Methodical instructions for self Works

Discipline:Cardiorespiratory System in pathology"

Code discipline: KSR 3302

Title educational programs: 6B10115 "Medicine"

The volume of study clocks / credits : 270h. (9 credits)

Course and semester study: 3 course, Vsemester

Methodical instructions for independent work of students are developed in accordance with the working curriculum of Diskipline (Sillabus) "CardiorespiratorySystem in pathology"And discussed at the meeting of the department.

Protocol № 10 from "31" 05. 2024y

Head of the Department: doctor of medical sciences, professor Bekmurzaeva E.K.

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- 1.**Topic №1:** The diagnostic value of laboratory and instrumental methods for the study of respiratory organs. Study of the function of external breathing.
- **2.SafeL.:**Familiarize students with the main methods of laboratory research and identify a number of diagnostic signs that serve as criteria for the pathological process of the respiratory system.
- **3.Tasks:** setaboutin the end
- 4.Form/ assessment:presentation
- 5.CriteriaAbout(Requirements for the task): Specified at the end.
- 6. Duration: at 6-day
- 7. Literature: setabouton the The last page of Sillabus

8.control:

Ouestions:

- 1. What changes in the GBA can be found in inflammatory processes in the bronchopulmonary system?
- 2. What methods are spending a sputum conducted?
- 3. What can be an increase in pleural fluid?

Tests:

1.Patient 52 years old, complains of shortness of breath, cough with rusty rusty, weakness, sweating. Considers himself a patient for many years. The disease proceeded waves, first with rare, and then with more frequent exacerbations. Rusty sputum stands out at:

- a. bruboral pneumonia
- b. lung cancer
- c. bronchiectatic disease
- d. chronic bronchitis
- e. lung gangrene
- 1. Patient 35 years old, turned to a doctor with complaints of weakness, malaise, shortness, cough with plenty of abundant mucus-Gurnic wet odorless, especially in the morning, per day is released to 300 ml. Sometimes hemochkali is observed. Both for 5 years, periodically the condition deteriorates, was repeatedly treated in the hospital. Silver sputum stands out at:
 - a. lung gangrene
 - b. bruboral pneumonia
 - c. bronchiectatic disease
 - d. chronic bronchitis
 - e. lung cancer
- 2. A man of 46 years old, turned into a clinic with complaints about general weakness, malaise, decline in performance, degradation of appetite, weight loss, stubborn cough with a small amount of sputum. I lost weight by 6 kg for 3 months. Three-layer sputum stands out at:
 - a. bruboral pneumonia
 - b. lung abscess
 - c. tuberculosis
 - d. chronic bronchitis
 - e. lung cancer
- 3. The patient I., 36 years old, suffering from COPD, is located on a stationary treatment for the focal pulmonary tuberculosis without decay. After the Watching clinical improvement over the past 3 days is noted to increase body temperature up to 38 ° C, unproductive cough. Examination method, to clarify the reason for the deterioration of the patient's condition:
 - a. Sowing sputum on the sensitivity of the accompanying microflora

- b. Brush biopsy
- c. Bronchoscopy
- d. Tuberculin sample
- e. Computer spirography
- 4. Three-layer Wet after defending character for:
- a. lung abscess and bronchiectasis
- b. acute bronchitis
- c. sarcoidosis
- d. exogenous allergicalveolitis
- e. chronicobstructivebronchitis
- 5. If spirals were found in spiralKurshmanaAnd Charcot Crystals Leiden, then this is:
- a. bronchial asthma
- b. lung abscess
- c. chronic simple bronchitis
- d. lung gangrena
- e. bronchiectatic disease
- 6. The wet as "raspberry jelly" is characteristic of:
- a. lung
- b. bronchiectatic disease
- c. bruboral pneumonia
- d. acute bronchitis
- e. Lung Atelectasis

Patient 26 years from a group of social risk. Complaints on weakness, malaise, fatigue, weight loss, damp, night sweating. It is ill for the last 2-3 months, it often works in a night shift. On the fluorogramInfiltrative shadow detected in the top shareRight lung, with a root to the root. Your tactic:

