#### ASSESSMENT TOOLS FOR MIDTERM ASSESSMENT

#### **Internal Diseases Propaedeutic**

Curriculum	31.05.01 General Medicine
Specialty	General Medicine
Form of education	Full-time
Designer Department	Internal diseases
Graduate Department	Internal Diseases

#### Sample tasks and tests (3 th term)

#### **Stage I: Formative assessment.**

### 1.1. Points oral quiz.

Topic 1: Clinical methods of examination. The scheme of the medical history. General examination. Examination rules. The importance of an examination in the clinic of internal diseases. Survey of patients with respiratory diseases. Characteristics of shortness of breath, cough, chest pain.

- 1. Do you know medical history scheme and it's components?
- 2. The rules of taking the anamnesis.
- 3. What is the sequence of the general examination of the patient?
- 4. Can you tell us about the types of disturbed consciousness?
- 5. What position a sick person can take in bed?
- 6. How the patient's condition is assessed?
- 7. Diagnostic value of face examination.
- 8. What do people pay attention to when examining the skin?
- 9. Can you name the causes of cyanosis, jaundice and pale skin?
- 10. Can you name the causes of general and local edema?
- 11. How to assess the severity of subcutaneous fat?
- 12. What is a pasty?
- 13. What is an anasarca?

## **1.2. Sample tests (with keys)**

#### Term 3

Topic 2: Examination of the chest. Pathological forms of the chest. Palpation of the chest. Surface orientation palpation, elasticity check, determination of vocal tremor.

#### I. Palpation of the chest can determine:

- 1. The location of the borders of the lungs
- 2. Pleural friction noise
- 3. Localization and cause of pain
- 4. Chest resistance

#### 5. Vocal fremitus

#### II. The rigidity of the chest is observed at:

- 1. Massive compaction of lung tissue
- 2. Ossification of the costal cartilage
- 3. The pleural cavities filled with liquid
- 4. Formation of the cavity in the lung which communicates with the bronchus

#### III. Vocal fremitus is strengthened by the syndrome of:

- 1. Seals lung tissue
- 2. Increased airiness of the lung tissue
- 3. The fluid accumulation in the pleural cavity
- 4. Formation of the cavity in the lung which communicates with the bronchus
- 5. The air accumulation in the pleural cavity

#### IV. Vocal fremitus is weakened by the syndrome of:

- 1. Seals lung tissue
- 2. Increased airiness of the lung tissue
- 3. The fluid accumulation in the pleural cavity
- 4. The air accumulation in the pleural cavity
- 5. Inflammation of the bronchi

#### V. What diseases are characterized by increased vocal fremitus?

- 1. Adhesive pleurisy
- 2. Exudative pleurisy
- 3. Chronic bronchitis
- 4. Lung abscess after dissection
- 5. Croupous pneumonia in stage 2 of the disease

#### VI. What diseases are characterized by weakening of vocal fremitus?

- 1. Exudative pleurisy
- 2. Pneumothorax
- 3. Focal pneumonia
- 4. Lung abscess after dissection
- 5. Chronic bronchitis

#### VII. What diseases are characterized by weakening of vocal fremitus?

- 1. Emphysema
- 2. Pneumosclerosis
- 3. Central lung cancer (with complete obstruction of the bronchus)
- 4. Exudative pleurisy
- 5. Bronhoectatic disease

#### VIII. The rigidity of the chest is marked with

- 1. Bronchial asthma
- 2. Emphysema
- 3. Exudative pleurisy
- 4. Bronchitis
- 5. Croupous pneumonia

#### IX. Vocal fremitus is increased by

1. Pneumothorax

- 2. Hydrothorax
- 3. Formation in the lung cavity, communicating with the bronchus
- 4. Inflammation of the bronchi
- 5. Increased airiness of the lungs

Keys: I - 3,4,5; II - 2,3; III - 1,2; IV - 2,3,4; V - 4,5; VI - 1,2; VII - 1,2,3,4; VIII - 2,3; IX - 3.

#### 1.3. Sample Case-studies for formative assessment (4 th term)

#### The syndromes of the lungs diseases.

1. The study of the patient's chest revealed an increase in its anterior-posterior size. The lower border of the lungs: to the right on the appropriate lines at the level of VII, VIII, IX, X, XI ribs, to the left – at the level of VIII, IX, X, XI ribs, height of standing tops to the right and left — 4,5 cm. What kind of pathology is it? What are the expected results when carrying out comparative percussion and auscultation of the lungs?

