PROPAEDEUTICS

OF INTERNAL DISEASES

Control questions for current and final classes



МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ КАФЕДРА ПРОПЕДЕВТИКИ ВНУТРЕННИХ БОЛЕЗНЕЙ

ПРОПЕДЕВТИКА ВНУТРЕННИХ БОЛЕЗНЕЙ

PROPAEDEUTICS OF INTERNAL DISEASES

Контрольные вопросы к текущим и итоговым занятиям



Минск БГМУ 2018

УДК 616.1/.4-07(075.8)-054.6 ББК 53.4я73 П81

Рекомендовано Научно-методическим советом университета в качестве контрольных вопросов к текущим и итоговым занятиям 16.05.2018 г., протокол № 9

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Пропедевтика внутренних болезней = Propaedeutics of Internal Diseases : П81 контрольные вопросы к текущим и итоговым занятиям / И. Л. Арсентьева [и др.]. – Минск : БГМУ, 2018.-40 с.

ISBN 978-985-21-0060-1.

Содержит перечень контрольных вопросов к текущим и итоговым занятиям по дисциплине «Пропедевтика внутренних болезней».

Предназначены для преподавателей и студентов 2–3-го курсов медицинского факультета иностранных учащихся.

УДК 616.1/.4-07(075.8)-054.6 ББК 53.4я73

ISBN 978-985-21-0060-1

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SEMESTER 4 GENERAL PROPAEDEUTICS (SEMIOLOGY)

LESSON № 1

Topic: "Introduction into discipline «Propaedeutics of Internal Diseases». Short history of the development of the science of internal diseases. Medical Ethics and Deontology. The organization of therapeutic department functioning in hospitals. Methods of clinical examination of patients with internal diseases: subjective and objective methods. Scheme of Case History".

List of Control Questions:

- 1. General plan of patient's examination. Methods of clinical examination of the patient: main (subjective and objective) and additional (laboratory and instrumental).
- 2. The Scheme of the Case History. Case History as a scientific, medical and legal document.
- 3. Anamnesis. Anamnesis sections (the Present History (or "Anamnesis morbi" in Latin) and the Past History (or "Anamnesis vitae" in Latin)), their medical and social meaning. Rules of collecting information about the Present History and the Past History.
 - 4. Rules and techniques of general examination.
- 5. Types of patient's position in bed, facial expression, state of consciousness.
- 6. Examination of the skin, visible mucosa, hypodermal fatty tissues, lymph nodules, muscles, bones and joints.
- 7. Palpation. Physical basis of palpation. Types of palpation, their diagnostic meaning.
- 8. Percussion. Physical basis of percussion. Types and general rules of percussion. Characterization of percussion sounds.
- 9. Auscultation. Physical basis of auscultation. General rules and techniques of auscultation.

LESSON № 2

Topic: "Subjective and objective methods of patient examination with stomach and bowel diseases".

List of Control Questions from related disciplines:

- 1. Anatomy of the stomach. Variants of the stomach shape.
- 2. Anatomy of the small intestine, its location in the abdomen (topography).
- 3. Anatomy and topography of the large intestine parts.
- 4. Basic physiological functions of the stomach secretory, motor, endocrine.

5. Basic physiological functions of the intestine — secretory, nutritive, motor-evacuating, endocrine.

List of Control Questions:

- 1. Basic and additional complaints systematized according to syndromes. Characteristics of the main clinical syndromes.
 - 2. Features of general examination in case of gastrointestinal diseases.
 - 3. Examination of the abdomen in vertical and horizontal positions.
 - 4. Auscultation of the abdomen.
- 5. Percussion of the abdomen. Detection of free fluid in the abdominal cavity.

LESSON № 3

Topic: «Superficial and deep palpation of the abdomen».

List of Control Questions from related disciplines:

- 1. Anatomy and topography of the stomach. Variants of the stomach shape.
- 2. Anatomy of the small intestine, its location in the abdomen (topography).
- 3. Anatomy and topography of the large intestine parts.

List of Control Questions:

- 1. Position of the patient on abdominal cavity palpation.
- 2. The method of superficial approximate palpation of the abdomen.
- 3. Rules and method of superficial comparative palpation of the abdomen.
- 4. Diagnostic meaning of superficial abdominal palpation.
- 5. Rules, technique and sequence of deep methodical palpation of the large intestine and stomach by Obraztsov-Strazhesko.
- 6. Description and estimation of palpated organ: sigmoid colon, caecum, descending, ascending and transverse colon, lower stomach border, liver and spleen.

LESSON № 4

Topic: "Major clinical syndromes of esophagus, stomach and bowel diseases".

- 1. Syndrome of stomach bleeding. Reasons, clinical and laboratory signs. Intestinal bleeding: reasons, clinical and laboratory signs.
 - 2. Methods for diagnosing latent bleeding.
 - 3. Stomach and pulmonary bleeding differences.
- 4. Syndromes of secretory stomach dysfunction (hyper- and hyposecretory). Reasons. Diagnosis.
- 5. Syndromes of maldigestion and malabsorbtsion. Reasons, pathophysiology, diagnostic signs.

Topic: "Subjective and objective methods of examination of patients with liver and bile ducts diseases".

List of Control Questions from related disciplines:

- 1. Anatomy and topography of the liver and spleen.
- 2. Anatomy of the gall bladder, its location in the abdomen (topography).

List of Control Questions:

- 1. Complaints of patients with hepatobiliary diseases.
- 2. Rules and techniques of liver percussion. Diagnostic meaning.
- 3. Liver borders by Kurlov. Diagnostic meaning.
- 4. Rules and techniques of liver palpation. Diagnostic meaning.
- 5. Rules and techniques of spleen percussion. Diagnostic meaning.
- 6. Rules and techniques of spleen palpation. Diagnostic meaning.

LESSON № 6

Topic: "Major clinical syndromes of hepatobiliary diseases".

List of Control Questions:

- 1. Syndrome of obstructive (post-hepatic) jaundice: causes, clinical and laboratory signs.
- 2. Syndrome of hemolytic (pre-hepatic) jaundice: causes, clinical and laboratory signs.
- 3. Syndrome of parenchymatous (hepatic) jaundice: causes, clinical and laboratory signs.
 - 4. Portal hypertension syndrome: causes, symptoms.

LESSON № 7

Topic: "Laboratory and instrumental methods of examination in case of gastrointestinal diseases".

List of Control Questions from related disciplines:

- 1. Stomach anatomy.
- 2. Stomach functions.
- 3. Phases of stomach secretion.
- 4. What is the mechanism of bile formation?
- 5. Physiological meaning of bile.
- 6. What is the mechanism of bile secretion?
- 7. Intestine functions.

List of Control Questions:

- 1. How is stomach contents collected for examination?
- 2. What parenteral stimulants are used for probing?
- 3. What physical properties of stomach contents should be studied?
- 4. What chemical properties of stomach contents should be studied?
- 5. The concept of intragastric pH-probe technique.
- 6. What are the tubeless methods used in examination of the secretory function of the stomach?
 - 7. How can three-stage duodenal sounding be performed?
 - 8. What is chromatic duodenal sounding used for?
 - 9. What trial diets are prescribed before a scatological examination?
 - 10. How to prepare the patient for occult blood feces analysis?

LESSON № 8

Topic: "Observation of patients with diseases of the digestive system".

- 1. Rules of identification and systematization of complaints in patients with gastrointestinal diseases.
 - 2. Rules of examination of patients with gastrointestinal diseases.
- 3. Clinical significance of changes in patient's position, color of skin and mucous membranes, skin condition, subcutaneous tissue, configuration and abdominal volume in vertical and horizontal positions.
- 4. Stomach bleeding: causes, clinical and laboratory signs. Intestinal bleeding: causes, clinical and laboratory signs.
 - 5. Diagnosis of hidden bleeding.
 - 6. Difference in stomach and pulmonary bleeding.
- 7. Syndromes of stomach secretory dysfunction (hyper- and hyposecretion). Causes, diagnosis.
- 8. Maldigestion syndrome. Malabsorption syndrome. Causes, mechanism of the development, diagnostic signs.
- 9. Rules of identification and systematization of complaints in patients with diseases of the liver and bile ducts.
- 10. Rules of examination of patients with diseases of the liver and bile ducts.
- 11. Clinical value of CNS disorder, discoloration of the skin and mucosa, bleedings, presence of vascular formations, venous collaterals, enlargement of the abdomen.
 - 12. Post-hepatic jaundice. Causes, symptoms and laboratory signs.
 - 13. Pre-hepatic jaundice. Causes, symptoms and laboratory signs.
 - 14. Hepatic jaundice. Causes, symptoms and laboratory signs.
 - 15. Portal hypertension syndrome: causes, symptoms.

SEMESTER 5 GENERAL PROPAEDEUTICS

LESSON № 1

Topic: "Examination of patients with respiratory diseases. Subjective examination of patients with respiratory diseases (inquiry). Objective examination of patients with respiratory diseases: general inspection, visual examination and palpation of the chest".

List of Control Questions:

- 1. What is medical deontology?
- 2. What is the ethics of questioning?
- 3. In what order is the questioning conducted?
- 4. What complaints of the patient are considered to be the main?
- 5. Why is it necessary to detail the complaints?
- 6. List the complaints of patients with respiratory diseases.
- 7. What is the order of the Present History taking?
- 8. What is the value of the development of the Present History for diagnosis?
 - 9. What is the purpose of the Past History taking?
- 10. Is it possible to ask questions concerning the previous diseases and private life in the presence of other people (tell about the privacy rules)?
 - 11. What is the fever?
 - 12. What types of curves exist in case of fever?
 - 13. How to store medical thermometers correctly?
 - 14. What are the requirements for body temperature measurement?
 - 15. What is the temperature sheet and how to fill it correctly?
 - 16. What are the types of fevers?
 - 17. What are the characteristics of care for febrile patients?
- 18. What options are used to decrease body temperature in febrile patients?
- 19. What are the symptoms of crisis? What does the urgent help in case of collapse consist of?

