

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

BANK OF ASSESSMENT TOOLS FOR DISCIPLINE

«PHTHISIATRY»

Training program (specialty): 31.05.01 «GENERAL MEDICINE»

Department: Phthisiology named after I.S. Nikolaev

Mode of study: full-time

Nizhniy Novgorod
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1. Bank of assessment tools for the current monitoring of academic performance, mid-term assessment of students in the discipline «Phthysiatry»

This Bank of Assessment Tools (BAT) for the discipline «Phthysiatry» is an integral appendix to the working program of the discipline «Phthysiatry». All the details of the approval submitted in the WPD for this discipline apply to this BAT.

2. List of assessment tools

The following assessment tools are used to determine the quality of mastering the academic material by students in the discipline:

No.	Assessment tool	Brief description of the assessment tool	Presentation of the assessment tool in the BAT
1	Test questions	A system of standardized tasks that allows you to automate the procedure of measuring the level of knowledge and skills of a student.	Bank of test tasks
2	Control work	A tool of checking the ability to apply acquired knowledge for solving problems of a certain type by topic or section.	Set of control tasks in variants
3	Creative task	A partially regulated task that has a non-standard solution and allows you to diagnose skills, integrate knowledge of various fields, and argue own point of view. It can be performed individually or by a group of students.	Group topics and/or individual creative tasks
4	Essay	A tool that allows you to evaluate the student's ability to state the essence of the problem in writing, independently analyze this problem using concepts and analytical tools of the relevant discipline, and draw conclusions summarizing the author's position on the problem.	The subject of the essay
5	Individual survey	A control tool that allows you to assess the degree of comprehension of the material	List of questions

3. A list of competencies indicating the stages of their formation in the process of mastering the educational program and the types of evaluation tools

Code and formulation of competence	Stage of competence formation	Controlled sections of the discipline	Assessment tools
UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC-5, PC-6, PC-7	Entry	Section 1. Features of the method of examination of a patient with pulmonary tuberculosis. Curation of patients. Formulation of the diagnosis in accordance with the requirements of the clinical classification.	Test questions, control work, creative task, essay, individual survey

		Tuberculin diagnostics. BCG vaccination. Treatment of patients with tuberculosis.	
UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC-5, PC-6, PC-7	Current	Section 2. Primary tuberculosis. Disseminated tuberculosis. Focal pulmonary tuberculosis. Detection of tuberculosis.	Test questions, control work, creative task, essay, individual survey
UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC-5, PC-6, PC-7	Current	Section 3. Infiltrative pulmonary tuberculosis. Tuberculoma of the lungs. Caseous pneumonia. Cavernous and fibrous-cavernous pulmonary tuberculosis. Cirrhotic pulmonary tuberculosis.	Test questions, control work, creative task, essay, individual survey
UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC-5, PC-6, PC-7	Current	Section 4. Tuberculous pleurisy. Complications of tuberculosis. TB dispensary. The work of institutions of the general medical network to detect tuberculosis.	Test questions, control work, creative task, essay, individual survey
UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC-5, PC-6, PC-7	Current, mid-term	Section 5. Prevention of tuberculosis. Exam.	Test questions, control work, creative task, essay, individual survey

4. The content of the assessment tools of entry, current control

4.1. Entry control is carried out by the discipline teacher when conducting classes in the form of test questions:

001. In the X-ray protocol, it is necessary to display
- skiological characteristics of the pathological process
 - morphological characteristics of the pathological process
 - an assumption about the morphology of the process, obtained on the basis of the skiological characteristics of pathological changes in the lungs and mediastinal organs
002. The conclusion of the X-ray examination protocol is
- conclusion
 - a diagnosis
 - multiple scalo-morphological characteristic of the pathological process
003. The conclusion of the X-ray examination protocol can be
- specific
 - indicating the differential diagnostic series, including no more than two nosological forms
 - with recommendations for the use of additional methods to clarify the diagnosis in an unclear case
 - all of the above
004. In the conclusion of the X-ray protocol, in addition to the form of tuberculosis, it is necessary to reflect
- process localization
 - prevalence of the process
 - the activity of the process (its phase)
 - process option
 - all of the above

005. Tuberculosis of the bronchus, detected during bronchoscopy, is clinically asymptomatic
- in 5-7% of cases
 - in 20-30% of cases
 - in 50% of cases
006. Bronchoscopy in patients with tuberculosis is indicated
- in all forms of pulmonary tuberculosis, occurring with destruction and bacterial excretion
 - during preoperative examination of patients
 - with tuberculous pleurisy and tuberculosis of the intrathoracic lymph nodes
 - with bacterial excretion from a focus of unclear localization
 - in all of the above cases
007. Therapeutic bronchoscopy in patients with tuberculosis is indicated
- with infiltrative tuberculosis of the bronchus without severe stenosis of its lumen
 - with ulcerative tuberculosis of the wall of the lobar bronchus with the growth of granulation, stenosing its lumen
 - with local catarrhal endobronchitis
 - with diffuse hypertrophic endobronchitis
008. Bronchoscopy with a "rigid" bronchoscope has advantages over fiberoptic bronchoscopy, except
- cheap hardware
 - a better view of the trachea and bronchi of the 1st-2nd order
 - the ability to examine the wall of the bronchi of the 3rd-6th order
009. Fiberoptic bronchoscopy has all of the following advantages over rigid bronchoscopy, except
- cheap hardware
 - less traumatic intervention
 - the ability to biopsy the lung tissue
010. With a transbronchial forceps biopsy, they are taken for examination
- pieces of bronchial mucosa
 - pieces of the bronchus wall with mucous membrane and cartilage tissue
 - areas of the lung parenchyma
011. Infiltrative pulmonary tuberculosis is
- pulmonary tuberculosis, characterized by a blackout area
 - pulmonary tuberculosis, manifested by a clinic of pneumonia
 - pulmonary tuberculosis, characterized by inflammatory changes with a predominance of the exudative component and caseous necrosis in the center
012. The predominance of the exudative inflammatory process in infiltrative tuberculosis with caseous necrosis and frequent formation of decay cavities occurs first
- due to the hyperergic reaction of the macroorganism to Mycobacterium tuberculosis
 - due to hypersensitization of lung tissue to antigens of mycobacterium tuberculosis
 - due to massive multiplication of infection in the lesion
013. The clinical and radiological variants of infiltrates are based on
- damage to the bronchus
 - the severity of specific inflammation and its prevalence
 - the presence of atelectatic changes
 - volume of lung damage
 - clinical manifestations of the disease
014. The lobular infiltrate is characterized
- the absence of clinical manifestations of the disease
 - moderately severe and short-term clinical symptoms of the disease
 - the presence of symptoms of local bronchitis
 - the presence of moist rales in the lung
015. For lobular infiltrate, the most characteristic radiographic features are
- uniform round focus with foci around