Answer: emphysema of the lung, box sound by percussion, weakened vesicular breathing

2. The right half of the patient's chest lags behind sharply when breathing, with comparative percussion a dull sound is determined in the right axillary region. What are the possible causes of these changes, what additional methods of physical research should be used to differentiate them?

Answer: Blunt sound can be caused by hydrothorax or lung compaction syndrome, it is necessary to conduct auscultation – with hydrothorax lack of breathing, with compaction of the lung – bronchial breathing.

Stage: Midterm assessment (credit, 5<sup>th</sup> term)

Midterm assessment is carried out in the form of credit. Tasks for the credit include case – study and practical skill.

Tasks for competence assessment «Knowledge»		
List of Case studies	-theoretical	
Topic 1: External examination. Palpation of skin, lymph nodes,		
musculoskeletal system		
Task № 1.		
A patient with a body temperature of 39°C was admitted to the Department.		
1. What's that temperature called?		
2. What kind of fever is called constant?		
3. What can be seen when examining the skin?		
4. What is a critical temperature drop?		
5. Why is it necessary to monitor a critical decrease in temperature?		
	Task type	
Tasks for competence assessment «Abilities»		
List of points for practical skill	-practical	
1. General examination of the patient. Assessment of skin, mucous membranes.		
Determination of edema, evaluation of subcutaneous fat. Palpation of lymph		
nodes. Examination, palpation of the musculoskeletal system.		
2. Examination and palpation of the chest. Interpretation of results.		
3. Comparative percussion of the lungs. The change of percussion sound by the		
main bronchopulmonary syndromes.		
4. Topographic percussion of the lungs: determination of the upper, lower border		

of the lungs and respiratory excursion of the lower edge of the lungs. Interpretation of the results.

- 5. Auscultation of the lungs. Interpretation of the results.
- 6. Examination and palpation of the heart. Definition and characteristics of the apical shock. Interpretation of the results.

#### Stage: Midterm assessment (credit, 3,4,5 th term)

#### **Practical skills**

- 1. Examination, superficial approximate palpation and auscultation of the abdomen. Interpretation of the results. Determination of the symptoms of Mendel, Shchetkin-Blumberg. The presence of an 'acute' abdomen.
- 2. Methodical deep sliding palpation according to V. P. Obraztsov and N. D. Strazhesco. Interpretation of the results of palpation.
- 3. Abdominal percussion. Three methods for determining ascites. Interpretation of the results.
- 4. Percussion determination of the boundaries of the liver according to Kurlov. Determination of the size of the liver according to Kurlov (according to percussion and palpation of the liver).
- 5. Palpation of the liver. Interpretation of the results. Apical shock. Interpretation of the results obtained.

**Stage: Midterm assessment (credit, 5,6<sup>th</sup> term)** 

#### Case-study

Patient P., 48 years old, complained of shortness of breath, palpitations, increasing with exercise, swelling of the lower extremities, abdominal enlargement.

Objectively: general condition of moderate severity. On examination, acrocyanosis, thumping and pulsation of the neck veins, which increases on inspiration. The chest is symmetrical, both halves participate in the act of breathing. Above the lungs – a clear pulmonary sound during percussion, vesicular breathing during auscultation, BDD 18 in min. The apical push is determined in the 5 intercostal space 1 cm inside of the left mid-clavicular line, moderately high, unshed. Percussion-the left border of relative cardiac dullness is 1 cm inside from the left midclavicular line, the right one is 2.5 cm outside from the right edge of the sternum, the upper one is on the lower edge of 3 ribs. During auscultation-at all points, weakening, deafness of heart tones, systolic noise on the basis of the xiphoid process, is carried out along the left edge of the sternum, increases with deep inspiration. Blood pressure 130/70 mm Hg The abdomen is soft and painless, free fluid in the abdominal cavity is determined. The size of the liver is 17; 15;12 cm. There are no edema.

#### **Ouestions:**

Highlight the syndrome.

What additional methods should be used for diagnosis?

Explain the reason for the increase in the size of the liver.

Stage: Midterm assessment (exam, 6<sup>th</sup> term)

occurrence. Gallop rhythm. Diagnostic value.