LESSON № 2

Topic: "Objective examination of patients with respiratory diseases: percussion and auscultation of lungs. Methods of laboratory and instrumental studies in respiratory diseases".

List of Control Questions from related disciplines:

- 1. Anatomy of respiratory organs.
- 2. Basic functions of respiratory organs.

- 1. List and characterize the basic complaints of patients with respiratory diseases, specify their pathogenesis and diagnostic value.
- 2. Describe methods of taking patient's Present and Past Histories according to their sections.
- 3. Specify features of taking the Present and Past Histories of patients with respiratory diseases.
- 4. Evaluate the general condition of the patient's respiratory disease: lying position, types of consciousness disorder, the presence of herpetic rashes on the lips and wings of the nose, discoloration of the skin, the color and shape of the nail phalanges, the presence of edema. Explain the mechanism of the development of the identified symptoms.
 - 5. Describe the significance of static and dynamic examination of the chest.
 - 6. List and characterize the normal forms of the chest.
- 7. Describe the pathological chest forms and explain the mechanism of their formation, diagnostic significance.
- 8. List causes of thorax asymmetry (presence of volume increase (bulging) or decrease (reduction) for one of the chest halves (or its part).
 - 9. Explain the principal causes of thorax halve lagging while breathing.
 - 10. Characterize breathing types and diagnostic meaning of their detection.
- 11. List and characterize changes of the respiratory rate, depth and rhythm, specify probable mechanisms of their development.
- 12. Name types and mechanism of occurrence in case of periodic respiration.
 - 13. List general rules and sequence of the thorax palpation.
 - 14. Describe the technique of determining thorax resistance.
 - 15. List the main causes of thorax resistance changes.
 - 16. Name the purpose of thorax palpation.
- 17. Describe the mechanism of vocal vibration formation and technique of its detection.
- 18. List the mechanism and causes of vocal vibration intensifying (or weakening).
- 19. Characterize percussion as a research technique and explain its physical foundation.
 - 20. Name percussion types and its common rules.
- 21. List the rules for conducting comparative and topographical lung percussion.
- 22. Specify the position of the finger-plexymeter for comparative percussion of the lungs: on anterior, lateral and posterior surfaces of the thorax.
 - 23. Describe the basic characteristics of percussion sound.
 - 24. Characterize pulmonary, femoral and tympanic sounds.

- 25. Characterize percussion sounds on the symmetric thorax sites in normal condition.
- 26. List the reasons of percussion sound difference above some symmetric lung areas (lung apices, on II–III intercostals spaces, in auxiliary fosses) in healthy people.
- 27. Name causes and specify development mechanisms of the next percussion sounds: a) absolutely dull sound, b) dullness, c) tympanic sound, d) mixed dull-tympanic sound, e) bandbox sound, f) metallic sound, i) sound of "cracked pot".
- 28. Indicate diagnostic value of comparative and topographical lung percussion.
 - 29. List topographical lines of the chest.
- 30. Name a normal level of the lung apices (height in cm) and Kronig's area width (in cm).
- 31. Specify the lower lung border position (right and left) along the topographical line in normal condition.
 - 32. List the causes of lung border position changes (one-side, both sides).
- 33. Characterize the method of detecting lung edge mobility (lower lung border excursion) along the topographical lines (in cm).
 - 34. Name the basic reasons of limitation of lower lung border mobility.
 - 35. Specify the projection of lung lobes to the chest surface.
- 36. Characterize an auscultation as a research technique and explain its physical foundation.
- 37. Name auscultation types, specify their advantages and disadvantages. Characterize common rules and techniques.
 - 38. Describe the method, technique and sequence of lung auscultation.
- 39. Explain vesicular breathing development and the mechanism of its formation.
- 40. Name causes and explain the mechanism of physiological and pathological weakening of vesicular breathing.
- 41. Specify causes and explain the mechanism of physiological and pathological intensifying of vesicular breathing.
- 42. Explain the mechanism and name the reason for occurrence of rough vesicular breathing and rough vesicular breathing with extended expiration.
- 43. Characterize the saccadic breathing and specify causes of its occurrence.
- 44. Explain the mechanism of bronchial (laryngotracheal) breathing occurrence and characterize it. Specify places of its auscultation in healthy person.
- 45. Indicate what kind of bronchial breathing is pathological, name its types.
- 46. Explain the mechanism of loud and silent bronchial breathing formation, name basic causes of their formation.

- 47. Name the causes of amphoric and metallic bronchial breathing occurrence and characterize them. Indicate their diagnostic value.
- 48. Characterize the stenotic bronchial breathing and specify causes of its occurrence.
- 49. Characterize mixed (bronchovesicular) breathing and specify causes of its occurrence. Indicate its diagnostic value.
 - 50. List adverse respiratory sounds.
- 51. Give a definition of rales, specify their types and possible places of development.
- 52. Name basic conditions for dry rales (rhonchi) development, specify their types and mechanism of occurrence.
- 53. Indicate basic causes for moist rales occurrence, places of development, types and diagnostic significance.
- 54. Indicate the diagnostic significance of dividing moist rales into sonorous and not sonorous.
- 55. Give definition of crepitation, specify mechanism of its occurrence and diagnostic value.
 - 56. What are the main differences between crepitation and moist rales?
- 57. Give definition of pleural friction rub, describe the mechanism of its occurrence, characterize and define its diagnostic value.
- 58. Indicate the main differences in the noise of pleural friction rub, crepitation and moist rales.
- 59. Name the basic differences between pleuropericardial friction rub and pericardial friction rub.
- 60. Specify places of occurrence, formation mechanism, diagnostic significance of Hippocrates sound (splash sound), sound of "falling drop" and sound of "a water pipe".
- 61. Describe bronchophony as a research technique, characterize the method and explain its physical basis.
- 62. Indicate what is the advantage of determining bronhophony over the study of vocal tremor.
- 63. Describe bronhophony in healthy people and indicate its diagnostic value.
- 64. Name causes and the mechanism of positive bronchophony development.

Topic: "Main clinical signs in case of respiratory diseases".

- 1. Syndrome of pulmonary tissue consolidation. Clinical signs.
- 2. Syndrome of cavity formation in the lung. Clinical signs.

- 3. Syndrome of bronchial obstruction. Clinical signs.
- 4. Syndrome of emphysema. Clinical signs.
- 5. Syndrome of fluid accumulation in the pleural cavity (hydrothorax or pleurisy). Clinical signs.
- 6. Syndrome of air congestion in the pleural cavity (pheumothorax). Clinical signs.
- 7. Syndrome of respiratory insufficiency (acute and chronic). Clinical signs.
 - 8. Clinical signs of an acute respiratory distress-syndrome.
 - 9. Syndrome of chronic pulmonary heart. Clinical signs.

Topic: "Observation of patients with respiratory diseases".

List of Control Questions:

- 1. What parts does the method of examining the patient consist of?
- 2. What does the term "anamnesis" means?
- 3. Methodology of revealing patient's complaints.
- 4. What is the algorithm of the Present History taking?
- 5. Name the main sections of the Past History.
- 6. Give definition of the dyspnea and mechanisms of its development.
- 7. Cough: definition, types, development mechanisms.
- 8. Haemoptysis: definition, development mechanisms, characteristics.
- 9. Thorax pains: development mechanism, algorithm of pain syndrome describing. Differential diagnosis of pleural pains and torakalgya.
 - 10. Rules and sequence of patient's general examination.
- 11. Types of the forced position of the patient in case of respiratory pathology.
 - 12. Constitution: definition, types. Meaning in case of respiratory diseases.

LESSON № 5

Topic: "Examination of patients with cardiovascular diseases. Subjective examination of patients with cardiovascular diseases (inquiry). Objective examination: general, inspection of the heart area and peripheral vessels area, palpation of the heart area, examination of the arterial and venous pulse. Measuring of blood pressure. Percussion of the heart".

- 1. List basic complaints of patients with cardiovascular system diseases.
- 2. Mechanism of cardiac edema development, its signs.
- 3. Mechanism of heart area pain development.

- 4. Mechanism of dyspnea development and its signs in case of cardiovascular diseases.
 - 5. Mechanism of headache, dizziness, vision impairment development.
- 6. Mechanism of cough, blood spitting (hemoptysis, pneumorrhagia) development.
 - 7. List sections of the Present History and the Past History.
- 8. What general examination data are typical for patients with diseases of the cardiovascular system.
 - 9. Mechanism of apical impulse development.
- 10. What are the characteristics of apical impulse and the reasons of its changes.
 - 11. Mechanism of cardiac impulse development.
 - 12. Mechanism of systolic and diastolic shivering development.
 - 13. Pulsation of neck vessels. Diagnostic value.
 - 14. Pulsation in epigastric area, liver pulsation. Diagnostic value.
 - 15. What are the characteristics of arterial pulse.
 - 16. Popov-Savelyev symptom. Diagnostic value.
 - 17. What are the characteristics of venous pulse.

Topic: "Objective examination of patients with cardiovascular diseases: auscultation of the heart. Laboratory and instrumental studies in cardiovascular diseases".