b) a homogeneous irregularly shaped focal shadow, often with foci around

c) inhomogeneous blackout area with foci around

d) triangular heterogeneous area with foci around

016. Lobular infiltrate seen among infiltrative tuberculosis

a) in 10% of cases

b) in 20% of cases

c) in 30% of cases

d) in 50% of cases

017. With lobular infiltrate of *Mycobacterium tuberculosis* in sputum and bronchial washings,

a) up to 10% of cases

b) up to 20% of cases

c) up to 30% of cases

d) up to 50% of cases

e) over 50% of cases

018. With lobular infiltrate, decay is determined

a) in less than 10% of cases

b) about 20% of cases

c) about 30% of cases

d) about 50% of cases

e) above 50% of cases

019. Clinical and radiological syndrome of lobular infiltrate requires differential diagnosis

a) with focal pneumonia

b) with a benign tumor

c) with a retention cyst

d) with echinococcus

020. With effective treatment of lobular infiltrate, residual changes in the form of

a) limited pneumosclerosis

b) dense foci

c) tuberculomas

d) segmental cirrhosis

021. Round infiltrate is characterized

a) no clinical manifestations

b) moderately severe and prolonged clinical manifestations

c) severe clinical manifestations

d) all of the above

022. The most characteristic radiological signs of a round infiltrate are:

1) uniform round focus with foci around

2) uniform irregular focus with foci around

3) non-uniform focus with foci around

4) heterogeneous irregular area with foci around

5) triangular, heterogeneous area with foci around

6) inhomogeneous wrong focus

a) correct answers 1 and 3

b) correct answers 1 and 2

c) correct answers 4 and 6

d) correct answers 5 and 6

e) correct answers 2 and 4

023. The round infiltrate undergoes disintegration

a) in 10% of cases

b) in 20% of cases

c) in 30% of cases

d) in 40% of cases

e) in 50% of cases and more often

024. With a round infiltrate, the release of Mycobacterium tuberculosis is observed

- a) in 10% of cases
- b) in 20% of cases
- c) in 30% of cases
- d) in 40% of cases
- e) in 50% of cases or more

025. Clinical and radiological syndrome of round infiltrate primarily requires differential diagnosis

- a) with pneumonia
- b) with lung cancer
- c) with echinococcus
- d) with a benign tumor
- e) with a retention cyst

026. With effective treatment of round infiltrate, residual changes are more often formed in the form

- a) area of pneumosclerosis
- b) dense focus with moderate pneumosclerosis
- c) tuberculomas
- d) segmental cirrhosis

027. Cloud-like infiltrate is characterized

- a) clinical signs of pneumonia
- b) clinical symptoms of bronchitis
- c) absence of clinical manifestations
- d) pain on the affected side
- e) an increase in body temperature

028. The most characteristic radiological signs of a cloud-like infiltrate are

- a) heterogeneous irregular focus with foci
- b) an inhomogeneous triangular shading area with foci
- c) inhomogeneous, irregularly shaped blackout area with foci
- d) homogeneous irregular blackout area with foci
- e) a uniform triangular shading area with foci

029. With a cloud-like infiltrate, the release of Mycobacterium tuberculosis is observed

- a) in 40% of cases
- b) in 50% of cases
- c) in 60% of cases
- d) in 70% of cases
- e) in 80% of cases or more

030. Cloud-like infiltrate undergoes disintegration

- a) in 30% of cases
- b) in 40% of cases
- c) in 50% of cases
- d) in 60% of cases
- e) in 70% of cases or more

031. Clinical and radiological syndrome of cloudy infiltrate requires differential diagnosis:

- 1) with pneumonia
- 2) with lung cancer
- 3) with sarcoidosis of the lungs
- 4) with a retention cyst
- 5) with abscess pneumonia
- 6) with eosinophilic pneumonia
- 7) with Wegener's granulomatosis

- a) correct answers 2, 3 and 5
- b) correct answers 1, 5 and 6
- c) correct answers 1, 2 and 5