- a. Wet analysis on BK
- b. Send to the phthisiatra
- c. Conduct antibacterial therapy
- d. Appoint anti-tuberculosis treatment
- e. Send to the pulmonary compartment
- 7. Patient 22 years, got sick, a few days ago, there was loss inBody, chills, Pain in the chest right, cough with mocked mocrysts in small quantity, shortness of breath.RadiographRight in S1, S3 homogeneous dimming.Meterso It is necessary to assume ...
 - a. Lung abscess
 - b. PneumoniayuSi- 3 V / Shares of Right Lung
 - c. Exudative pleurisy
 - d. Dry pleurisy
 - e. Lung Atelectas
- 8. The patient has 40 years old, who has moved two weeks ago, the condition has deteriorated dramatically: fever up to 38-39°C, chills, pronounced inxication syndrome, shortness of breath, violation of the rhythm of the heart. Identifiedcardiomegaly, deafness of the heart tones, weakening u tone and systolic noise at the top, weakening u tone and diastolic noise on the aorta, flickering arrhythmia,hepatosplenomegaly. Specify the list of necessary surveys:
 - a. Common blood test immunogram, Echox, Bacteriological research of blood
 - b. Common blood test, urine, ehox,immunogram

- c. General blood test, urine, ehox, pulmonary x-ray
- d. General blood test, urine, ehox, ultrasound GDZ
- e. Common blood test, ehox, spleen puncture
 - 1.Topic№ 2:Laboratory and instrumental research methods for syndromes: compacts of lung tissue, impaired bronchial passability, increase in lightness in light. Palpation of the chest and percussion of the lungs in patients with the pathology of the respiratory system.
 - **2.SafeL.:** Acquaint students with basic methods Studies in syndromes: seals of lung tissue, impaired bronchial passability, increased airiness in the light, the presence of fluid and cavity in lightweight, respiratory failure.
 - 3.Tasks: setaboutin the end
 - 4.Form/ assessment:presentation
 - 5.CriteriaAbout(Requirements for the task): Specified at the end.
 - 6. Duration: at 6-day
 - 7. Literature: contains theon the The last page of Sillabus

8.control:

Questions:

- 1. What changes in the x-ray image can be detected during inflammatory processes in the bronchopulmonary system?
- 2. What methods of functional diagnostics is carried out?
- 3. What other additional instrumental diagnostic methods can be used?

Tests:

- 1. The simplest quickly fulfilled method for assessing the state of bronchial passability fordefinitionThe volume of peak speed of exhalation (PSV) is:
 - a. peak flowmetry
 - b. fluorography
 - c. Radiography of chest organs
 - d. Computer tomography of chest
 - e. electrocardiography
- 2. The hospital entered the patientAnd, 27 years old, with a disruption of breathing. Hissent to pneumotachometry.Pneumotachometrydetermined by:
 - a. The volumetric speed of the air flow during the inhalation and exhalation
 - b. additional volume
 - c. breathing
 - d. reserve
 - e. residual air
 - 3. N. Patient, 34 g., Worked for 14 years by a molder in the foundry shop. Professional Harm:

Quartz-containing dust (concentration 4 times higher than PDC), Increased air temperature in premises.atAdmission to work was recognized almost healthy. After 10 years, cough appeared from the beginning of the work, shortness of breath during exercise, general weakness. After admission to the patient's hospital sent to oximetry. Oxihemometry determined by:

- a. Volumetric speed of inhalation and exhalation
- b. additional volume
- c. oxygen saturation
- d. breathing