- 1. Mechanism of the first and the second heart sounds development.
- 2. What are the possible changes of the first and the second heart sounds?
- 3. Mechanism of splitting and bifurcation of the first and second heart sounds.
 - 4. Classification of heart murmurs.
- 5. What body position is the best for auscultation of systolic and diastolic heart murmurs?
- 6. What characteristics of systolic and diastolic murmurs should be detected on auscultation?
 - 7. Mechanisms of organic systolic murmur development.
 - 8. Mechanisms of functional systolic murmur development.
 - 9. Mechanisms of organic diastolic murmur development.
 - 10. Mechanisms of functional diastolic murmur development.
 - 10. Mechanisms of pericardial friction murmur development.
 - 11. Mechanisms of pleuropericardial friction murmur development.
 - 12. Classification of arterial blood pressure levels.
 - 13. What is the normal level of central venous pressure?

- 14. Anatomy and functions of conductive heart system.
- 15. Electrocardiogram (ECG) standard leads, chest leads (by Wilson).
- 16. Components of "normal" electrocardiogram.

Topic: "Main clinical syndromes in cardiovascular diseases".

List of Control Questions:

- 1. Syndrome of the peripheral arterial circulation disorder. Clinical signs.
- 2. Syndrome of the peripheral venous blood outflow disorder. Clinical signs.
 - 3. Acute superficial thrombophlebitis. Clinical signs.
- 4. Syndrome of the lymphatic drainage disorder (lymph outflow disorder). Clinical signs.
 - 5. Metabolic syndrome. Clinical signs.
- 6. Syndrome of the myocardial hypertrophy of the left ventricle. Clinical signs.
 - 7. Syndrome of the left ventricle dilatation. Clinical signs.
 - 8. Syndrome of arterial hypertension. Clinical signs.
 - 9. Syndrome of the heart valve disorder. Clinical signs.
 - 10. Coronary insufficiency syndrome. Clinical signs.
 - 11. Syndrome of the heart failure. Clinical signs.

LESSON Nº 8

Topic: "Clinical and electrocardiographic signs of the hypertrophy of atria and ventricles".

- 1. Electrocardiogram (ECG) waves and intervals are normal, their characteristics.
 - 2. Sequence and rules of electrocardiogram (ECG) interpretation.
 - 3. Clinical signs of left atrium hypertrophy.
 - 4. Electrocardiogram (ECG) signs of left atrium hypertrophy.
 - 5. Clinical signs of right atrium hypertrophy.
 - 6. Electrocardiogram (ECG) signs of right atrium hypertrophy.
 - 7. Clinical signs of left ventricle hypertrophy.
 - 8. Electrocardiogram (ECG) signs of left ventricle hypertrophy.
 - 9. Clinical signs of right ventricle hypertrophy.
 - 10. Electrocardiogram (ECG) signs of right ventricle hypertrophy.

LESSON Nº 9

Topic: "Clinical and electrocardiographic signs of cardiac arrhythmias due to the disorders of myocardial excitability and conduction (heart blocks)".

List of Control Questions from related disciplines:

- 1. Name heart chambers.
- 2. Name the right, left and lower heart contours which are projected onto the front chest surface of the human body.
 - 3. What layers does the wall of the heart consist of?
 - 4. Where is the sinus node and the atrioventricular connection located?
 - 5. Which part of the conductive heart system is normally a pacemaker?
- 6. What is a normal sequence and excitation time in the right and left atrium?
- 7. What is the maximum number of impulses (per minute) from the atria to the ventricles can AV connection normally pass without an atrioventricular blockade development?
- 8. What is the direction of depolarization wave in ventricular myocardium thickness: from endocardium to epicardium or from epicardium to endocardium?
 - 9. Give the definition of an electrocardiogram.
- 10. What are the components of normal electrocardiogram? What electrophysiological processes do they reflect in the heart muscle?
- 11. What is the normal duration and amplitude of all waves of a normal electrocardiogram?
 - 12. What is "the interval of internal deviation"? What its norm is?
- 13. What ECG interval is called electrical ventricular systole? How does its duration depend on the heart rhythm frequency?
 - 14. What is the order of the electrocardiogram decoding?

- 1. What is called heart rhythm disorders (arrhythmias)?
- 2. What three groups are arrhythmias divided into?
- 3. What are clinical and electrocardiographic signs of sinus tachycardia?
- 4. What are clinical and electrocardiographic signs of sinus bradycardia?
- 5. How will the electrocardiogram (ECG) change in case of sinus arrhythmia?
 - 6. What mechanisms are the reasons of heart rhythm disorders?
 - 7. What are clinical and electrocardiographic signs of atrial extrasystole?
 - 8. List electrocardiographic signs of extrasystole from Av-connection.
 - 9. List clinical and electrocardiographic signs of ventricular extrasystole.
- 10. List clinical and electrocardiographic signs of supraventricular paroxysmal (atrial tachycardia and from AV-connection).
- 11. What are clinical and electrocardiographic signs of ventricular paroxysmal tachycardia?

- 12. What are clinical and electrocardiographic signs of atrial flutter?
- 13. List clinical and electrocardiographic signs of atrial fibrillation.
- 14. List clinical signs of ventricular flutter and fibrillation.
- 15. How will the electrocardiogram readings (ECG) change in case of ventricular flutter and fibrillation?
 - 16. List clinical and electrocardiographic signs of sinoatrial block.
 - 17. What are clinical and electrocardiographic signs of intra-atrial block?
- 18. What are clinical and electrocardiographic signs of the first degree of AV-block?
- 19. List clinical and electrocardiographic signs of three types of atrioventricular block of the 2nd degree.
- 20. How will the electrocardiogram readings (ECG) change in case of atrioventricular block of the 3rd degree?
 - 21. What are the signs of Morgagni–Adams–Stokes syndrome?
 - 22. What is the Frederic syndrome?
- 23. List clinical and electrocardiographic signs of total block of the right branch of His bundle.
- 24. List clinical and electrocardiographic signs of total block of the left branch of His bundle.
 - 25. List clinical and electrocardiographic signs of WPW syndrome.
 - 26. Name clinical and electrocardiographic signs of shortened PQ interval.

Topic: "Observation of patients with cardiovascular diseases".

- 1. List the methods of examining patients with cardiovascular diseases.
- 2. List the main complaints of patients with cardiovascular diseases and the algorithm of their specification.
 - 3. Signs of cardiac edema.
 - 4. Signs of peripheral cyanosis.
 - 5. Position of the patient with cardiovascular diseases.
 - 6. What determines the quantity of the arterial pulse?
 - 7. What is hemodynamic marker of arterial pulse volume?
 - 8. What is hemodynamic marker of arterial pulse tension?
 - 9. What is the pulse deficiency?
 - 10. What arteries can be used to examine the pulse?
 - 11. What is the cause of the apex beat?
 - 12. What is the cause of the cardiac beat?
 - 13. What is the cause of the "cat's purr" symptom?
 - 14. What are the numbers of optimal arterial blood pressure.
 - 15. What are the numbers of normal arterial blood pressure.

- 16. What are the numbers of high normal arterial blood pressure.
- 17. What are the numbers of high arterial blood pressure.
- 18. What are the numbers of normal venous pressure.
- 19. What is the purpose of heart percussion?
- 20. Principles and rules of heart percussion.
- 21. Name the right, left and lower heart contours.
- 22. Give the definition of "relative heart dullness" and name its normal borders.
- 23. Give the definition of "absolute heart dullness" and name its normal borders.
 - 24. What is the size of the diameter of relative heart dullness.
 - 25. What are the types of heart configurations.
 - 26. What is a vascular bundle formed by and what is its normal width?
- 27. List conditions under which the size of relative heart dullness increases.
 - 28. List conditions under which the size of relative heart dullness decrease.
- 29. List conditions under which the size of absolute heart dullness increases.
- 30. List conditions under which the size of absolute heart dullness decreases.
- 31. List conditions which cause dislocation of borders of relative and absolute heart dullness but without size changes.
 - 32. List conditions which cause vascular bundle widening.
 - 33. What is the reason of a certain order of heart auscultation?
 - 34. Mechanism of the first heart sound development.
 - 35. Mechanism of the second heart sound development.
 - 36. Mechanism of the third heart sound development.
 - 37. Mechanism of the forth heart sound development.
- 38. Causes of weakening and intensifying of the first and the second heart sounds.
 - 39. Mechanism of splitting and doubling of the first heart sound.
 - 40. Mechanism of splitting and doubling of the second heart sound.
 - 41. The "quail" rhythm, its origin and clinical meaning.
 - 42. The "gallop" rhythm, its origin and clinical meaning.
 - 43. What leads to pendulous rhythm formation?
 - 44. Classification of heart murmurs.
 - 45. Causes of intra-cardiac murmurs development.
 - 46. Causes of extra-cardiac murmurs development.
- 47. How can systolic and diastolic murmurs be distinguished by means of auscultation?
 - 48. What is the difference between organic and functional heart murmurs?
 - 49. List functional diastolic murmurs.

