, a fistula in the area of the left lower leg.

Objectively: the skin is pale, the marks of folds of underwear are visible, swelling is especially pronounced on the face, limbs and less so on the trunk, soft, mobile. The mucous membrane of the oral cavity is pale, dry, thinned. Blood pressure is not elevated. There is 4.5% protein in the blood (hypoproteinemia). In the urine: specific gravity - 1035, protein - 10 g / l, in the sediment there are many

hyaline and granular cylinders, 5-6 cells of the renal epithelium in the field of vision. The amount of urea and residual nitrogen in blood serum is within normal limits. The functional test according to Zimnitsky has not been changed.

- A. What disease can you think of?
- B. What causes lead to this pathology?
- C. What is nephrotic syndrome and does it have a place in this situation?
- D. Specify the main mechanism of edema development in this pathology?

Solution of the situational task:

- A. secondary amyloidosis of the kidney
- B. chronic infectious and purulent-septic diseases
- B. edema, proteinuria, hypo- and dysproteinemia, hypercholesterolemia

3. Patient M., 45 years old, called the district doctor and presented the following complaints: during the last month, he has been suffering from severe headaches and itching of the skin, pain in the stomach, nausea, vomiting and loose stools. It is known from the anamnesis that he has been suffering from kidney disease for many years.

Objectively: a petechial rash and signs of scratching are visible on the skin of the hands and chest, the skin is dry, whitish dust near the roots of the hair, the smell of ammonia in exhaled air, Kussmaul's loud breathing. On the mucous membrane of the cheeks, the floor of the oral cavity, the tongue, surface spots of whitish color, phenomena of hyperkeratosis. In the region of the heart, pericardial friction noise is heard. The abdomen is painful during palpation along the course of the large intestine and in the epigastric area.

- A. What is the cause of this clinical picture?
- B. What diseases most often lead to this clinical condition?
- C. Name the most likely numbers of daily diuresis in this patient?
- D. What is hyposthenuria?

Solution of the situational task:

- A. the terminal stage of CKD
- B. kidney disease
- C. less than 50 ml. day
- D. decrease in urine density from 1.012 with stability by 1-2 units per day

4. Patient I., 30 years old, complained to the district doctor about increased weakness, headache, shortness of breath, aching pains in the lumbar region, morning swelling on the face, dryness and bitterness in the mouth. He has been sick for 10 years.

Objectively: the skin is pale, the face is puffy. When examining the oral cavity - chronic catarrhal gingivitis. Heart: enlarged to the left, tachycardia, emphasis of the II tone on the aorta. Lungs and stomach without pathological changes. Urine: specific gravity 1011, protein - 850 mg / l, erythrocytes - 5-10 leached into the field of vision, cylinders - single granular and hyaline, renal epithelial cells - single. Proba according to Zimnitskyi: specific gravity - 1011, 1012, 1011, 1010, 1012, 1011, 1012, 1012; quantity – 50ml, 60ml, 50ml, 70ml, 60ml, 50ml, 40ml, 30ml.

- A. What pathology should be considered based on the described signs?
- B. Highlight the main syndromes?
- C. What changes take place in the analysis according to Zimnitskyi?
- D. What amount of protein in urine is characteristic of nephrotic syndrome?

Solution of the situational task:

- A. chronic glomerulonephritis
- B. edema, urinary and pain syndromes
- C. hypoisostenuria
- D. 3 mg/liter and more

5. Patient P., 19 years old, complains of swelling of the whole body, but mostly on the face, headache, constant aching pain in the area of the kidneys and

urine the color of "meat slops". The disease started acutely, 5 days ago.

Objective: pallor of the skin, general swelling with a predominant localization on the face, around the eyes. Strained fluid pulse, increased blood pressure. Muffled heart sounds and a weak systolic murmur at the top of the heart. In the urine: specific gravity - 1023, protein 330 mg/l, in the sediment leukocytes, leached erythrocytes, granular cylinders, renal epithelial cells.

- A. What disease does the patient have?
- B. Highlight the main syndromes of this disease?
- C. What is the most common cause of this pathology?
- D. What is the mechanism of blood pressure increase in this case?

Solution of the situational task:

- A. acute glomerulonephritis
- B. urinary, pain syndromes, edema, weakness
- C. transmission of streptococcal disease
- D. retention of sodium

6. Patient K., 48 years old, turned to the district doctor with complaints of pain during urination, pain in the kidney area, accelerated urination, chills, temperature rise to 38°C.