- e. reserve
- 4. To the endoscopic method of research of the respiratory systemRefers:
- a. bronhography
- b. bronchoscopy
- c. fiberoptic bronchoscop
- d. thoracoscopy
- e. tracheoscopy
- 5. In Gymnasium No. 5 held a general inspection of high school students. Method of study of the respiratory system used for mass examination:
- a. fluorography
- b. bronchography
- c. radiography
- d. tomography
- e. sciagraphy
- 6. In order to raise the correct diagnosis and correctly compose a scheme of therapy for the diseases of the lungs, the doctor must conduct a number of special studies of the respiratory organs. One analysis of the complaints is not enough, because often for different diseases are characterized by the same symptoms. The task of any doctor is to properly choose the research method to quickly and without unnecessary inconvenience for the patient to determine the disease. To the additional method of studying the respiratory systemBelieve:
 - a. capillaroscopy
 - b. pneumotachometry
 - c. oxyhemotria
 - d. bronchography
 - e. spirometry
- 7. The patientbronchial asthmaFor self-control of the state of external respiration, it is necessary to have its own:
 - a. Peak flow meter
 - b. Body plethysmograph
 - c. Spirograph
 - d. Pneumotachograph
 - e. Gas analyzerblood composition
- 8. Woman 29years, presentsComplaints on the thoracic pain on the left, temperature increase to 39°C, increasing shortness of breath. Objectively: weakening voice jitter on the left, shortening of the percussion sound. The number of breathing 22 inminute, heart rate- 100 beats per minute. The decisive methodDiagnosis is:
 - a. Radiography of the chest
 - b. Bronchography
 - c. ECG
 - d. General blood analysis
 - e. Spirography

- 9. Men have cough with knittingслизисто-Gurnal wets with unpleasantsmell, growingIn the night and preliminary clock. When inspection:acrocyanotic triangle, nailFalangi by the type of "drum sticks".In lower sectionsEasy on both sides, more on the right wet average elibrianwheezing, scattered humming wheezing.most Informative diagnostic method:
 - a. Bronchography
 - b. Thoracoscopy
 - c. Scintigraphylight
 - d. Magnetic resonance tomography of the lungs
 - e. ReviewRadiography of the Organschest
 - 10. The main radiological symptom is characteristic of focal pneumonia:
 - a. focal shadow
 - b. multiple round shadows
 - c. linear dimming
 - d. common dimensions
 - e. multiple enlightenment
- 1.Topic№ 3:Laboratory and instrumental research methods for syndromes: the presence of fluid and cavity in lightweight, respiratory failure. Auscultation of the lungs in the norm and with pathologypatients with respiratorythe system.
 - 1. SafeL.:Introduce students withInstrumental methods of research with leading clinical syndromes of diseases of respiratory organs.
 - 2. Tasks: Specified at the end.
 - 3. Form/ assessment:presentation, Pneumonia / indicated in силлабусе.
 - **5. Performance criteria:** Specified at the end.
 - **6. Deadline:**On the 11th day
 - 7. Literature: Specified in the last page Syllabus
 - 8. Control (questions, tests):

Ouestions:

- 1. What changes of radiographs are available in patients with diseases of the respiratory organs?
- 2. What is spiritography and how is registered?
- 3. NameTools for the diagnostics of the sealing syndrome of lung fabric associated withCovid-19.

- 1. The patient 47 years old turned to a district doctor with complaints about periodically emerging episodes of shortness of shortness of breath at rest, which appeared during the last week. It consists of accounting by the gynecologist about the Moma of the Uterus since 2005. Objectively: in the lower departments of the right light Local dulling of pulmonary sound, impaired breathing, CHA 26 per minute, heart rate 86 per minute, hell 120/80 mmpr.cr. Radiographs: Picture of "matte glass". Your diagnosis:
 - A. pneumonia
 - B. bronchial asthma
 - C. pulmonary artery thromboembolism
 - D. neurocirculatory dystonia
 - E. acuteobstructivebronchitis
- 2. Patient A. 38 years old, he turned to a doctor with complaints about cough, at times with mucous-purulent sputum over the past 2 years. Smokes from 15 years. The last 3 months

appeared expiratory shortness of breath when running and lifting on the 3rd floor. Auscultative: Hard breath, dry wheezes. Index Tiffno is 55%. Pre-diagnosis:

- A. Chronic obstructive pulmonary disease
- B. Pulky
- C. focal pneumonia
- D. Sarcoidosis of lungs
- E. bronchial asthma
- 3. Children's educatorthe garden worries the exhausting dry cough with

. ChDD - 22vmin, hyperemia of the face, in the lungs hard breath,

There are no wheezes. With a radiographic study of pathology, no detection.