Midterm assessment is carried out in the form of exam. Tasks for the exam include oral quiz, case history, practical skills.

## Tasks for competence assessment «Knowledge» Task type List of theoretical points for oral quiz -theoretical 1. Cough, types of cough. Detailing the complaint, the causes, diagnostic value of the symptom. 2. The separation of sputum. The types of sputum (mucoid, mucopurulent, purulent, rottenness-tion). Detailing the complaint, the causes, diagnostic value of the symptom. 3. Hemoptysis. Pulmonary hemorrhage. Detailing the complaint, the causes, diagnostic value of the symptom. Difference from esophageal and gastric bleeding. 4. Chest pain in the disease of the pleura and respiratory muscles. Detailing the complaints, the causes, diagnostic value of the symptom. 5. Dyspnea (inspiratory, expiratory, mixed, tachypnea, stridor), shortness of breath. Mechanisms of occurrence, diagnostic value. 6. Central and peripheral cyanosis, the mechanism of its occurrence, diagnostic value. 7. Study of voice tremor in symmetrical areas of the chest. Diagnostic value in major bronchopulmonary syndromes. 8. The nature of percussion sound in symmetrical areas of the chest normally and by major bronchopulmonary syndromes. 9. Vesicular respiration. Mechanism of occurrence. Diagnostic value by the major bronchopulmonary syndromes. 10. Bronchial breathing. Mechanism of occurrence. Diagnostic value by the major respiratory syndromes. 11. Hard breath. Mechanism of occurrence. Diagnostic value by the basic bronchopulmonary syndromes. 12. Dry bass and treble rales. Mechanism of occurrence. Diagnostic value. 13. Crackles: voiced and unvoiced, small-, medium - and large bubbly wheezing. Mechanism of occurrence. Diagnostic value. 14. Crepitus, mechanism of formation, differences between the rales and noise of friction of pleura. Diagnostic value. 15. The noise of friction of the pleura, the mechanism of occurrence, differences from the wheezing and fastening. Diagnostic value. 16. Shortness of breath in heart disease (heart failure). Detailing the complaint, the causes, diagnostic value of the symptom. 17. Apical push. Characteristics of the apical push. Diagnostic value. 18. Cardiac impulse and epigastric pulsation. Diagnostic value. 19. Determination of systolic and diastolic tremor in the heart. Palpation of the heart base. Diagnostic value. 20. Diagnostic value of changes in the boundaries of relative dullness of the heart. 21. Diagnostic value of changes in the boundaries of absolute dullness of the heart. 22. The 1<sup>st</sup> and 2<sup>nd</sup> cardiac tones. Basic properties of tone. Change of the first tone in pathology. Diagnostic value. 23. The 3<sup>rd</sup> and 4<sup>th</sup> cardiac tones. Basic properties of tone. Mechanism of

24. The murmur of mitral regurgitation. Character, timbre, duration of noise. Places of the best auscultation of murmurs, ways of murmur conduction of heart.

## Diagnostic value.

- 25. Types of edema (cardiac, renal, impaired local venous circulation, giponatriemiei), the cause, their location, prevalence and rainnot.
- 26. Pain in the epigastric region: early, late, night, hungry pain. Spasticity and distension pain. Details of the complaint. Diagnostic value.
- 27. Peritoneal abdominal pain. Details of the complaint. Diagnostic value. Symptom of peritoneal irritation by Schetkin-Blumberg. Diagnostic value.
- 28. Dyspeptic phenomena: nausea, vomiting, heartburn, belching. Detailed characteristics, mechanisms and diagnostic significance of these symptoms.
- 29. Constipation, diarrhea. Mechanism of origin, diagnostic value.
- 30. Gastrointestinal bleeding: esophageal, gastric, and intestinal. Clinical signs. Diagnostic value.
- 31. Biliary colic. The mechanism of pain, their diagnostic value.
- 32. Spider veins. Hepatic palms. Gynecomastia. Diagnostic value.
- 33. Renal colic. Details of the complaint.
- 34. Violation of urination: oliguria, strangury, ischuria, polyuria, anuria, floor-lacure. Diagnostic value.