- d) correct answers 3, 4 and 7
 e) correct answers 5, 6 and 7
032. With effective treatment of a cloud-like infiltrate, it can form
- area of pneumosclerosis
 - area of pneumosclerosis with foci
 - segmental cirrhosis
 - all of the above
033. Periscissuritis is characterized by the following clinical syndromes:
- fever
 - dry cough
 - dry and small bubbling moist rales
 - shortening of percussion sound
 - bronchial breathing
 - weight loss
 - chest pain on the affected side
 - wet medium and large bubbling rales
 - secretion of mucopurulent sputum
 - absence of clinical symptoms
- the correct answer is 10
 - correct answers 1, 3, 4, 5 and 9
 - correct answers 1, 2, 3, 4, 6 and 7
 - correct answers 4, 5, 6, 8 and 9
 - correct answers 1, 2 and 4
034. The most characteristic radiological signs of periscissuritis are
- heterogeneous irregular focus with foci
 - inhomogeneous blackout area with foci
 - heterogeneous triangular area with foci
 - a homogeneous area of blackout with foci
 - a uniform triangular shading area with foci
035. Periscissurite undergoes decay
- in 30% of cases
 - in 40% of cases
 - in 50% of cases
 - in 60% of cases
 - in 70% of cases or more
036. With periscissuritis, the isolation of *Mycobacterium tuberculosis* is observed
- in 40% of cases
 - in 50% of cases
 - in 60% of cases
 - in 70% of cases
 - in 80% of cases or more
037. Clinical and radiological syndrome of periscissuritis requires differential diagnosis
- with acute pneumonia
 - with lung cancer
 - with lung sarcoidosis
 - with a retention cyst
 - with abscess pneumonia
 - with eosinophilic pneumonia
- correct answers 1 and 2
 - correct answers 1 and 5
 - correct answers 2 and 3
 - correct answers 3 and 4
 - correct answers 5 and 6
038. With effective treatment, periscissuritis is more likely to form

- a) area of pneumosclerosis
- b) area of pneumosclerosis with foci
- c) tuberculoma
- d) cirrhosis or area of pneumosclerosis with foci
- e) large foci

039. With lobite, the following clinical symptoms are observed:

- 1) high fever
 - 2) acute onset with prodrome
 - 3) dry cough
 - 4) wet cough
 - 5) dull percussion sound
 - 6) bronchial breathing
 - 7) a large number of moist rales
 - 8) chest pain on the affected side
 - 9) moderate clinical symptoms
- a) correct answers 1, 4, 5, 6, 7 and 8
 - b) correct answers 1, 2, 5, 6 and 7
 - c) correct answers 1, 5 and 6
 - d) correct answers 1, 2, 3, 5 and 8
 - e) the correct answer is 9

040. Tuberculous lobitis is characterized by the following radiographic features:

- 1) blackout area, capturing part of the share
 - 2) blackout area, capturing the entire share
 - 3) uniform shadow
 - 4) heterogeneous shadow with focal formations
 - 5) high shadow intensity
 - 6) share increased in volume
 - 7) the share is reduced in volume
 - 8) often decay
 - 9) rarely decay
 - 10) often foci of bronchial screening
- a) correct answers 2, 4, 5, 7, 9 and 11
 - b) correct answers 1, 3, 5, 6, 9 and 11
 - c) correct answers 1, 3, 6 and 8
 - d) correct answers 2, 4, 5, 7, 8 and 10
 - e) correct answers 2, 3, 5, 6, 8 and 11

041. Lobit undergoes decay

- a) in 40% of cases
- b) in 50% of cases
- c) in 60% of cases
- d) in 70% of cases
- e) in 80% of cases or more

042. With lobitis, the isolation of *Mycobacterium tuberculosis* is observed

- a) in 40% of cases
- b) in 50% of cases
- c) in 60% of cases
- d) in 70% of cases
- e) in 80% of cases or more

043. Tuberculous lobitis must be differentiated

- a) with croupous pneumonia
- b) with lung cancer
- c) with eosinophilic pneumonia
- d) all of the above

044. With effective treatment, lobitis often forms

- a) area of pneumosclerosis
- b) large foci
- c) area of pneumosclerosis with foci
- d) tuberculoma
- e) cirrhosis

045. The main morphological difference between caseous pneumonia and variants of infiltrative tuberculosis is

- a) a large amount of damage
- b) the predominance of caseous necrosis
- c) more frequent breakdown
- d) tendency to bronchogenic dissemination
- e) defeat of large bronchi

046. With caseous pneumonia, the following clinical symptoms are observed:

- 1) acute onset
- 2) high fever
- 3) subfebrile temperature
- 4) dry cough
- 5) wet cough
- 6) dry rales in the lungs
- 7) many moist rales
- 8) moderately expressed listed clinical symptoms

- a) correct answers 8
- b) correct answers 1, 2, 5 and 7
- c) correct answers 1, 3, 4 and 6
- d) correct answers 1, 3 and 5
- e) correct answers 1, 3 and 6

047. Caseous pneumonia is characterized by the following x-ray symptoms:

- 1) blackout area
- 2) focus dimming
- 3) uniform shadow
- 4) non-uniform shadow
- 5) high intensity shade
- 6) the presence of decay of lung tissue
- 7) rare breakdown of lung tissue
- 8) limited bronchogenic dissemination
- 9) extensive bronchogenic dissemination
- 10) limited defeat
- 11) frequent polysegmental lesions

- a) correct answers 1, 3, 6, 8 and 11
- b) correct answers 2, 4, 5, 6, 8 and 10
- c) correct answers 2, 3, 5, 7, 8 and 10
- d) correct answers 1, 4, 5, 6, 9 and 11
- e) correct answers 1, 3, 7, 8 and 10

048. Caseous pneumonia is characterized

- a) poor allocation of MBT
- b) abundant allocation of MBT
- c) rare isolation of MBT
- d) single isolation of MBT

049. Caseous pneumonia must be differentiated

- a) with klebsiellopneumonia
- b) with staphylococcal pneumonia
- c) with pneumococcal pneumonia
- d) lung cancer
- e) with pneumonia caused simultaneously by Klebsiella and Staphylococcus aureus