Most appropriate to clarify the diagnosis:

- A. Scintigraphylight
- B. Fibrogastroduodenoscopy
- C. Computer tomography
- D. Research Functions of External Breath
- E. The study nasopharyngealFlushing
- 4. The man has 56 years old, with a long history of the smokers, appearedshortness of breath, general weakness, streaks of blood in sputum. In the lungsbuzzing and buzzingwheezing.onRadiograph of the roots of the lungs are expanded, the atelectasis of the plot of the middle shareправоголегкого. In the analysis of sputum:neutrophils, erythrocytes. To clarify the diagnosis it is necessary to spend the patientSurvey method:
 - A. Spirography
 - B. Bronchography
 - C. Computer tomography
 - D. Scintigraphylight
 - 5. The sensitive indicator reflecting the degree of bronchial obstruction is:
 - A. with lowering OFV1 and Fire
 - B. with lowering Yellow
 - C. with lowering Fzhel
 - D. with lowering Jelly and FFV1
 - E. with lowering residual lung tank
- 1.Topic №4:Diagnostic value of laboratory and instrumental studies for diseases of the cardiovascular system.

Diagnostic value. ECG is normal. Technique of electrocardiographic research.

- **2.SafeL.:**Aboutacquaint students with aboutchoвныMImethodAMILaboratory and instrumental research and determination of a number of diagnostic signs that serve as criteria for the pathological process of the cardiovascular system.
- 3.Tasks:indicated at the end
- **4.Form/ assessment:** presentation
- **5.CriteriaAbout(Requirements for the task):** Specified at the end.
- **6. Duration:**at 16-day
- 7. Literature: Scheduled on the last page Syllabus

8.control:

Questions:

- 1. What changes to the UAK can be found at coronary failure?
- 2. What are myocardial infarction biochemicals know?
- 3. The consequence of which there may be an increase in blood troponin?

- 1. For myocardial infarction, it is not characteristic of the level of level:
- a. LDH-5
- b. AST
- c. troponinI
- d. troponinate
- e. Мв-fractionfk
- 2. The most informative methods for diagnosing an atherosclerosis of the coronary arteries:
- a. angiography
- b. ECG
- c. echocardiography
- d. stress-echocardiography
- e. ECG-monitoring
- 1. The most reliable ECG criteria of myocardial infarction are:
- a. The appearance of the q widthover 30msecand the depth of more2 mmin two leads and more
- b. elevation segmentSt
- c. segment depressionSt
- d. Appearance of lifting or depression segment Stmorel mmafter 20msecfrom point j in two adjacent leads;
 - e. segment depressionSt
 - 2. The most informative method of diagnosisvasorenal arterial hypertension:
 - a. renalarteriography
 - b. US renal scintigraphy kidney
 - c. scintigraphykidney
 - d. Uzi renal arteries
 - e. X-ray renal studies
- 3. Male 37 years old. In the morning, during walking, a short-term sense of compression behind the sternum with numbness of the brushes occurs periodically. With deep breathing, pain does not increase. During pain, the patient slows down walking. For the first time, such phenomena arose about a month ago. The best method for diagnosis:
 - a. electrocardiography
 - b. Radioisotope Heart Scanning
 - c. coronary angiography
 - d. echocardiography
 - e. Radiological study of the chest
- 4. Research requiredpatient for Verification of the diagnosis in the detection of arterial hypertension and systolic noise over the navel:
 - a. Uzdg renal arteries
 - b. Ultrasound kidneys
 - c. Review R-graphic of the chest organs
 - d. ocular fundus
 - e. excretory urography