## List of theoretical points for oral quiz: syndromes of diseases of internal organs

- 1. Bronchial obstruction syndrome.
- 2. Syndrome of lobar and focal compaction of pulmonary tissue.
- 3. Syndrome of the air cavity in the lung connected to the bronchus and pneumothorax syndrome.
- 4. Syndrome of the lungs emphyseme.
- 5. Syndrome of fluid accumulation in the pleural cavity (hydrothorax) with compression atelectasis syndrome.
- 6. Restrictive respiratory failure.
- 7. Obstructive respiratory failure.
- 8. Acute coronary insufficiency syndrome (angina, myocardial infarction).
- 9. Syndrome of acute left ventricular failure. Heart asthma, pulmonary edema.
- 10. Syndrome (biventricular) chronic heart failure.
- 11. The syndrome of acute vascular insufficiency (faint, collapse, shock).
- 12. The syndrome of hypertension.
- 13. Syndromes of cardiomegaly (hypertrophy and dilation of the heart).
- 14. Syndrome of hypertension of the small circle of blood circulation.
- 15. Small bowel syndrome (enteritis).
- 16. Syndrome lesions of the colon (colitis).
- 17. The syndrome of 'acute abdomen'.
- 18. Syndromes of esophageal, gastric and intestinal bleeding.
- 19. The syndrome of parenchymatous (hepatic) jaundice.
- 20. Syndromes of mechanical (obstructive) jaundice.
- 21. Syndromes of hemolytic (adrenal) jaundice.
- 22. Portal hypertension syndrome.
- 23. The syndrome of hepatic-cellular insufficiency (hepatic coma).
- 24. The syndrome of biliary colic.
- 25. Renal colic syndrome.
- 26. Nephrotic syndrome.
- 27. Nephritic syndrome.
- 28. Renal failure syndrome (acute and chronic). Uremic coma.
- 29. The syndrome of anemia.
- 30. Syndrome, hyperthyroidism, hypothyroidism.

#### List of theoretical points for oral quiz: diseases of internal organs

- 1. Chronic bronchitis
- 2. Focal pneumonia
- 3. Lobar pneumonia
- 4. Lung abscess
- 5. Bronchial asthma
- 6. Dry and exudative pleurisy
- 7. Spontaneous pneumothorax
- 8. Emphysema
- 9. The respiratory distress syndrome
- 10. Coronary heart disease: angina pectoris
- 11. Coronary heart disease: myocardial infarction
- 12. Hypertension and symptomatic hypertension
- 13. Mitral valve insufficiency
- 14. Stenosis of the left atrioventricular orifice
- 15. Aortic valve insufficiency
- 16. Stenosis of estuary of aorta
- 17. Tricuspid valve failure
- 18. Acute and chronic heart failure syndrome
- 19. Chronic pulmonary heart
- 20. Chronic gastritis
- 21. Gastric and duodenal ulcer
- 22. Chronic enteritis and colitis
- 23. Chronic hepatitis
- 24. Cirrhosis
- 25. Cholelithiasis
- 26. Cholecystitises
- 27. Jaundice syndrome: parenchymal, mechanical and hemolytic
- 28. Hepatic cell failure syndrome
- 29. Acute glomerulonephritis
- 30. Chronic glomerulonephritis
- 31. Nephrotic syndrome
- 32. The syndrome of chronic renal failure. Uremic coma
- 33. Acute post-hemorrhagic anemia
- 34. Chronic iron deficiency anemia
- 35. B12-folic deficiency anemia

# List of theoretical points for oral quiz: instrumental and laboratory diagnostics of diseases of internal organs

- 1. Laboratory diagnostics of inflammation syndrome (clinical and biochemical blood tests)
- 2. Laboratory and instrumental diagnostics of chronic obstructive bronchi (sputum analysis, blood analysis, spirography, bronchoscopy, etc.))
- 3. Instrumental diagnostics of respiratory distress syndrome (spirography, alloy Tiffno)
- 4. Laboratory and instrumental diagnostics of acute pneumonia and lung abscess (sputum analysis, blood analysis, radiography)
- 5. Instrumental diagnostics of ischemic heart disease and stable angina (ECG12, Bicycle ergometry, daily monitoring of ECG by Holter, stress Echo-CG)
- 6. Laboratory and instrumental diagnostics of acute myocardial infarction (clinical and biochemical blood tests, ECG12, echocardiography)
- 7. Laboratory and instrumental diagnostics of syndrome of arterial hypertension

(measurement and daily monitoring of blood pressure, ECG12, echocardiography, urinalysis, test by Zimnitskiy, ultrasound examination of the kidneys, fundus examination, biochemical analysis of blood)