050. With effective treatment of caseous pneumonia, more often
- area of pneumocirrhosis
 - pneumosclerosis with foci
 - multiple tuberculomas
 - cirrhotic and fibrous-cavernous tuberculosis
 - a group of foci
051. Tuberculoma in the structure of respiratory tuberculosis incidence is
- 1-2%
 - 4-5%
 - 10-20%
 - 20-25%
052. Among the contingent of patients with tuberculosis, persons with this process make up
- 5%
 - 8%
 - 8-10%
 - 10-15%
 - more than 20%
053. Tuberculoma of the lung is
- a focus of caseous necrosis larger than 1 cm, surrounded by a zone of specific granulation tissue
 - a focus of caseous necrosis larger than 1 cm, surrounded by a zone of specific and nonspecific inflammation
 - a focus of caseous necrosis larger than 1 cm, surrounded by a connective tissue capsule with the inclusion of cellular elements of tuberculous granuloma
054. In the tuberculoma of the lung, mycobacterium tuberculosis is less than in the infiltrative-pneumonic process of the same size.
- 10 times
 - 20 times
 - 50 times
 - 100 times
 - 1000 times
055. The formation of tuberculoma is possible in all of the following cases, except
- scarring of the cavity
 - filling the cavity
 - progression of the focal form of tuberculosis
 - progression of tuberculous local panbronchitis
056. Caseous include all of the listed variants of tuberculoma, except
- infiltrative-pneumonic
 - pseudotuberculomas
 - homogeneous
 - layered
 - conglomerate
057. Exacerbation of the tuberculous process in tuberculoma is associated
- with the appearance of symptoms of intoxication
 - with a perifocal reaction around the tuberculoma and the appearance of disintegration in it
 - with the reproduction of Mycobacterium tuberculosis
 - all of the above
058. Tuberculomas are considered large.
- 1-2 cm
 - 3.0-3.9 cm
 - 4-5-6 cm or more
059. Tuberculomas may have the following clinical course
- stationary
 - progressive

- c) regressive
- d) all answers are correct

060. A patient with a long-term stationary tuberculoma developed symptoms of intoxication: cough with scanty sputum (AFB+), and on the x-ray - a perifocal reaction around the tuberculoma and a decay cavity in it, which should be regarded

- a) as a progressive variant of the course of the disease
- b) as a phase of infiltration and decay in pulmonary tuberculoma
- c) as a reactivation of tuberculosis

061. An exacerbation in tuberculomas of small size, detected without signs of activity of a specific process, takes place approximately

- a) in 3-5% of cases
- b) in 10% of cases
- c) in 20-30% of cases
- d) more than 30% of cases

062. In a patient with pulmonary tuberculoma, identified in the phase of infiltration, decay and seeding (AFB+) and subjected to effective chemotherapy, the most likely to be

- a) steady flow of the process
- b) disease progression
- c) regressing variant of the course of the process

063. In a patient with pulmonary tuberculoma, identified in the phase of infiltration, decay and seeding (AFB+), who refused treatment, the most likely to be

- a) stationary variant of the course of the disease
- b) progressive course of the disease
- c) a regressive variant of the course of the disease

064. With prolonged remission of the process, tuberculomas predominate in caseous masses

- a) bacterial specimens of Mycobacterium tuberculosis
- b) transformed forms of Mycobacterium tuberculosis
- c) filtering specimens of mycobacterium tuberculosis
- d) all of the above

065. The appearance of clinical symptoms and changes in the tomogram and ESR in patients with pulmonary tuberculosis is usually associated

- a) only with the reproduction of Mycobacterium tuberculosis in the lesion
- b) with the reproduction of Mycobacterium tuberculosis and their exit from the lesion with the appearance of a perifocal inflammatory reaction
- c) with the reproduction of mycobacterium tuberculosis and the melting of caseous masses
- d) all of the above

066. With the appearance of a decay cavity in patients with pulmonary tuberculoma, bacterial excretion will

- a) massive and permanent
- b) not abundant and not constant
- c) to be absent

067. Tuberculoma is more often localized in the following segments of the lungs

- a) 1st, 2nd, 6th, 7th
- b) 3rd, 5th, 8th, 9th
- c) 4th, 5th, 7th, 9th
- d) 1st, 2nd, 6th, 10th

068. Tuberculomas within the segment are localized more often

- a) subpleural, cortical, in the mantle region
- b) in the central department
- c) in the middle section
- d) intersegmentally
- e) on the border of the 1st, 2nd, 6th, 10th segments

069. Tuberculoma in the phase of infiltration usually has a contour

- a) fuzzy
- b) bumpy
- c) clear

070. In tuberculoma during remission of the process, the contour is more often

- a) clear
- b) fuzzy
- c) bumpy

071. The main factors contributing to the emergence of tuberculosis and its unfavorable course when combined with other diseases are all of the following except

- a) metabolic disorders
- b) suppression of the immune system
- c) dysfunction of parenchymal organs
- d) damage to the hematopoietic organs

072. All of the following diseases increase the risk of developing tuberculosis, except

- a) diabetes
- b) gastroduodenal ulcer
- c) pneumoconiosis
- d) alcoholism
- e) hypertension

073. Morphological changes in tuberculosis that developed against the background of other diseases are characterized by all of the following, except

- a) the predominance of productive processes
- b) the predominance of exudative processes
- c) the prevalence of caseous changes
- d) predominance of alternative changes

074. The clinical course of tuberculosis in combination with other diseases is characterized by all of the following features, except

- a) not different from the usual
- b) tendencies to disease progression
- c) relatively slow regression during treatment

075. Tuberculosis in patients with chronic bronchitis in comparison with the average frequency is observed

- a) more often
- b) less often
- c) does not differ from the average frequency

076. Tuberculosis of the respiratory organs and its consequences contribute to the onset and adverse course of chronic bronchitis

- a) yes
- b) no

077. The course of tuberculosis in patients with chronic bronchitis

- a) not different from usual
- b) is characterized by a less favorable course
- c) can be characterized as unfavorable only in some patients

078. Прогрессирующее течение туберкулеза чаще наблюдается

- а) при геморрагическом и атрофическом бронхите
- б) при обструктивном и гнойном бронхите
- в) при фибринозном и гипертрофическом бронхите
- г) при катаральном бронхите

079. Patients with tuberculosis are relatively more likely to experience

- a) non-obstructive bronchitis
- b) obstructive bronchitis
- c) both equally common