- 50. What are the causes of Strazhesko's (so called "gun") heart sound?
- 51. What are the causes of pericardial friction murmur?
- 52. What are the causes of pleuropericardial murmur?
- 53. Give the definition of the electrocardiogram?
- 54. What is the order of the electrocardiogram analysis?
- 55. How can the origin of heart rhythm be detected? What types of rhythms are there?
 - 56. How can the frequency of heart beats be detected?
 - 57. What are the signs of the right atrium hypertrophy.
 - 58. What are the signs of the left atrium hypertrophy.
 - 59. What are the signs of the right ventricle hypertrophy.
 - 60. What are the signs of the left ventricle hypertrophy.
 - 61. Give definition of heart arrhythmias and their classification.
 - 62. What are the ECG signs of sinus tachycardia?
 - 63. What are the ECG signs of sinus bradycardia?
 - 64. What are the ECG signs of atrial and atrioventricular extrasystole?
 - 65. What are the signs of ventricular extrasystole?
 - 66. What are the ECG signs of supraventricular paroxysmal tachycardia?
 - 67. What are the ECG signs of ventricular paroxysmal tachycardia?
 - 68. What are the ECG signs of three degrees of atrioventricular block?
 - 69. What are the signs of Morgagni-Adams-Stokes syndrome?
 - 70. What are the ECG signs of total block of the left branch of His bundle?
- 71. What are the ECG signs of total block of the right branch of His bundle?
 - 72. What are the ECG signs of atrial fibrillation?
 - 73. What are the ECG signs of atrial flutter?
 - 74. What are the ECG signs of ventricle flutter?
 - 75. What are the ECG signs of ventricle fibrillation?

Topic: "Subjective and objective examination of patients with diseases of the kidneys and urinary tract. Laboratory and instrumental studies. Main clinical syndromes in case of diseases of the kidneys and urinary tract".

List of Control Questions from related disciplines:

- 1. Kidney anatomy.
- 2. Nephron function.
- 3. Vascular glomerulus function.
- 4. Henle's loop function.

- 1. Complaints of patients with kidney and urinary tract diseases.
- 2. Mechanism of pain syndrome development.

- 3. Mechanism of urinary syndrome development.
- 4. Mechanism of eclampsia development.
- 5. Mechanism of renal hypertension syndrome development.
- 6. Mechanism of acute kidney disorder development.
- 7. Mechanism of nephrotic syndrome development.
- 8. Mechanism of chronic kidney disease development.
- 9. Features of the Present History and the Past History taking in patients with kidney and urinary tract diseases.
 - 10. Instrumental methods of examination in case of kidney diseases.
- 11. What types of urinalysis should be prescribed to patients with kidney and urinary tract diseases?

Topic: "Subjective and objective examination of patients with blood diseases. Laboratory and instrumental studies. Main clinical syndromes in case of blood system diseases".

List of Control Questions:

- 1. Hematological syndromes.
- 2. Anemic syndrome. Complaints and clinical manifestations.
- 3. Degree of anemia severity according to hemoglobin level.
- 4. Sideropenic syndrome. Complaints and clinical manifestations.
- 5. Iron deficiency anaemia. Haemogram characteristic.
- 6. Funicular myelosis syndrome. Clinical manifestations.
- 7. Haemogram characteristic of B12-folate-deficiency anemia.
- 8. Jaundice syndrome. Clinical signs and laboratory diagnostic tests.
- 9. Hyperplastic syndrome (in case of leukemia). Complaints and clinical manifestations.
 - 10. Hyperplastic syndrome (in case of leukemia). Changes in haemogram.
- 11. Bleeding syndrome (in case of leukemia). Clinical manifestations and changes in haemogram.
- 12. Intoxication syndrome (in case of leukemia). Clinical manifestations and haemogram characteristics.

LESSON № 13

Topic: "Subjective and objective examination of patients with diseases of the thyroid gland, diabetes mellitus and diseases of joints. Laboratory and instrumental studies. Main clinical syndromes".

- 1. Basic complaints in case of thyroid gland diseases.
- 2. Basic complaints in case of pancreatic gland diseases (diabetes mellitus).

- 3. Basic complaints in case of joint diseases.
- 4. Mechanism of basic complaint development in case of thyroid gland, pancreatic gland and joint diseases.
- 5. List laboratory examinations in case of thyroid gland, pancreatic gland and joint diseases.
- 6. List instrumental examinations in case of thyroid gland, pancreatic gland and joint diseases.
 - 7. Clinical signs of thyrotoxicosis syndrome.
 - 8. Clinical signs of hypothyrosis syndrome.
 - 9. Clinical signs of hyperglycaemia syndrome.
 - 10. Clinical signs of hypoglycaemia syndrome.
 - 11. Clinical signs of joint syndrome.

Topic: "Observation of patients with diseases of the kidneys and urinary tract, with blood system disorders, with endocrine diseases and diseases of joints".

- 1. Complaints of patients with kidney and urinary tract diseases.
- 2. Mechanism of pain syndrome development.
- 3. Mechanism of urinary syndrome development.
- 4. Mechanism of eclampsia development.
- 5. Mechanism of renal hypertension syndrome development.
- 6. Mechanism of acute kidney injury development.
- 7. Mechanism of nephrotic syndrome development.
- 8. Mechanism of chronic kidney disease development.
- 9. Features of collecting the Present History and the Past History of patients with kidney and urinary tract diseases.
 - 10. Instrumental methods of examination in case of kidney diseases.
- 11. What kinds of urinalysis should be administered to patients with kidney and urinary tract diseases?
 - 12. Haematological syndromes.
 - 13. Anaemic syndrome. Complaints and clinical manifestations.
 - 14. Anaemia. Degree of the severity according to the haemoglobin level.
 - 15. Sideropenic syndrome. Complaints and clinical manifestations.
 - 16. Iron deficiency anaemia. Haemogram characteristic.
 - 17. Funicular myelosis syndrome. Clinical manifestations.
 - 18. Haemogram characteristic of B12-folate deficiency anaemia.
- 19. Jaundice syndrome. Clinical manifestations and laboratory diagnostic criteria.

- 20. Hyperplastic syndrome (in case of leukemia). Complaints and clinical manifestations.
 - 21. Hyperplastic syndrome (in case of leukemia). Changes in haemogram.
- 22. Bleeding syndrome (in case of leukemia). Clinical manifestations and changes in haemogram.
- 23. Intoxication syndrome (in case of leukemia). Clinical manifestations and haemogram characteristics.
 - 24. Basic complaints in case of thyroid gland diseases.
- 25. Basic complaints in case of pancreatic gland diseases (diabetes mellitus).
 - 26. Basic complaints in case of joint diseases.
- 27. Basic complaints in case of thyroid gland diseases, pancreatic gland diseases and joint diseases. Mechanisms of each complaint development.
- 28. List laboratory examinations in case of thyroid gland, pancreatic gland diseases and joint diseases.
- 29. List instrumental methods of examination in case of thyroid gland, pancreatic gland diseases and joint diseases.
 - 30. Clinical signs of thyrotoxicosis syndrome.
 - 31. Clinical signs of hypothyrosis syndrome.
 - 32. Clinical signs of hyperglycaemia syndrome.
 - 33. Clinical signs of hypoglycaemia syndrome.
 - 34. Clinical signs of joint syndrome.

Topic: "Technique of ECG recording and algorithm of ECG interpreting for a healthy person".

- 1. Give definition of electrocardiogram.
- 2. Describe the procedure of preparing the electrocardiograph for work?
- 3. How should extremity electrodes be attached?
- 4. How should chest electrodes be attached?
- 5. List possible ECG paper speed.
- 6. What possible types of interference may occur during ECG? How can they be eliminated?
 - 7. List components of "normal" electrocardiogram.
 - 8. Electrocardiogram (ECG) analysis algorithm.
 - 9. How can the source of heart rhythm be determined by ECG?
 - 10. How can the heart rate be determined by ECG?
 - 11. How can the electrical heart axis position be determined by ECG?

Topic: "Methods of laboratory tests: clinical and biochemical blood test; urinalysis, examinations of sputum and pleural fluid".

- The student must be able to give the conclusion on **blood** analyses.
- Complete blood count contains the following data:
- 1. Erythrocytes 4.2×10^{12} /l, haemoglobin 140 g/l; colour index 1.0; leucocytes 6.5×10^9 /l; basophiles 0 %, band neutrophils 3 %, segmented neutrophils 63 %, monocytes 10 %, lymphocytes 22 %, thrombocytes 200×10^9 /l, ESR 8 mm/H.
- 2. Erythrocytes 2.6×10^{12} /l, haemoglobin 65 g/l; colour index 0.7; leucocytes 4.5×10^{9} /l; basophiles 0 %, band neutrophils 5 %, segmented neutrophils 52 %, monocytes 5 %, lymphocytes 37 %, eosinophiles 1 %, thrombocytes 180×10^{9} /l, ESR 15 mm/H, anisocytosis, a poikilocytosis.
- 3. Erythrocytes 3.5×10^{12} /l, haemoglobin 148 g/l; colour index 0.9; leucocytes 25.0×10^9 /l; eosinophiles 7 %, young neutrophils 3 %, band neutrophils 18 %, segmented neutrophils 52 %, monocytes 5 %, lymphocytes 27 %, ESR 20 mm/H, toxic graininess of neutrophils.
- 4. Erythrocytes 2.5×10^{12} /l, haemoglobin 96 g/l; colour index 0.9; thrombocytes 180×10^{9} /l; leucocytes 2.0×10^{9} /l; myeloblasts 54 %, band neutrophils 1 %, segmented neutrophils 17 %, monocytes 2 %, ESR 25 mm/H.
- 5. Erythrocytes 3.5×10^{12} /l, haemoglobin 112 g/l; colour index 0.9; thrombocytes 400×10^9 /l; leucocytes 330×10^9 /l; myeloblasts 2%, promyelocytes 5%, myelocytes 3%, young neutrophils 4%, band neutrophils 7%, segmented neutrophils 30%, basophiles 4%, eosinophiles 6%, lymphocytes 30%, monocytes 9%, ESR 30 mm/H.
- 6. Erythrocytes 4.0×10^{12} /l, haemoglobin 120 g/l; colour index 0.9; thrombocytes 21×10^9 /l; leucocytes 52×10^9 /l; eosinophiles 1 %, band neutrophils 1 %, segmented neutrophils 24 %, monocytes 2 %, lymphocytes 72 %, prolymphocytes 2 %, ESR 17 mm/H; the Botkin's–Gumpreht little bodies.
- 7. Erythrocytes $2.5 \times 1012/l$, haemoglobin 90 g/l; colour index 1.0; thrombocytes $150 \times 10^9/l$; leucocytes $10.0 \times 10^9/l$; myeloblasts 50 %, band neutrophils 1 %, segmented neutrophils 25 %, lymphocytes 16 %, monocytes 6 %, ESR 31 mm/H.
 - The student must be able to give the conclusion on **urinalyses**:
- 1. Diurnal amount of urine is 1250 ml; colour is straw-yellow; urine is transparent; reaction is slightly acidic; relative density is 1020; protein and

glucose are absent. *Sediment microscopy*: epithelial cells are single in the sample; leucocytes are 0–2 in sight, erythrocytes and cylinders are absent.