Objectively: fever, positive Pasternatsky sign on the left. The urine is cloudy, with flakes, the specific gravity of urine is moderately increased, the reaction is alkaline, leukocytes cover all fields of vision, single erythrocytes. Blood pressure is normal. No pathology was detected on the part of other organs.

- A. What pathology should the doctor think about?
- B. What is painful urination called?
- C. Which of the additional research methods will help to confirm the diagnosis?
- D. What is the peculiarity of the pain syndrome in this disease?

Solution of the situational task:

- A. acute pyelonephritis on the left

- B. stranguria
- C. excretory pyelography, ultrasound, urine culture tank, urine analysis according to Nechiporenko
- D. one-sidedness

7. A patient, 21 years old, is giving birth. Upon admission to the maternity hospital, she complains of severe headache, nausea, massive swelling of the legs, crotch, and face. During inspection, it is braked. An hour later, he does not answer questions, tonic convulsive twitching of the muscles of the lower legs, vomiting appeared. Blood pressure 230/120 mm Hg.

- A. What pathology are you thinking about?
- B. What combination of symptoms leads to this complication?
- C. What should be the doctor's tactics?

Solution of the situational task:

- A. eclampsia of a pregnant woman against the background of gestosis
- B. hypertension, edema, proteinuria
- C. anticonvulsant and antihypertensive therapy

8. The patient, 39 years old, is undergoing inpatient treatment for a hernia on the left lower leg. During the week, he began to notice a fever, an increase in body weight (by 1.5-2 kg every day), swelling of the legs, an increase in the volume of the abdomen, a headache in the occipital region, accompanied by nausea, vomiting, urine the color of "meat slops" .

- A. What pathology are we talking about?
- B. Why did this pathology develop against the background of dysentery?
- C. What is the pathogenetic mechanism of edematous syndrome in this disease?
- D. Name the components of the urinary syndrome in this disease?

Solution of the situational task:

- A. acute glomerulonephritis
- B. sensitization by hemolytic streptococcus
- C. the formation of autoimmune complexes in the blood and their deposition on the basement membrane
- D. hematuria, proteinuria, cylindruria

9. Patient D., 50 years old, has a history of frequent sore throats, the color of urine is "meat slop", swelling on the face. He did not seek medical help. In the last 3-4 years, he began to notice itchy skin, dry mouth, and thirst.

Objectively, when examining the oral cavity, the mucous membrane is pale with a yellowish tinge, dry, and the phenomena of hyperkeratosis are determined.

- A. What pathology can you think about?
- B. What examinations must be carried out?
- C. What do you expect to see in a general urinalysis?
- D. How to explain the presence of itching in this pathology?

Solution of the situational task:

- A. chronic glomerulonephritis, CRF
- B. General urine analysis, urine analysis according to Zimnitskyi, creatinine clearance, blood electrolytes
- C. decrease in specific weight, hyposthenuria
- D. products of nitrogen metabolism

10. Patient T., 25 years old, was repeatedly treated for cystitis. After the SARS, she felt pain in the area of the kidneys, more on the right, accelerated painful urination, chills, temperature rise to 38°C. In the urine analysis - a large number of leukocytes, specific gravity 1012.

- A. What disease can you think of?
- B. What is the name of accelerated painful urination?
- C. Name the feature of the pain syndrome in the area of the kidneys in this

pathology?

Solution of the situational task:

- A. right-sided pyelonephritis
- B. polystronguria
- C. one-sidedness

11. Patient B, 47 years old, with chronic kidney disease, had anasarca, muffled heart sounds, tachycardia, and a trapezoidal configuration of the heart. In the anamnesis - acute glomerulonephritis.

Objectively, when examining the oral cavity, the mucous membrane is pale with a yellowish tinge, dry, and the phenomena of hyperkeratosis are determined.

- A. What form of chronic glomerulonephritis is observed in the patient?
- B. What is the mechanism of edema development?

Solution of the situational task:

- A. Nephrotic form of chronic glomerulonephritis.
- B. Permanent proteinuria leads to hypoproteinemia and a decrease in oncotic pressure. A drop in oncotic pressure leads to edema, hypovolemia develops, hyponatremia, which stimulates the production of aldosterone, and a vicious circle is formed.

12. Patient C, 75 years old, is concerned about causeless, persistent, recurrent, painless macrohematuria.

- A. What disease should be considered?
- B. What other complaints may bother the patient?
- C. What instrumental studies can confirm the diagnosis?

Solution of the situational task:

- A. Malignant neoplasm of the kidney.
- B. For weakness, reduced work capacity, weight loss, depression.
- C. Ultrasound, computed tomography.

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