080. Chemotherapy of tuberculosis in patients also suffering from chronic bronchitis

- a) does not differ

- b) should be longer with simultaneous treatment of chronic bronchitis
- c) there is a need for endotracheal infusion of anti-tuberculosis drugs
- d) should be combined with broad-spectrum antibiotic aerosol treatment

081. Medical indications for surgery in a patient with tuberculosis of the respiratory organs are determined

- a) the progression of the disease despite ongoing treatment or the occurrence of complications that threaten the life of the patient
- b) suspension in the involution of the process during drug treatment
- c) preservation by the end of the main course of chemotherapy of changes that threaten a significant risk of reactivation of the infection
- d) the presence of chronic foci of the infectious process, the sanitation of which is impossible with medications
- e) all answers are correct

082. Social indications for surgery are determined

- a) drunkenness and alcoholism of the patient
- b) indiscipline and refusal of treatment
- c) the need for various reasons to accelerate the medical and social rehabilitation of the patient

083. Vital indications for surgery are

- a) carrying out urgent surgical intervention in order to prevent the collapse of lung tissue in the lesion and bronchogenic dissemination
- b) emergency surgery to prevent pulmonary hemorrhage or spontaneous pneumothorax
- c) carrying out urgent surgical intervention to eliminate life-threatening manifestations or complications of the infectious process
- d) all answers are correct

084. The main indication for surgery for tuberculosis of the intrathoracic lymph nodes is

- a) infiltrative bronchoadenitis and its complications
- b) tumorous bronchoadenitis and its complications

085. With tumorous bronchoadenitis, indications for emergency surgery arise due to

- a) with the occurrence of lymph-hematogenous and bronchogenic dissemination
- b) with the complication of atelectasis of the lobe or lung
- c) with the threat of a breakthrough of caseous masses into the lumen of the bronchus or esophagus during the contact transition of the process to the wall of the bronchus or esophagus

086. With tumorous bronchoadenitis, ganglionectomy is indicated in the case of

- a) generalized nature of the lesion
- b) extensive deposition of calcium salts in the tissue of the affected lymph node
- c) insufficient effectiveness of combined chemotherapy with the preservation of the activity of a specific process or a high risk of its reactivation due to a significant amount of damage (lymph nodes more than 1.5-2 cm in diameter)
- d) all answers are correct

087. With a bronchopulmonary complication of tuberculosis of the intrathoracic lymph nodes, surgery is indicated if during general and local drug treatment

- a) pneumofibrosis or pneumocirrhosis is formed
- b) atelectasis is not allowed
- c) manifestations of active tuberculosis persist in the altered lung tissue or bronchial tree, and pulmonary hemorrhages occur or a secondary infection joins
- d) all answers are correct

088. Indications for surgery in patients with focal pulmonary tuberculosis are determined

- a) exacerbations and progressive course of the disease
- b) high risk of reactivation (large foci of encysted caseosis)
- c) the need to achieve full rehabilitation (profession, etc.) or reduce the time of treatment of the patient
- d) correct answers a) and b)
- e) correct answers b) and c)

089. With infiltrative tuberculosis in the decay phase, surgery is performed during the main course of chemotherapy
- in the event of complications that threaten the life of the patient or the progression of the underlying disease (hemorrhage, spontaneous pneumothorax)
 - with a tendency to transform the process into cavernous tuberculosis
 - while maintaining the decay cavity after 4-6 months of chemotherapy
 - correct answers a) and b)
090. In case of pulmonary tuberculoma, surgery is indicated
- in a stationary process, without signs of activity, if the size of the tuberculoma exceeds 1.5-2 cm
 - with a progressive or undulating course of the disease
 - during a process that proceeds with signs of activity (bacterioexcretion, decay, infiltration, seeding)
 - all answers are correct
091. Surgery is indicated for cavernous pulmonary tuberculosis
- if during the main course of chemotherapy there was no tendency to scarring of the cavity
 - if the destruction cavity has not healed by the end of the main course of chemotherapy
 - after elimination of signs of exacerbation of the disease with the help of medications and delimitation of the infectious process
 - correct a) and c)
092. With fibrous-cavernous pulmonary tuberculosis, surgical treatment can be performed only in a limited number of patients.
- due to various diseases associated with tuberculosis in this group of patients
 - due to the high prevalence of tuberculosis of the lungs
 - due to reduced reserves of the respiratory system
 - due to the large number of refusals from the proposed operation
 - all answers are correct
093. When deciding on an operation in a patient with cirrhotic tuberculosis, it is necessary
- clarify the extent of the lesion on the basis of X-ray tomography examination of the lungs
 - clarify the extent of the lesion using bronchoscopy and bronchography
 - clarify the extent of the lesion by angiography or scanning
 - to exclude, using the above methods of research, hypoplasia of the lung, complicated by tuberculosis infection
 - all answers are correct
094. Indications for surgery in cirrhotic tuberculosis are dictated mainly
- the risk of progression of tuberculosis
 - the risk of secondary infection, complications of aspergillosis, as well as pulmonary hemorrhages
 - the risk of respiratory failure
095. The methods of collapse therapy for pulmonary tuberculosis include
- therapeutic pneumothorax and pneumoperitoneum
 - extrapleural pneumothorax (pneumolysis)
 - thoracoplasty
 - all answers are correct
 - correct answers a) and b)
096. The methods of collapse surgery of pulmonary tuberculosis include
- therapeutic pneumothorax and pneumoperitoneum
 - extrapleural pneumothorax (pneumolysis)
 - thoracoplasty
 - correct answers a) and b)
 - correct answers b) and c)
097. Artificial pneumothorax (gas insufflation into the pleural cavity) is superimposed
- for medical purposes
 - for diagnostic purposes

- c) for preventive purposes
- d) all answers are correct
- e) correct answers a) and b)