- 2. Diurnal amount of urine is 480 ml; urine colour is «of meat slops», urine is turbid, reaction is acidic, relative density is 1028; protein is 2.3 g/l. *Sediment microscopy*: moderate amount of epithelial cells, leucocytes are 5–10 in sight; erythrocytes cover the entire sight, hyaline cylinders are 1–2 in sight.
- 3. Diurnal amount of urine is 1960 ml; urine colour is straw-yellow, reaction is acidic, relative density is 1008; protein is 1.66 g/l. *Sediment microscopy*: moderate amount of epithelial cells, leucocytes are 0–2 in sight; erythrocytes are fresh and changed, 10–15 in sight, hyaline cylinders are 2–3 in sight.
- 4. Diurnal amount of urine is1300 ml; urine colour is straw-yellow, reaction is alkaline, relative density is 1015; protein is 0,066 g/l. *Sediment microscopy*: leucocytes are 20–30 in sight, considerable amount of mucus and bacteria.
- 5. Urine is of greenish-yellow colour; relative density is 1018; protein and glucose are absent, positive bilirubin test, negative urobilin test. *Sediment microscopy*: without special features.
- 6. Urine is of beer colour and turbid, relative density is 1020; protein and glucose are absent. Positive urobilin and bilirubin tests. *Sediment microscopy*: without special features.
- 7. Urine is yellow and turbid, relative density is 1022; protein and glucose are absent. Positive urobilin test and negative bilirubin test. *Sediment microscopy*: without special features.
- The student must be able to give the conclusion on analyses of **sputum** and **pleural liquid**:
- 1. 30 ml of sputum of grayish colour, mucous character and viscous consistence were examined. Microscopic examination revealed slight amount of cylindrical epithelium cells, and 10–20 leucocytes in sight.
- 2. 25 ml of sputum of mucous character and viscous consistence, inodorous were examined. Microscopic examination revealed spirals of Kurshman, crystals of Sharko–Lejden, 15–20 eosinophils in sight, slight amount of cylindrical epithelium cells.
- 3. 15 ml of rusty colour sputum of viscous consistence, inodorous were examined. Microscopic examination revealed 20–30 leucocytes and up to 40 erythrocytes in sight, and macrophages. Bacterioscopic examination revealed pneumococci.
- 4. 400 ml of sputum of greenish-yellow colour, purulent character and liquid consistency, with fetid odour, three-layered were examined. Microscopic examination revealed considerable quantity of elastic fibers, leucocytes cover all sights, cholesterol crystals. Bacterioscopic examination revealed staphylococci.

- 5. 300 ml of sputum of grey-yellow colour, mucopurulent character were examined. Microscopic examination revealed significant amount of elastic fibers, leucocytes, single erythrocytes. Bacterioscopic examination revealed acid-resistant bacteria.
- 6. During pleurocentesis 1500 ml of transparent liquid, with relative density 1015, protein 15 g/l was taken. Rivalta's test was negative. Microscopic examination revealed small amount of mesothelial cells, 2–3 leucocytes in sight, single erythrocytes. Bacteriological culture was sterile.
- 7. During pleurocentesis 1100 ml of cloudy, fluid with greenish-yellow colour, with relative density 1020, protein 15 g/l was taken. Rivalta's test was positive. Microscopic examination revealed considerable quantity of leucocytes among which neutrophils predominated. Bacteriological examination revealed streptococci.

Topic: "Subjective, objective, laboratory and instrumental examinations of patients with internal diseases. Practical skills training (in the laboratory for practical skills training (BSMU))".

- 1. What parts does the method of examining patient consist of?
- 2. What does the term "anamnesis" mean?
- 3. Methodology of revealing patient's complaints.
- 4. What is the algorithm of the Present History taking?
- 5. List the main sections of the Past History.
- 6. Give definition of dyspnea and mechanisms of its development.
- 7. Cough: definition, types, development mechanisms.
- 8. Hemoptysis: definition, development mechanisms, characteristics.
- 9. Thorax pains: development mechanism, algorithm of pain syndrome describing. Differential diagnosis of pleural pains and torakalgya.
 - 10. Rules and sequence of patient's general examination.
- 11. Types of forced position of the patient in case of respiratory pathology.
 - 12. Constitution: definition and types (somatotypes).
 - 13. List and characterize normal chest forms.
 - 14. List and characterize types of pathological chest forms.
- 15. What is the correct way to count the number of respiratory movements? List breathing type differences for men and women.
- 16. What is vocal fremitus (vibration)? Mechanism of its development. Normal and pathological changes.
- 17. What is the purpose of thorax resistance examination? Describe its changes depending on age and pathology type.

- 18. Physical basis of the percussion method. Percussion types.
- 19. Purposes of comparative and topographical lung percussion.
- 20. What are the causes and mechanisms of percussion sound change? (Dull sound, mixed dull-tympanic sound, absolutely dull sound, bandbox sound, tympanic sound, metallic sound, "cracked pot" sound).
- 21. Vesicular breathing. Mechanism of its development and characteristics. Causes of physiological and pathological intensifying and weakening.
- 22. Bronchial breathing. Mechanism of its development and characteristics. Differences in vesicular and bronchial breathing.
 - 23. Causes of pathological bronchial breathing development.
- 24. Dry rales (rhonchi): mechanisms of the development, places of origin, characteristics. Differences in dry and moist rales.
- 25. Moist rales: mechanism of the development, places of origin, characteristics. Differences in dry and moist rales.
 - 26. What is the cause of the "cat's purr" symptom?
 - 27. What are the numbers of optimal arterial blood pressure?
 - 28. What are the numbers of normal arterial blood pressure?
 - 29. What are the numbers of high normal arterial blood pressure?
- 30. What are the numbers of high arterial blood pressure in case of arterial hypertension?
 - 31. What are the numbers of normal venous blood pressure?

SEMESTER 6 SPECIAL PROPAEDEUTICS

LESSON № 1

Topic: "Symptoms, diagnosis, principles of treatment and prevention of bronchial asthma, chronic obstructive pulmonary disease".

List of Control Questions from related disciplines:

- 1. Anatomy of bronchi and lungs.
- 2. What are the functions of bronchi and lungs?
- 3. What chest type is observed in case of pulmonary emphysema?
- 4. Explain the chest resistance and vocal vibration changes in case of pulmonary emphysema.
- 5. Characterize the results of lung percussion and auscultation in case of pulmonary emphysema.

List of Control Questions:

"Bronchial Asthma"

1. Give definition of bronchial asthma and list the causes (etiological factors) of the disease.

- 2. Indicate the main elements of BA pathogenesis and mechanisms of bronchial obstruction.
 - 3. Give BA classification.
 - 4. Characterize clinical picture of different BA types.
 - 5. Describe clinical signs of BA exacerbation.
 - 6. List BA complications.
 - 7. List complaints and case history data in case of BA.
 - 8. Describe physical examination results in case of BA.
 - 9. List laboratory and instrumental methods of examination in case of BA.
 - 10. Describe allergological examination results in case of BA.
 - 11. Characterize spirography examination results in case of BA.
 - 12. Indicate against what diseases differential diagnosis of asthma is made.
 - 13. Make differential diagnosis of BA and COPD.
 - 14. What is the purpose, objectives and main stages of BA treatment?
 - 15. Characterize basic drug groups for BA treatment.
 - 16. List and characterize devices for drug inhalation.
 - 17. List drug groups for treatment of asthma attacks.
 - 18. Describe the treatment of BA exacerbations.
 - 19. List the main medical measures for asthmatic status.
 - 20. Describe BA treatment in rest period.
 - 21. List non-medical methods of BA treatment.
 - 22. Describe prophylactic measures and characterize BA prognosis.

"Chronic Obstructive Pulmonary Disease"

- 1. Give definition of COPD.
- 2. Epidemiology, etiology and pathogenesis of COPD.
- 3. COPD classification.
- 4. Clinical signs of COPD.
- 5. Role of instrumental and laboratory examination methods in COPD diagnosis.
 - 6. Differential diagnosis of COPD.
 - 7. Principles of COPD treatment.
 - 8. Primary and secondary prophylaxis of COPD.

LESSON № 2

Topic: "Symptoms, diagnosis, principles of treatment and prevention of pneumonia, pleurisy, acute and chronic respiratory failure. First aid treatment for acute respiratory failure".