- Instrumental diagnostics of chronic pulmonary heart echocardiography, spirography, typhoid test, radiography of lungs and heart)
- 9. Instrumental diagnostics of aortic heart defects (ECG12, echocardiography, radiography of the heart)

## List of theoretical points for oral quiz: instrumental and laboratory diagnostics of diseases of internal organs

- 10. Instrumental diagnostics of mitral heart defects (ECG12, echocardiograraphy, chest radiography of the heart)
- 11. Laboratory and instrumental diagnostics of chronic gastritis (analysis of gastric contents, esophagogastroduodenoscopy)
- 12. Laboratory and instrumental diagnosis of gastrointestinal bleeding syndrome (blood test, fecal analysis, esophagogastroduodenoscopy, measurement of blood pressure)
- 13. Laboratory and instrumental diagnosis of gastric ulcer and duodenal ulcer (esophagogastroduodenoscopy, radiography, fecal analysis, etc.)
- 14. Laboratory and instrumental diagnostics of the syndrome of mechanical, parenchymal and hemolytic jaundice (biochemical blood analysis, urine analysis, and ultra-sonic examination of the abdominal cavity)
- 15. Laboratory diagnosis of cytolytic and expressed mesenchymal-inflammatory and cholestatic syndromes in diseases of the liver and 'small' syndrome pechenocnaya-term failure
- 16. Laboratory diagnostics of nephrotic and nephritic syndromes (urine test, blood biochemical analysis)
- 17. Laboratory diagnostics of chronic renal failure (urine analysis, Zimnitskiy test, biochemical blood analysis)
- 18. Laboratory diagnosis of anemia
- 19. Laboratory diagnosis of leukemia

## Tasks for competence assessment «Abilities»

## -practical

#### List of points for practical skill:

- 1. General examination of the patient. Assessment of skin, mucous membranes. Determination of edema, evaluation of subcutaneous fat. Palpation of lymph nodes. Examination, palpation of the musculoskeletal system.
- 2. Examination and palpation of the chest. Interpretation of results.
- 3. Comparative percussion of the lungs. The change of percussion sound by the main bronchopulmonary syndromes.
- 4. Topographic percussion of the lungs: determination of the upper, lower border of the lungs and respiratory excursion of the lower edge of the lungs. Interpretation of the results.
- 5. Auscultation of the lungs. Interpretation of the results.
- 6. Examination and palpation of the heart. Definition and characteristics of the apical shock. Interpretation of the results.
- 7. Limits of relative dullness of the heart: determination of the right, left and upper limits.
- 8. Determination of the boundaries of absolute dullness of the heart: left, upper, right. Interpretation of the results.
- 9. Determination of the diameter of the heart, the width of the vascular bundle, the configuration of the heart. Signs of dilation of the heart cavities. Interpretation of

Task type

the results.

- 10. Auscultation of heart. Interpretation of the results.
- 11. Examination, superficial tentative palpation and auscultation of the abdomen. Interpretation of the results. Determination of symptoms of Mendel, Schetkin-Blumberg. Signs of 'acute' belly.
- 12. Methodical deep sliding palpation by V. P. Obraztsov and N. D. Strazhesco. Interpretation of the results of palpation.
- 13. Belly percussion. Three methods of determination of ascites. Interpretation of the results.
- 14. Percussion determination of the boundaries of the liver by Kurlov. Determination of the size of the liver by Kurlov (according to percussion and palpation of the liver).
- 15. Palpation of the liver. Interpretation of the results.
- 16. Palpation of the gallbladder. Determination of the symptoms Kera, Mussi-St. George (right-sided Frenikus-symptom), Murphy and Lepene. Interpretation of the results.
- 17. Percussion and palpation of the spleen. Interpretation of the results.
- 18. Demonstration of the research methods needed to diagnose fluid syndrome in the pleural cavity (hydrothorax).
- 19. Demonstration of the research methods necessary for the diagnosis of pulmonary lobar syndrome.
- 20. Demonstration of the research methods necessary for the diagnosis of obstructive atelectasis syndrome.
- 21. Demonstration of the research methods necessary for the diagnosis of air syndrome in the pleural cavity (pneumothorax).
- 22. Demonstration of the research methods necessary for the diagnosis of syndrome of arterial hypertension.