098. Diagnostic pneumothorax is superimposed with the aim of

- a) identify pleural adhesions
- b) identify free pleural effusion
- c) clarify the localization of the pathological process (pulmonary or extrapulmonary)
- d) all answers are correct

099. As a result of the collapse (collapse) of the lung, the elastic tension of the lung tissue is removed, the hemodynamics in the lung tissue change, and lymph circulation occurs, which leads to

- a) to the convergence of the walls of the cavity
- b) to an increase in the exudative reaction with the cleansing of the cavity from caseous masses and resorption of necrosis
- c) to the predominant development of productive inflammation in the lesion
- d) correct answers a) and b)
- e) correct answers a) and c)

100. In the era of chemotherapy, indications for the imposition of therapeutic pneumothorax are determined by a combination of the following factors

- a) fresh limited destructive tuberculosis (focal, infiltrative, in the decay phase), localized in the upper lobe of the lung
- b) cavernous and limited fibro-cavernous tuberculosis, localized in the upper lobe of the lung
- c) poor tolerance to chemotherapy drugs or primary drug resistance to them
- d) correct answers a) and c)
- e) all answers are correct

№ test question	response template	№ test question	response template	№ test question	response template	№ test question	response template	№ test question	response template
1	c	21	b	41	e	61	b	81	e
2	a	22	a	42	e	62	c	82	c
3	d	23	d	43	a	63	b	83	c
4	e	24	e	44	e	64	b	84	b
5	c	25	b	45	b	65	b	85	c
6	e	26	b	46	b	66	b	86	c
7	b	27	a	47	d	67	d	87	c
8	c	28	c	48	b	68	a	88	d
9	a	29	e	49	e	69	a	89	d
10	c	30	e	50	d	70	a	90	d
11	c	31	c	51	b	71	d	91	c
12	c	32	d	52	c	72	e	92	e
13	b	33	c	53	c	73	a	93	e
14	b	34	c	54	d	74	a	94	b
15	b	35	e	55	a	75	a	95	a
16	a	36	e	56	a	76	a	96	e
17	a	37	b	57	c	77	b	97	e
18	a	38	d	58	c	78	b	98	c
19	a	39	d	59	d	79	b	99	e
20	b	40	d	60	b	80	b	100	d

4.2. Current control is carried out by the discipline teacher when conducting classes in the form of control work:

Option number 1

1. Tube frequency. pleurisy as an independent form of respiratory tuberculosis in children and adolescents.
2. Types of pleurisy according to pleural tomography.
3. Clinical manifestations of dry pleurisy.
4. Specify the possible options for the beginning of exudative tuba. pleurisy.
5. Changes in the hemogram with tube. pleurisy.
6. X-ray data for osteodiaphragmatic pleurisy.
7. What data of additional research methods allow to prove tub. etiology of pleurisy?
8. Differential diagnosis of tubes. pleurisy with para- and meta-pneumonic pleurisy.
9. What is the purpose of the Rivalta test?
10. Basic principles of treatment of a patient with tubers. pleurisy.

Option number 2

1. Tube frequency. pleurisy as a complication of primary respiratory tuberculosis in children and adolescents.
2. Types of tubes. pleurisy by the presence of exudate.
3. How to distinguish pain in dry pleurisy from pain in intercostal neuralgia?
4. Clinical symptoms in exudative tub. pleurisy.
5. Changes in the proteinogram with tube. pleurisy.
6. X-ray data for interlobar pleurisy.
7. What is pleuroscopy?
8. What data should be based on when making a diagnosis of tuba. pleurisy?
9. What is pyopneumothorax?
10. Etiotropic therapy of a patient with tubers. pleurisy.

Option number 3

1. Define tubes. pleurisy.
2. Types of tubes. pleurisy by the nature of the exudate.
3. Percussion data with dry pleurisy.
4. Examination data for exudative pleurisy.
5. The nature of tuberculin tests in tub. pleurisy.
6. X-ray data for mediastinal pleurisy.
7. What is the purpose of pleuroscopy in patients with pleurisy?
8. Differential diagnosis of tubes. pleurisy and tumor pleurisy.
9. In what cases is pleural empyema possible?
10. Pathogenetic therapy of a patient with tuba. pleurisy.

Option number 4

1. Types of tubes. pleurisy by pathogenetic mechanism.
2. What is free effusion?
3. Auscultation data for dry pleurisy.
4. Clinic with exudative tube. pleurisy.
5. Data from a biochemical study of blood serum in tub. pleurisy.
6. What is the purpose of a tomographic examination with tube. pleurisy?
7. What is a pleurobiopsy?
8. Differential diagnosis of tubes. pleurisy and rheumatic pleurisy.
9. What is pneumopleurisy?
10. Main directions of tuba therapy. pleurisy.

Option number 5

1. Pathogenesis of perifocal pleurisy.
2. Types of tubes. pleurisy along the course of the process.
3. Data of an objective examination with dry pleurisy.
4. Clinical symptoms and objective examination data in mediastinal pleurisy.
5. What is the difference between exudate and transudate?
6. How can you distinguish free effusion from encysted?
7. What is the purpose of pleurobiopsy?

8. Differential diagnosis of tubes. pleurisy and effusion in congestive heart failure.
9. Complications with tube. pleurisy.
10. Methodology for pleural punctures.

Option number 6

1. Pathogenesis of allergic pleurisy.
2. What is encysted pleurisy?
3. X-ray data for dry pleurisy.
4. Percussion data for exudative pleurisy.
5. What type of exudate is more common in tuberculous pleurisy?
6. For what purpose can laterography be used for exudative pleurisy.
7. What is the purpose of bronchoscopy in patients with tuba. pleurisy?
8. With effusions in which diseases differential diagnosis of tuba is performed. pleurisy?
9. Possible complications in pleural empyema.
10. Methods of administration of anti-tuberculosis drugs for tuberculosis. pleurisy.