List of Control Questions:

1. Give definition of pneumonia, pleurisies, acute and chronic respiratory insufficiency.

- 2. Classification of pneumonia, pleurisies, acute and chronic respiratory insufficiency.
 - 3. Etiology and pathogenesis of specified diseases.
 - 4. Clinical signs of specified diseases.
 - 5. Instrumental and laboratory diagnosis of specified diseases.
 - 6. Complications of pneumonia and pleurisies.
- 7. Principles of treatment and prevention of pneumonia, pleurisies, acute and chronic respiratory insufficiency.

Topic: "Symptoms, diagnosis, principles of treatment and prevention of acute rheumatic fever and MCVD (mitral cardiac valve diseases)".

List of Control Questions:

- 1. Give definition of acute rheumatic fever (ARF).
- 2. Classification of acute rheumatic fever.
- 3. Etiology and pathogenesis of acute rheumatic fever.
- 4. Diagnostic criteria of acute rheumatic fever.
- 5. Major criteria of ARF. Clinical manifestations.
- 6. Minor criteria of ARF. Clinical manifestations.
- 7. Principles of acute rheumatic fever treatment and prevention.
- 8. Etiology of mitral cardiac defects.
- 9. Intra-cardiac hemodynamic in case of MCVD (stenosis and insufficiency (regurgitation)).
 - 10. Clinical picture of mitral regurgitation.
 - 11. Clinical picture of mitral stenosis.
- 12. Instrumental diagnosis of MCVD (echocardiogram, electrocardiogram (ECG), heart X-ray).
 - 13. Principles of MCVD treatment and prevention.

LESSON № 4

Topic: "Symptoms, diagnosis, principles of treatment and prevention of infective endocarditis and ACVD (aortic cardiac valve diseases)".

- 1. Give definition of infective endocarditis (IE).
- 2. Risk factors of IE.
- 3. Etiology and pathogenesis of IE.
- 4. Classification of IE.
- 5. Diagnostic criteria of IE.
- 6. Clinical picture of IE.
- 7. Principles of infective endocarditis treatment and prevention.

- 8. Etiology of chronic aortic insufficiency (regurgitation).
- 9. Intra-cardiac hemodynamic in case of chronic aortic insufficiency (regurgitation).
 - 10. Clinical picture of chronic aortic insufficiency (regurgitation).
- 11. Instrumental diagnosis of chronic aortic insufficiency (regurgitation): echocardiogram, electrocardiogram (ECG), heart X-ray.
 - 12. Etiology of aortic stenosis.
 - 13. Clinical picture of aortic stenosis.
- 14. Instrumental diagnosis of aortic stenosis (echocardiogram, electrocardiogram (ECG), heart X-ray).
 - 15. Principles of ACVD treatment and prevention.

Topic: "Symptoms, diagnosis, principles of treatment and prevention of ischemic heart disease: angina pectoris, myocardial infarction. First aid treatment for angina pectoris attack (pain control in case of angina attack). Concept of the atherosclerosis".

- 1. Give definition of "ischemia", "ischemic heart disease (ICD)".
- 2. List risk factors of atherosclerosis.
- 3. Indicate the main stages of atherogenesis and mechanisms leading to relative or absolute coronary deficiency.
 - 4. Classification of ischemic heart disease (by World Health Organization).
- 5. Give definition of stable angina pectoris (stenocardia) and unstable angina.
 - 6. Characterize functional classes of stable angina.
 - 7. Instrumental and laboratory diagnosis of stable angina.
 - 8. Characterize pain syndrome during stenocardia attack.
 - 9. First aid treatment in case of angina pectoris attack (pain control).
 - 10. List non-drug methods of ICD treatment.
 - 11. List preventive measures and characterize ICD prognosis.
 - 12. Give definition of myocardial infarction.
 - 13. Etiology and pathogenesis of myocardial infarction.
 - 14. Classification of myocardial infarction.
 - 15. What clinical syndromes are typical for myocardial infarction?
 - 16. Characterize pain syndrome in case of myocardial infarction.
- 17. Characterize toxic syndrome (due to myocardial necrosis development) in case of myocardial infarction.
 - 18. ECG signs of micro-focal myocardial infarction (without Q-wave).
 - 19. ECG signs of macro-focal myocardial infarction (with Q-wave).
 - 20. List types of MI onset.

- 21. List MI complications.
- 22. Principles of myocardial infarction treatment (micro- and macro-focal).

Topic: "Symptoms, diagnosis, principles of treatment and prevention of arterial hypertension (AH). First aid treatment for hypertensive crisis".

List of Control Questions:

- 1. Give definition of primary and secondary AH.
- 2. Etiology and pathogenesis of primary AH.
- 3. Classification of arterial hypertension.
- 4. Criteria of risk stratification of arterial hypertension.
- 5. What is the purpose of examining patients with elevated BP level?
- 6. List basic complaints in case of BP elevation.
- 7. What data may physical examination of patient with primary AH reveal?
- 8. What functional examinations should be carried out in patients with elevated BP level to assess the state of target organs?
 - 9. Characterize types of cerebral hemodynamic.
 - 10. Characterize types of central hemodynamic.
- 11. What is necessary to know about risk degree in patients with primary AH?
 - 12. Principles of primary AH treatment.
 - 13. Give definition of hypertensive crisis.
 - 14. List the criteria of hypertensive crisis.
 - 15. Classification of hypertensive crisis.
 - 16. Characterize hypertensive crisis of the I order.
 - 17. Characterize hypertensive crisis of the II order.

 18. Characterize complicated and uncomplicated hypertensive.
 - 18. Characterize complicated and uncomplicated hypertensive crisis.
 - 19. Treatment of complicated hypertensive crisis.
 - 20. Treatment of uncomplicated hypertensive crisis.

LESSON № 7

Topic: "Symptoms, diagnosis, principles of treatment and prevention of heart failure and vascular insufficiency. First aid treatment for syncope.".

- 1. Give definition of heart failure.
- 2. Etiology and pathogenesis of heart failure.
- 3. Classification of acute heart failure.
- 4. Classification of chronic heart failure.
- 5. Clinical picture of acute right ventricular heart failure.
- 6. Clinical picture of acute left ventricular heart failure.

- 7. Laboratory and instrumental diagnosis of acute heart failure.
- 8. Principles of acute heart failure (right and left ventricular) treatment.
- 9. Clinical picture of chronic heart failure according to stages and functional classes.
 - 10. Laboratory and instrumental diagnosis of chronic heart failure.
 - 11. Principles of chronic heart failure treatment.
 - 12. Heart failure prophylaxis.
 - 13. Give definition of acute vascular insufficiency (AVI).
 - 14. Etiology and pathogenesis of AVI.
 - 15. Classification of AVI.
 - 16. Clinical picture of syncope.
 - 17. First aid in case of syncope.
 - 18. Clinical picture of collapse.
 - 19. Clinical picture of shock.
 - 20. Principles of treatment and prevention of collapse and shock.

Topic: "Symptoms, diagnosis, principles of treatment and prevention of diseases of stomach and bowel (acute and chronic gastritis; stomach ulcer and duodenum ulcer; irritable bowel syndrome). First aid treatment for stomach bleeding".

- 1. Give definition of gastritis.
- 2. Classification of gastritis.
- 3. Etiology and pathogenesis of gastritis.
- 4. Clinical picture of acute and chronic gastritis.
- 5. Instrumental and laboratory diagnosis of gastritis.
- 6. Principles of treatment and prophylaxis of gastritis.
- 7. Give definition of stomach and duodenum ulcer.
- 8. Classification of stomach and duodenum ulcer.
- 9. Etiology and pathogenesis of stomach and duodenum ulcer.
- 10. Clinical picture of stomach ulcer.
- 11. Clinical picture of duodenum ulcer.
- 12. Instrumental and laboratory diagnosis of stomach and duodenum ulcer.
- 13. Principles of treatment and prophylaxis of stomach and duodenum ulcer.
- 14. Give definition of irritable bowel syndrome.
- 15. Etiology and pathogenesis of irritable bowel syndrome.
- 16. Clinical picture of irritable bowel syndrome.
- 17. Diagnosis of irritable bowel syndrome.
- 18. Principles of treatment and prophylaxis of irritable bowel syndrome.
- 19. Causes of gastrointestinal bleeding.

- 20. Clinical picture of gastrointestinal bleeding.
- 21. First aid in case of stomach bleeding.

Topic: "Symptoms, diagnosis, principles of treatment and prevention of diseases of gallbladder and liver, acute and chronic hepatic insufficiency".

List of Control Questions:

- 1. Give definition of hepatitis.
- 2. Classification of hepatitis.
- 3. Etiology and pathogenesis of hepatitis.
- 4. Clinical picture of hepatitis.
- 5. Instrumental and laboratory diagnosis of hepatitis
- 6. Principles of treatment and prophylaxis of hepatitis.
- 7. Give definition of liver cirrhosis.
- 8. Classification of liver cirrhosis.
- 9. Etiology and pathogenesis of liver cirrhosis.
- 10. Clinical picture of liver cirrhosis.
- 11. Instrumental and laboratory diagnosis of liver cirrhosis.
- 12. Principles of treatment and prophylaxis of liver cirrhosis.
- 13. Give definition of cholecystitis.
- 14. Classification of cholecystitis.
- 15. Etiology and pathogenesis of cholecystitis.
- 16. Clinical picture of chronic acalculous cholecystitis.
- 17. Clinical picture of calculous cholecystitis (gall stone disease).
- 18. Instrumental and laboratory diagnosis of cholecystitis.
- 19. Principles of treatment and prophylaxis of cholecystitis.
- 20. Clinical picture of acute and chronic hepatic insufficiency.
- 21. Principles of treatment and prophylaxis of acute and chronic hepatic insufficiency.