- 5. Patient 55 years arise Pain in the heart of a compressive nature that have no clear connection with physical activity, but passing after taking nitroglycerin. Shealso suffer Varicose expansion of the veins of the lower extremities. Init is Increased blood pressure up to 160/90 мм.рт.ст. On ECG in 12 standard leads No specific changes. Next diagnostic The examination will be:
 - a. dailymonitoring
 - b. bicycle ergometry
 - c. sample with obzidanom
 - d. coronary angiography
 - e. determinationblood enzymes
- 6. Woman 25 years old. It bothers an acute stitching, compressing pain in the left half of the chest. With breathing, head movements, hands, breast wall palpation is enhanced. The pain arose 2 hours ago after trouble on work.yours tactics:
 - a. remove the electrocardiogram
 - b. prescribe treatment
 - c. send to a neuropathologist
 - d. hospitalized
 - e. x-ray
 - 7. On FKG, systolic noise of aortic stenosis has a form:
 - a. diamond-shaped
 - b. growing
 - c. constant
 - d. decreasingly-increasing
 - e. decreasing
- 8. Patient 57 years old. Meters monthMyocardial infarction picked back. Within 2 weeks, the gulling pains for the sternum, drug treatment without an effect. There are no dynamic changes to the ECG. Specify the desired research method:
 - a. Coronary angiography
 - b. Treadmill
 - c. DailymonitoringECG
 - d. Stress Echocardiography
 - e. Bicycle ergometer

- 9. For myocardial infarction, it is not characteristic of the level of level:
- f. LDH-5
- g. AST
- h. troponinI
- i. troponinate
- My-fractionfk
- 10. The most informative methods for diagnosing an atherosclerosis of the coronary arteries:
- f. angiography
- g. ECG
- h. echocardiography
- stress-echocardiography
- j. ECG-monitoring
- 11. The most reliable ECG criteria of myocardial infarction are:

- f. The appearance of the q widthover 30msecand the depth of more2 mmin two leads and more
- g. elevationsegmentSt
- h. segment depressionSt
- i. Appearance of lifting or depression segmentStmore1 mmafter 20msecfrom point j in two adjacent leads;
 - j. segment depressionSt
 - 12. The most informative method of diagnosisvasorenal arterial hypertension:
 - f. renalarteriography
 - g. US renal scintigraphy kidney
 - h. scintigraphykidney
 - i. Uzi renal arteries
 - j. X-ray renal studies
- 13. Male 37 years old. In the morning, during walking, a short-term sense of compression behind the sternum with numbness of the brushes occurs periodically. With deep breathing, pain does not increase. During pain, the patient slows down walking. For the first time, such phenomena arose about a month ago. The best method for diagnosis:
 - f. electrocardiography
 - g. Radioisotope Heart Scanning
 - h. coronary angiography
 - i. echocardiography
 - j. Radiological study of the chest
- 14. Research requiredpatient for Verification of the diagnosis in the detection of arterial hypertension and systolic noise over the navel:
 - f. Uzdgrenal arteries
 - g. Ultrasound kidneys
 - h. Review R-graphic of the chest organs
 - i. ocular fundus
 - j. excretory urography
- 15. Patient 55 years arisePain in the heart of a compressive nature that have no clear connection with physical activity, but passing after taking nitroglycerin. Shealso sufferVaricose expansion of the veins of the lower extremities. Init isIncreased blood pressure up to 160/90 мм.рт.ст. On ECG in 12 standard leadsNo specific changes. Next diagnosticThe examination will be:
 - f. dailymonitoring
 - g. bicycle ergometry
 - h. sample with obzidanom
 - i. coronary angiography
 - i. determinationblood enzymes
- 16. Woman 25 years old. It bothers an acute stitching, compressing pain in the left half of the chest. With breathing, head movements, hands, breast wall palpation is enhanced. The pain arose 2 hours ago after trouble on work.your stactics:
 - f. remove the electrocardiogram
 - g. prescribe treatment
 - h. send to a neuropathologist
 - i. hospitalized
 - j. x-ray
 - 17. On FKG, systolic noise of aortic stenosis has a form:

- f. diamond-shaped
- g. growing
- h. constant
- i. decreasingly-increasing
- j. decreasing
- 18. Patient 57 years old. Meters monthMyocardial infarction picked back. Within 2 weeks, the gulling pains for the sternum, drug treatment without an effect. There are no dynamic changes to the ECG. Specify the desired research method:
 - f. Coronary angiography
 - g. Treadmill
 - h. DailymonitoringECG
 - i. Stress Echocardiography
 - j. Bicycle ergometry
- **1.Topic** № **5:**Laboratory and instrumental research methods for syndromes: an increase in blood pressure and ischemic heart disease, acute and chronic coronary insufficiency, damage to the valve apparatus and at arrhythmias.
- **2.SafeL.:**AboutMeet students with 1 aboratoryMIand instrumentalMImethodAMIStudies in syndromes: enhancement of blood pressure and ischemic heart disease, acute and chronic coronary failure, damage to the valve apparatus and at arrhythmias.
- **3.Tasks:** indicated at the end
- 4.Form/ assessment: Presentation
- 5. Criteria About (Requirements for the task): Specified at the end.
- 6. Duration: on 22-day
- 7. Literature: Scheduled on the last page Syllabus

8.control: Ouestions:

- 1. The main clinical signs of coronary insufficiency syndromeare?
- 2. What is the purpose of blood tests on troponin?
- 3. What changes are determined in biochemical blood test with myocardial infarction?
- 1. What distinguishing features of systolic and diastolic noise know?
- 2. What causes of diastolic noise know?
- 3. At what pathologies there are diastolic slices of stylla?
- 4. What noises are subject to extraordinary?
- 5. What noise is heard in the inadentiality of the aortic valve?

- 1. Plok for which clappingItone, diastolic noise, especially presets
- a. mitral stenosis
- b. mitral insufficiency
- c. tricuspid stenosis
- d. aortic insufficiency
- e. aortic stenosis
- 2. Plok for which the detection of coarse systolic noise is characteristicinIiintercostal on the right of the sternum

- a. aortic stenosis
- b. lungartery
- c. defect interatrial partitions
- d. interventricular defectpartitions
- e. mitral insufficiency
- 3. Systolic "Cat purr" in Ii The intercostal on the right is found at:
- a. Stenosis of the mouthaorta
- b. Lack of aortic valve
- c. Mitral stenosis
- d. Mitral insufficiency
- e. Coarctation aorta
- 4. A soft blowing diastolic noise in a patient with a long-termly existing mitral stenosis over the pulmonary artery is heardfor.
 - a. relative lack of pulmonary valve due to high pulmonary hypertension
 - b. Stenosis of the Mitral Hole
 - c. defect interatrial partitions
 - d. Stenosis of the mouth of the pulmonary artery
 - e. aortic hole
- 5. Diastolic jitter-пальпаторноThe determined jitter of the chest in the precodal region in the diastole phase at some heart defects due to the turbulent blood flow through the affected valves or abnormalthe hole. Diastolic jitter on the top is due to:
 - a. mitral stenosis
 - b. aortic insufficiency
 - c. Aortic Stenosis
 - d. Three-life failure
 - e. mitral insufficiency
- 6. **Mitral stenosis** the narrowing of the area of the left atrioventricular mouth, leading to the difficulty of the physiological current of blood from the left atrium in the leftventricle. Diastolic The trembling in patients with mitral stenosis on the top is due to the same reasons as:
 - a. clapping 1 tone
 - b. rhythm quail
 - c. Focus 2 tones on pulmonary arteries
 - d. diastolic noise
 - e. split 2 tones on the top
 - 7. With a ortal stenosis, it is determined:
 - a. Systolic trembling on the top
 - b. Diastolic jitting on the top
 - c. Diastolic jitter on aorta (2 point of auscultation)
 - d. Systolic jitter on aorta
 - e. Systolic jitter at 3-4intercostal spaceAt the left edge of the sternum
- 8. Systolic trembling palpatorically defined in the Systole phase shake of the chest of the primitive region; observed in expressed defects heart, followed by roughsystolic systolic noiseThe jitter is explained by the same reasons as ...
 - a. systolicaortic
 - b. reinforced 1 tone on the top
 - c. Related 2 tone on aorta