Option number 7

1. Pathogenesis of metastatic pleurisy.
2. Define pleural empyema.
3. The nature of the pain syndrome in dry pleurisy.
4. Auscultation data for exudative pleurisy.
5. What is the cellular composition of exudate typical for tubes. pleurisy?
6. For what purpose is ultrasound of the pleural cavity used for exudative pleurisy.
7. How is the study of pleural effusion carried out (by what methods)?
8. With what diseases it is necessary to differentiate dry tub. pleurisy?
9. Tube outcomes. pleurisy.
10. Treatment of a patient with pleural empyema.

Option number 8

1. Ways of damage to the pleura in tub. pleurisy.
2. Pathological changes in the pleura with tube. pleurisy.
3. Percussion data with dry pleurisy.
4. Clinical picture with pleural empyema.
5. How to distinguish exudate from transudate?
6. X-ray data for osteodiaphragmatic pleurisy.
7. What is pleuroscopy?
8. What data should be based on when making a diagnosis of tuba. pleurisy?
9. What is pneumopleurisy?
10. Surgical treatment in tuba therapy. pleurisy (when surgical treatment is used, what types of operations).

Option number 9

1. At what age are tubes more common. pleurisy?
2. Pathological changes in the pleura with tube. pleurisy.
3. Clinical manifestations of dry pleurisy.
4. Examination data for exudative pleurisy.
5. The nature of tuberculin tests in tub. pleurisy.
6. X-ray data for interlobar pleurisy.
7. What data of additional research methods allow to prove tub. etiology of pleurisy?
8. Differential diagnosis of tubes. pleurisy with para- and meta-pneumonic pleurisy.
9. In what cases is pleural empyema possible?
10. The frequency of isolation of MBT from the exudate with tubes. pleurisy.

Option number 10

1. Tube frequency. pleurisy as an independent form of respiratory tuberculosis in children and adolescents.
2. Types of tubes. pleurisy according to the bacteriological characteristics of the exudate.
3. Pathological changes in the pleura with dry tube. pleurisy.
4. Specify the possible options for the beginning of exudative tuba. pleurisy.

5. Changes in the hemogram with tube. pleurisy.
6. X-ray data for mediastinal pleurisy.
7. Method of pleural puncture.
8. Differential diagnosis of tubes. pleurisy and tumor pleurisy.
9. Complications with tube. pleurisy.
10. What is the essence of the Rivalta test?

Option number 11

1. Tube frequency. pleurisy as a complication of primary respiratory tuberculosis in children and adolescents.

2. Types of pleurisy according to pleural tomography.
3. How to distinguish pain in dry pleurisy from pain in intercostal neuralgia?
4. Percussion data for exudative pleurisy.
5. Changes in the proteinogram with tube. pleurisy.
6. How can you distinguish free effusion from encysted?
7. What is the purpose of pleuroscopy in patients with pleurisy?
8. Differential diagnosis of tubes. pleurisy and rheumatic pleurisy.
9. Possible complications in pleural empyema.
10. Etiotropic therapy of a patient with tubers. pleurisy.

Option number 12

1. Define tubes. pleurisy.
2. Types of tubes. pleurisy by the presence of exudate.
3. Auscultation data for dry pleurisy.
4. Clinical symptoms in exudative tub. pleurisy.
5. Data from a biochemical study of blood serum in tub. pleurisy.
6. For what purpose can laterography be used for exudative pleurisy.
7. What is the purpose of pleurobiopsy?
8. Differential diagnosis of tubes. pleurisy and effusion in congestive heart failure.
9. Tube outcomes. pleurisy.
10. Main directions of tuba therapy. pleurisy.

Option number 13

1. Types of tubes. pleurisy by pathogenetic mechanism.
2. Pathological changes in the pleura with tube. pleurisy.
3. Data of an objective examination with dry pleurisy.
4. Clinical symptoms and objective examination data in mediastinal pleurisy.
5. What is the difference between exudate and transudate?
6. For what purpose is ultrasound of the pleural cavity used for exudative pleurisy.
7. What is the purpose of bronchoscopy in patients with tuba. pleurisy?
8. With effusions in which diseases differential diagnosis of tuba is performed. pleurisy?
9. What is pyopneumothorax?
10. Pathogenetic therapy of a patient with tuba. pleurisy.

Option number 14

1. Pathogenesis of perifocal pleurisy.
2. Types of tubes. pleurisy by the nature of the exudate.
3. X-ray data for dry pleurisy.
4. Clinic with exudative tube. pleurisy.
5. What type of exudate is more common in tuberculous pleurisy?
6. What is the purpose of a tomographic examination with tube. pleurisy?
7. How is the study of pleural effusion carried out (by what methods)?
8. With what diseases it is necessary to differentiate dry tub. pleurisy?
9. Complications with tube. pleurisy.
10. Methods of administration of anti-tuberculosis drugs for tuberculosis. pleurisy.

Option number 15

1. Pathogenesis of allergic pleurisy.
2. Types of tubes. pleurisy along the course of the process.

3. The nature of the pain syndrome in dry pleurisy.
4. Auscultation data for exudative pleurisy.
5. What is the cellular composition of exudate typical for tubes. pleurisy?
6. X-ray data for osteodiaphragmatic pleurisy.
7. What data of additional research methods allow to prove tub. etiology of pleurisy?
8. Differential diagnosis of tubes. pleurisy with para- and meta-pneumonic pleurisy.
9. Tube outcomes. pleurisy.
10. Surgical treatment in tuba therapy. pleurisy (when surgical treatment is used, what types of operations).