LESSON № 10

Topic: "Symptoms, diagnosis, principles of treatment and prevention of acute and chronic glomerulonephritis and pyelonephritis, acute renal injury, chronic kidney disease".

- 1. Give definition of glomerulonephritis.
- 2. Etiology and pathogenesis of acute and chronic glomerulonephritis.
- 3. Clinical picture of acute and chronic glomerulonephritis.

- 4. Instrumental and laboratory diagnosis of acute and chronic glomerulonephritis.
- 5. Principles of treatment and prophylaxis of acute and chronic glomerulonephritis.
 - 6. Give definition of pyelonephritis.
 - 7. Etiology and pathogenesis of acute and chronic pyelonephritis.
 - 8. Clinical picture of acute and chronic pyelonephritis.
- 9. Instrumental and laboratory diagnosis of acute and chronic pyelonephritis.
- 10. Principles of treatment and prophylaxis of acute and chronic pyelonephritis.
 - 11. Causes and classification of acute renal injury.
 - 12. Clinical picture of acute renal injury.
 - 13. Instrumental and laboratory diagnosis of acute renal injury.
 - 14. Principles of treatment and prophylaxis of acute renal injury.
 - 15. Causes of chronic kidney disease.
 - 16. Classification of chronic kidney disease.
 - 17. Clinical picture of chronic kidney disease according to stages.
 - 18. Instrumental and laboratory diagnosis of chronic kidney disease.
 - 19. Principles of treatment and prophylaxis of chronic kidney disease.

Topic: "Symptoms, diagnosis, principles of treatment and prevention of acute allergic diseases. First aid treatment for anaphylactic shock".

- 1. Give definition of urticaria (hives) and Quincke's oedema. Etiological factors of these diseases.
 - 2. Pathogenesis of urticaria and Quincke's edema.
 - 3. Classification of urticaria.
 - 4. Classification of Quincke's edema.
 - 5. Clinical picture of urticaria types.
 - 6. Clinical picture of Quincke's edema types.
 - 7. Complaints and case history in urticaria and Quincke's edema.
 - 8. Physical examination data in case of urticaria and Quincke's edema.
- 9. Instrumental and laboratory methods of examination used in case of urticaria and Quincke's edema diagnosis.
 - 10. Allergic examination results in case of urticaria and Quincke's edema.
- 11. List diseases against what differential diagnosis of urticaria and Quincke's edema is made.
- 12. Treatment objectives and indications for hospitalization in case of urticaria and Quincke's edema.

- 13. Quick-relief treatment in case of acute urticaria and Quincke's edema.
- 14. Basic drug-groups for treatment of urticaria and Quincke's edema.
- 15. Non-drug methods for treatment of urticaria and Quincke's edema.
- 16. Prophylaxis and prognosis of urticaria and Quincke's edema.
- 17. Give definition and etiological factors of anaphylactic shock (ASH).
- 18. Pathogenesis of anaphylactic shock and mechanisms underlying shock response.
 - 19. Classification of anaphylactic shock.
 - 20. Clinical picture of anaphylactic shock.
 - 21. Approaches to the diagnosis of anaphylactic shock.
- 22. List diseases against what differential diagnosis of anaphylactic shock is made.
 - 23. First aid in case of anaphylactic shock.
 - 24. Prophylaxis and prognosis in case of anaphylactic shock.

Topic: "Symptoms, diagnosis, principles of treatment and prevention of haemoblastosis".

List of Control Questions:

- 1. Etiology and pathogenesis of acute leukemia.
- 2. Etiology and pathogenesis of chronic leukemia.
- 3. Classification of acute leukemia.
- 4. Classification of chronic leukemia.
- 5. Basic clinical syndromes of acute leukemia.
- 6. Diagnosis of acute leukemia.
- 7. Clinical picture and diagnosis of chronic myeloleukemia.
- 8. Clinical picture and diagnosis of chronic lymphoid leukemia.
- 9. Principles of leukemia treatment.

LESSON № 13

Topic: "Symptoms, diagnosis, principles of treatment and prevention of diabetes mellitus and thyroid gland diseases. First aid treatment for hyperglycaemic (diabetic ketoacidosis) and hypoglycaemic coma".

- 1. Give definition of diabetes mellitus (DM).
- 2. Describe clinical manifestations of diabetes mellitus.
- 3. List clinical types of DM.
- 4. List diagnostic criteria of DM.
- 5. Indicate compensation criteria of DM type 1.
- 6. Indicate compensation criteria of DM type 2.

- 7. List methods of DM treatment.
- 8. List types of diabetic comas. Indicate methods of their diagnosis and treatment.
- 9. Give definition of hypothyrosis. Indicate clinical and laboratory diagnostic criteria, treatment methods.
- 10. Give definition of endemic struma. Indicate clinical and laboratory diagnostic criteria, treatment methods.
- 11. Give definition of thyrotoxicosis. Indicate clinical and laboratory diagnostic criteria, treatment methods.
- 12. Indicate clinical and laboratory signs of thyrotoxic crisis. Give first aid to the patient with crisis.

Topic: "Symptoms, diagnosis, principles of treatment and prevention of rheumatoid arthritis, reactive arthritis and osteoarthritis".

- 1. Give definition of rheumatoid arthritis.
- 2. Describe clinical manifestations of rheumatoid arthritis.
- 3. List laboratory and instrumental methods used for rheumatoid arthritis diagnosis.
 - 4. List diagnostic criteria of rheumatoid arthritis.
 - 5. List methods of rheumatoid arthritis treatment.
 - 6. Give definition of reactive arthritis.
 - 7. Describe clinical manifestations of reactive arthritis.
- 8. List laboratory and instrumental methods used for reactive arthritis diagnosis.
 - 9. List diagnostic criteria of reactive arthritis.
 - 10. List methods of reactive arthritis treatment.
 - 11. Give definition of osteoarthritis.
 - 12. What factors determine osteoarthritis development?
 - 13. Lesion of what joints is typical for primary osteoarthritis?
 - 14. Describe clinical manifestations of osteoarthritis.
- 15. List laboratory and instrumental methods used for osteoarthritis diagnosis.
 - 16. List methods of osteoarthritis treatment.
 - 17. What drugs are effective in osteoarthritis treatment?

Topic: "Observation of patients. Training case history writing".

CONTROL QUESTIONS

in the educational discipline "Propaedeutics of Internal Diseases" for the specialty 1-79 01 01 "General Medicine" (4, 5 and 6 semester)

- 1. General plan of patient's examination. Methods of clinical examination of a patient in the therapeutic department: main and additional. Scheme of the Case History. Case History as a scientific, medical and legal document.
- 2. The Anamnesis. The Present History and the Past History ("Anamnesis morbi" and "Anamnesis vitae"), their medical and social meaning. Rules of gathering information about the Present History and the Past History.
- 3. General Inspection. Types of inspection. Rules and techniques of general and local inspection.
- 4. Percussion. Physical foundation of percussion. General rules, techniques, methods and types of percussion.
- 5. Auscultation. Physical foundation of percussion. General rules, techniques, methods and types of percussion.
- 6. Palpation. Physical foundation of percussion. General rules, techniques, methods and types of percussion.
- 7. Rules of measuring body temperature. Types of fever, their diagnostic value.
- 8. Complaints of patients with diseases of the respiratory system: rules of revealing and systematization. Mechanism of their occurrence.
- 9. General inspection and thorax examination in case of respiratory diseases (patient's position, patient's skin colour, patient's thorax form. Position of the clavicles, scapulae, condition of intercostal spaces. Participation of additional respiratory muscles in breathing. Type of respiration).
- 10. Vesicular breathing, mechanism of its occurrence. Changes of vesicular breathing in normal condition and in lung and pleura pathology.
- 11. Bronchial breathing, mechanism of its occurrence. Types of bronchial breathing. Diagnostic value.
 - 12. Dry rales (rhonchi), mechanism of formation, diagnostic value.
 - 13. Moist rales (bubbling), mechanism of formation, diagnostic value.
- 14. Crepitation, mechanism of formation, diagnostic value. Difference between crepitation and moist rales.
- 15. Pleural friction rub, mechanism of formation, diagnostic value. Difference between pleural friction rub, crepitation, moist rales and pericardial friction rub.
- 16. Syndrome of pulmonary tissue consolidation. Causes, mechanism of its occurrence. Symptoms. Clinical example.