- d. accent 2 tones on aorta
- e. split 2 tones on aorta
- 9. A woman of 25 years is examined by a doctor for evaluating heart noise. AnamZe No indications for rheumatism and earlierListened noise. I and II tones are normal, cardiomegalythere is no. In the secondintercostal spaceSystolic noise noise is heard from the sternum. With auscultation of the heart and blood vessels two tones are not normal is listened to:
 - a. on the femoral artery
 - b. at carname arteries
 - c. on subclavian arteries
 - d. epigastricpoints
 - e. In all points of auscultation of the heart
- 10. The patient complains of fainting, pain in the heart, stench. In Auscultation Doubletone Traube is being listened toin:
 - a. Aortal Stenosis
 - b. aortic insufficiency
 - c. mitral stenosis
 - d. mitral insufficiency
 - e. three-way insufficiency

- 1. What is characteristic of cardiomyocytes with a rapid answer: A. The high values of the maximum diastolic potential are characterized; B. The refractory period is approximately equal to the duration of the action potential; B. They are concentrated mainly in the field of the conductive system nodes; The cell membrane contains fast sodium channels.
 - A. rightA, used, Mr.
 - B. rightUsed in, Mr.
 - C. rightUsed, Mr.
 - D. rightA, Mr.
- 2. What is characteristic of cardiomyocytes With a slow answer: A. The high values of the maximum diastolic potential are characterized; B. The refractory period is approximately equal to the duration of the action potential; B. Focusthey are predominantly in the area of the conductive system nodes; The cell membrane contains fast sodium channels.
 - A. Right and
 - B. right in
 - C. right b
 - D. Right g
- 3. What is characteristic of cardiomyocytes with a rapid answer: A. Are found among the cells of the conductive system and cells of the contracting myocardium; B. Refractory period significantly exceeds the potential duration actions; B. Characterized Spontaneous diastolic depolarization.
 - A. right b
 - B. rightA, used
 - C. Right and
 - D. right in
- 4. What is characteristic of cardiomyocytes With a slow answer: A. Are found among the cells of the conductive system and the cells of the contracting myocardium; B. The refractory period

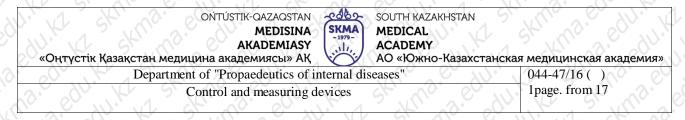
significantly exceeds the duration of the action potential; B. Characterized Spontaneous diastolic depolarization.

- A. rightA, used
- B. right in
- C. right b
- D. rightUsed in
- 5. List the properties of the cells of the contracting myocardium: A. Have the property of electrophysiologicalaвтоматии; B. have a high speed of activation andinactivation; B. have a low activation rate andinactivationdue to the large number of slow calcium channels; G. contain a significant number of fast sodium channels; D. The frequency of the generated pulses in various departments ranges from 20 to 90 pulses; E. Spontaneous generation of impulses in the norm is noncharacter.
 - A. rightUsed, Mr., Is
 - B. rightAnd, in, Etc.
 - C. rightIn, Mr., Etc.
 - D. rightUsed in, Is

Answers: 1) A, 2) B, 3) C, 4) D, 5) A.

- 1. The scientist-therapist, who proposed a scheme of questioning patients, bringing this method to the height of the art.
 - a. G.a. Zakharyin
 - b. L.Auenbrugger
 - c. District.Laennec.
 - d. Kussmaul.
 - e. Einthoven.
 - 2. With aortic insufficiency, the top push ..
 - a. domed
 - b. Spilled, reinforced.
 - c. The top push is shifted to the left and down, spilled
 - d. resistant
 - e. lifting
- 3. Inspection allows you to get an integrated idea of a person: its physical and mental state, the size of the body, its structure, sizes and forms of its individual parts, sizes of somebodies , themfunctions, the state of the skin, mucous, fat layer, lymph nodes, surface vessels, etc. during generalinspectionThe patient is not determined by:
 - a. Changes in the heart
 - b. bed
 - c. body type
 - d. consciousness
 - e. leather and visible mucous
- 4. Palpation -Physical method of medical diagnostic sheld by the patient's body feeling. As a method of studying properties pulse, Palpation is mentioned in the works Hippocrates. Palpation is based on:
 - a. Feeling tounel and volume of the organ
 - b. captureVisible eye change

- c. Casting sound from oscillatory movements in tissues
- d. sob
- e. Calming sound phenomena arising in the body
- 5. Palpation is based on a tangile sensation arising from movement and pressure of the fingers or palm of the feeling hand. With the help of palpation, the properties of tissues and organs determine: their position, magnitude, form, consistency, mobility, topographical relations, as well as the pain of the under study. Palpation method is significantly improved:
 - a. Bp.p.exemplary-N.d.guardian
 - b. C.p.Botkin
 - c. Kussmaul
 - d. M.I.wise
 - e. Γ.a.Zakharyin
- 6. Anasarka is a diffuse swelling of soft tissues with predominant localization in the lower half of the body, which arises as a consequence of other diseases and has a progressive course. The concept of anasarka does not include:
 - a. Stokes collar
 - b. ascites
 - c. hydropericardium
 - d. Massive, common swelling
 - e. hydrothorax
 - 7. Sharp shortness, suffocation, cough, hemochkami is:
 - a. Signs of acute left-detective failure
 - b. thromboembolism of the branches of pulmonary artery
 - c. The manifestations of respiratory failure associated with bronchial asthma
 - d. Manifestations of symptomatic arterial hypertension at feochromocytoma
 - e. Signs of renal eclampsia
- 8. In a patient, after exercise, the attack of shortness of breath appeared, accompanied by a chopping, cough with the release of frothy pink sputum. When inspection: in the lungs, wet solid-caliber wheels on both sides, flickering arrhythmia, an increase in liver, swelling on the lower limbs. Pathology, with specified symptoms:
 - a. Outragian left bore
 - b. Bronchial asthma attack
 - c.Pulmonary artery thromboembolism
 - d. Spontaneous pneumothorax
 - e. Infarction pneumonia
- 9. Woman 40 years old, turned to preventive inspection. Periodically notes rare short-term stabbing pain in the heart. Weight90 kgand growth170 cm, smokes 1 pack per day for 5 years, does not do physical exercises. The last examination was 6 years ago. Mother suffered a myocardial infarction at the age of 45. InphysicalThe examination of pathology has not been identified. Diagnostic examination that must be carried out first:
 - a. Serum cholesterol
 - b. Radiograph of the chest
 - c. Test with exercise
 - d. ECG
 - e. Coronary angiography



- 10. Patient V., 50 years old turned to a family doctor with complaints about intense pain in the chest. InAn examination of the doctor was not found any visible changes from the heart and lungs. Hell 120/85 mmpr.ct., Heart rate 88oud.b1 minute. The doctor reassured the patient and sent him home, with recommendations to lie down at home and come tomorrow. Is the doctor's tactic right?
 - a. No, it is necessary to appoint an urgent ECG study
 - b. Yes, the pains that have arisen do not foresee the dangers for the patient's condition
 - c. Yes, if any complications occur, it is possible to assist the next day
 - d. No, it is necessary to assign treatment with analgesics

No, it is necessary to send a patient for planned treatment.