- 17. Lung atelectasis syndrome (obturating and compressing). Causes, mechanism of its occurrence. Symptoms. Clinical example.
- 18. Syndrome of cavity formation in the lung. Causes, mechanism of its occurrence. Symptoms. Clinical example.
- 19. Syndrome of gas accumulation in the pleural cavity (pneumothorax). Causes, mechanism of its occurrence. Symptoms. Clinical example.
- 20. Syndrome of emphysema. Causes, mechanism of its occurrence. Symptoms. Clinical example.
- 21. Syndrome of accumulation of fluid in the pleural cavity. Causes, mechanism of its occurrence. Symptoms. Clinical example.
- 22. Syndrome of broken bronchial lumen (bronchial obstruction). Causes, mechanism of its occurrence. Symptoms. Clinical example.
 - 23. Syndrome of respiratory insufficiency (acute and chronic).
- 24. Bronchial asthma. Symptoms, diagnosis, principles of treatment and prophylaxis.
- 25. Chronic obstructive pulmonary disease. Symptoms, diagnosis, principles of treatment and prophylaxis.
- 26. Symptoms, diagnosis, principles of treatment and prophylaxis of pneumonia.
- 27. Symptoms, diagnosis, principles of treatment and prophylaxis of pleurisies.
- 28. Complaints of patients with diseases of the cardiovascular system: rules of revealing and systematization. Mechanism of their occurrence.
- 29. Rules of patient's inspection in case of cardiovascular diseases. Clinical value of inspection results.
- 30. Examination of pulse in patients with diseases of the cardiovascular system. Characteristics of both arterial and venous pulse. Diagnostic value of the examination of vessels.
- 31. The third and the fourth heart sounds, mechanism of formation. Determination of the heart sounds.
- 32. The first heart sound. Changes of its intensity and timbre. Its splitting and bifurcation. Mechanism of these changes.
- 33. The second heart sound. Changes of its intensity and timbre. Its splitting and bifurcation. Mechanism of these changes.
- 34. The "quail" rhythm, the "gallop" rhythm. Mechanism of occurrence and diagnostic value.
- 35. Rules of heart auscultation. Heart murmurs, mechanism of formation, classification. Difference between functional murmurs and organic murmurs (intra- and extracardiac).
- 36. Clinical and electrocardiographic (ECG) signs of cardiac arrhythmias due to the disorders of myocardial automaticity and excitability. Premature contractions (extrasystoles), fibrillation of atria.

- 37. Clinical and electrocardiographic (ECG) signs of cardiac arrhythmias due to the disorders of myocardial conduction (heart blocks).
- 38. Acute rheumatic fever. Symptoms, diagnosis, principles of treatment and prophylaxis.
- 39. Symptoms, diagnosis, principles of treatment and prophylaxis of mitral cardiac defects (mitral regurgitation, mitral stenosis: etiology, pathogenesis (haemodynamic), clinical picture).
- 40. Symptoms, diagnosis, principles of treatment and prophylaxis of infective endocarditis.
- 41. Symptoms, diagnosis, principles of treatment and prophylaxis of aortic cardiac defects (mitral regurgitation, mitral stenosis: etiology, pathogenesis (haemodynamic), clinical picture).
- 42. Symptoms, diagnosis, principles of treatment and prophylaxis of ischemic heart disease: angina pectoris, myocardial infarction. Concept of atherosclerosis.
- 43. Symptoms, diagnosis, principles of treatment and prophylaxis of arterial hypertensions.
- 44. Symptoms, diagnosis, principles of treatment and prophylaxis of acute left-ventricular heart failure (cardiac asthma, lung oedema). Causes, mechanism of occurrence. Diagnostic signs.
- 45. Symptoms, diagnosis, principles of treatment and prophylaxis of chronic heart failure. Causes, mechanism of occurrence. Clinical symptoms according to stages (classes) of chronic heart failure.
- 46. Complaints of patients with gastrointestinal diseases: rules of revealing and systematization. Anamnesis data.
- 47. Rules of examining patients with gastrointestinal diseases. Clinical value of inspection results: changes of patient's position, changes of skin colour and condition of patient's skin, changes of hypodermal fatty tissue condition, changes of visible mucosa condition, abdomen size and form in horizontal and vertical position.
- 48. Syndrome of the oesophageal, stomach and intestinal bleeding. Causes, clinical and laboratory signs. Diagnosis of hidden bleeding. Difference of stomach and pulmonary bleeding.
- 49. Constipation and diarrhea. Definition, mechanism of occurrence. Clinical value.
- 50. Maldigestion syndrome. Malabsorption syndrome. Causes, mechanism of occurrence. Symptoms. Clinical example.
- 51. Complaints of patients with liver and bile ducts diseases: rules of revealing, systematization.
 - 52. Rules of examining patients with liver and bile ducts diseases.
 - 53. Mechanism of bilirubin formation.
 - 54. Pre-hepatic jaundice. Causes, symptoms and laboratory signs.

- 55. Hepatic jaundice. Causes, symptoms and laboratory signs.
- 56. Post-hepatic jaundice. Causes, symptoms and laboratory signs.
- 57. Main clinical syndromes in hepatobiliary diseases: portal hypertension syndrome.
- 58. Symptoms, diagnosis, principles of treatment and prophylaxis of acute and chronic gastritis.
- 59. Stomach ulcer and duodenum ulcer. Symptoms, diagnosis, principles of treatment and prophylaxis.
- 60. Symptoms, diagnosis, principles of treatment and prophylaxis of diseases of gallbladder.
- 61. Symptoms, diagnosis, principles of treatment and prophylaxis of hepatitis.
- 62. Symptoms, diagnosis, principles of treatment and prophylaxis of liver cirrhosis.
- 63. Complaints of patients with kidney and urinary tract diseases: rules of revealing, systematization.
- 64. Rules of examining patients with kidney and urinary tract diseases (patient's position, patient's look and skin colour, condition of patient's skin, hypodermic tissue and visible mucosa; inspection of kidney's area and urinary bladder area).
- 65. Mechanism of renal oedema occurence. Difference of renal and cardiac oedema.
- 66. Urinary syndrome, its characteristics and diagnostic value. Clinical example.
- 67. Nephrotic syndrome. Causes of development. Symptoms. Diagnostic value.
 - 68. Syndrome of renal hypertension. Causes. Symptoms.
- 69. Symptoms, diagnosis, principles of treatment and prophylaxis of acute and chronic glomerulonephritis.
- 70. Symptoms, diagnosis, principles of treatment and prophylaxis of acute and chronic pyelonephritis.
- 71. Symptoms, diagnosis, principles of treatment and prophylaxis of acute renal injury.
- 72. Symptoms, diagnosis, principles of treatment and prophylaxis of chronic kidney disease.
- 73. Symptoms, diagnosis, principles of treatment and prophylaxis of acute allergic diseases.
- 74. Complaints of patients with blood system diseases: rules of revealing, systematization.
- 75. Anaemic syndrome. Causes, mechanism of occurrence, symptoms. Clinical example.

- 76. Hemorrhagic syndrome. Causes, mechanism of occurrence, symptoms. Clinical example.
- 77. Symptoms, diagnosis, principles of treatment and prophylaxis of leukemia.
- 78. Complaints of patients with endocrine diseases: rules of revealing, systematization.
- 79. Thyrotoxicosis (hyperthyroidism) syndrome and hypothyroidism syndrome. Etiology, pathogenesis, clinical picture.
 - 80. Hyperglycaemia syndrome and hypoglycaemia syndrome.
- 81. Symptoms, diagnosis, principles of treatment and prophylaxis of the thyroid gland diseases.
- 82. Symptoms, diagnosis, principles of treatment and prophylaxis of diabetes mellitus.
 - 83. Technique of general blood test investigation.
 - 84. Technique of biochemical blood test investigation.
- 85. Technique of urinalysis investigation; Nechiporenko's test; Zimnitsky's and Rehberg's tests. Urine sampling for all these tests. Diagnostic value.
- 86. Study of the sputum and pleural fluid (technique of the investigation). Diagnostic value.
 - 87. Coprological (feces) studies. Diagnostic value.

Topic: "Practical skills training (in the laboratory for practical skills training (BSMU))".

LIST OF PRACTICAL SKILLS

in the educational discipline "Propaedeutics of Internal Diseases" for the specialty 1-79 01 01 "General Medicine" (4, 5 and 6 semester)

- 1. Detection of vocal fremitus (tactile fremitus).
- 2. Thorax palpation.
- 3. Lungs comparative percussion.
- 4. Delimitation of the level of lung apex (anterior and posterior chest).
- 5. Delimitation of Kronig's area width.
- 6. Delimitation of the lower borders of lungs.
- 7. Determination of lower lung border excursion.
- 8. Lungs auscultation.
- 9. Detection of bronchophony.
- 10. Apex beat palpation.
- 11. Pulse examination.
- 12. Delimitation of the relative heart dullness.
- 13. Delimitation of borders (width) of the vascular bundle.

- 14. Detection of heart configuration.
- 15. Delimitation of diameter of the relative heart dullness.
- 16. Delimitation of absolute heart dullness.
- 17. Heart auscultation.
- 18. Surface palpation of the abdomen.
- 19. Sigmoid palpation.
- 20. Caecum palpation.
- 21. Transverse colon palpation.
- 22. Definition of the lower stomach border (using the method of auscultative palpation ("rustle").
 - 23. Detection of free and limited fluids in the abdominal cavity.
 - 24. Liver palpation.
 - 25. Delimitation of absolute liver dullness (superior and inferior).
 - 26. Liver size by Kurlov.
 - 27. Spleen percussion.
 - 28. Spleen palpation.
 - 29. Kidneys palpation.
 - 30. Palpation of peripheral lymph nodes.
 - 31. Thyroid gland palpation.

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Контрольные вопросы к текущим и итоговым занятиям

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Подписано в печать 20.06.18. Формат 60×84/16. Бумага писчая «Снегурочка». Ризография. Гарнитура «Тimes». Усл. печ. л. 2,32. Уч.-изд. л. 1,88. Тираж 99 экз. Заказ 441.

Издатель и полиграфическое исполнение: учреждение образования «Белорусский государственный медицинский университет». Свидетельство о государственной регистрации издателя, изготовителя, распространителя печатных изданий № 1/187 от 18.02.2014. Ул. Ленинградская, 6, 220006, Минск.