4.3 Current control is carried out by the discipline teacher when conducting classes in the form of creative task:

№1	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
C	-	<p>A 45-year-old man went to the doctor with complaints of fever up to 38.2°C, weakness, sweating, cough with mucopurulent sputum, shortness of breath with moderate physical exertion, weight loss of 5 kg per month. From the anamnesis it is known that the patient feels worse for a month, when he began to notice weakness, sweating, fever mainly in the evening, cough, shortness of breath appeared, and lost weight. He treated himself, took antipyretics. Smokes (about 25 years, 1 pack of cigarettes a day), alcohol abuse - denies. Drug use is denied. Epidemiological history: early tuberculosis was not sick. Tube. contact – a neighbor has pulmonary tuberculosis.</p> <p>On examination: the condition is satisfactory. Asthenic body type. Height 180 cm, weight 69 kg. The skin is clean, pale. The chest is of the correct form, the right half of the chest is slightly behind when breathing. Dullness of percussion sound on the right in the upper chest, where bronchovesicular breathing is heard, single moist rales. BH - 18 per minute. Heart sounds are muffled, rhythmic. Heart rate - 78 beats per minute, blood pressure - 110/70 mm Hg.</p> <p>In analyzes: Er - $4.1 \cdot 10^{12} / l$, Hb - 132 g / l, Le - $11.2 \cdot 10^9 / l$, p - 8%, s - 72%, l - 12%, m - 7%, e - 1%, ESR - 42 mm/h.</p> <p>Plain radiograph of the chest: in the upper lobe of the right lung, against the background of an enhanced pulmonary pattern, there are areas of infiltration, some of which are with decay cavities (the maximum of them is $2.5 \cdot 1.8$ cm), polymorphic foci. In the 4th, 5th, 6th segments on both sides there are foci of bronchogenic seeding.</p> <p>DST - papule 12 mm.</p> <p>In sputum: AFB 2+ was detected by microscopy. PCR detected MBT DNA; mutations associated with resistance to isoniazid and rifampicin were not identified.</p>
Q	1	Suggest the most likely diagnosis.
Q	2	Justify your diagnosis.
Q	3	Specify which additional method of instrumental research should be used for additional examination of the patient. Justify your choice.
Q	4	Specify which anti-tuberculosis drugs should be included in the patient's treatment regimen. Justify your choice.
Q	5	After 5 months of controlled regular anti-tuberculosis therapy, the patient noted the elimination of symptoms of intoxication and respiratory complaints, the normalization of laboratory parameters, and the cessation of bacterial excretion. An x-ray tomographic study shows resorption of foci of bronchogenic seeding, a partial decrease in infiltration and foci in the upper lobe of the right lung, but destructive changes persist (tuberculomas

		of medium size have formed with decay). What is your next treatment strategy? Justify your choice.
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№2	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
C	-	<p>In a 25-year-old man, changes in the lungs were revealed during prophylactic fluorography.</p> <p>From the anamnesis it is known that during the last month he noted rapid fatigue, weakness, a small cough, mostly dry, sometimes with a small amount of sputum. He did not go to the doctor, as he connected the deterioration of his state of health with a heavy work load and smoking. Smokes (about 10 years, 1 pack of cigarettes a day), alcohol abuse - denies. Drug use is denied. Previous FLG (a year ago) is the norm. Epidemiological history: early tuberculosis was not sick. Tube. contact is denied.</p> <p>On examination: the condition is satisfactory. Asthenic body type. Height 170 cm, weight 58 kg. The skin is clean, physiological color. The chest is of the correct form, both halves of the chest are evenly involved in the act of breathing. Percussion sound clear pulmonary. Breathing is vesicular, rales are not clearly heard. RR - 18 per minute. Heart sounds are rhythmic, clear. Heart rate - 74 beats per minute, blood pressure - 110/70 mm Hg. The abdomen is soft, painless on palpation in all departments. The liver and spleen are not enlarged. There is no dysuria. The symptom of tapping in the lumbar region is negative.</p> <p>In the analyses: Er - $4.2 \cdot 10^{12} / l$, Hb - 134 g / l, Le - $8.6 \cdot 10^9 / l$, p - 4%, s - 66%, l - 21%, m - 7%, e - 2%, ESR - 22 mm/h.</p> <p>CT of the chest: in the 2nd segment of the right lung, an infiltration focus of 24mm * 18mm * 15mm in size (height) with a small decay cavity in the center 8mm * 5mm * 4mm surrounded by hypodense foci is determined. In other segments of the right lung and in the left lung - without focal and infiltrative changes.</p> <p>Mantoux test with 2 TU - papule 15 mm. DST - papule 10 mm.</p> <p>In sputum: AFB were not detected by microscopy 3 times. PCR detected MBT DNA; mutations associated with resistance to isoniazid and rifampicin were not identified.</p>
Q	1	Evaluate the results of the Mantoux test with 2 TU and the diaskin test.
Q	2	Suggest the most likely diagnosis.
Q	3	
Q	4	Specify which anti-tuberculosis drugs should be included in the patient's
Q	5	<p>After 3 months of controlled regular anti-tuberculosis therapy with 4 drugs (isoniazid, rifampicin, pyrazinamide, ethambutol), the patient noted the elimination of symptoms of intoxication and respiratory complaints, normalization of laboratory parameters, cessation of bacterial excretion.</p> <p>When conducting a CT scan of the respiratory organs, there is a pronounced positive trend in the form of a decrease in the size of the infiltrate to the size of the focus (9mm * 8mm * 5mm), a decrease in the number and size of foci in the 2nd segment of the right lung; no decay cavities were found.</p>

№3	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
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C	-	<p>A 52-year-old man went to the doctor with complaints of fever up to 38.5°C, cough with mucopurulent sputum, shortness of breath, weakness, sweating, chest pain.</p> <p>From the anamnesis it is known that the patient fell ill acutely 2 days ago. After hypothermia, weakness, fever, sweating, coughing, shortness of breath with moderate physical exertion, pain in the right side of the chest with coughing and deep breathing appeared. He was treated on his own (taking antipyretics) without effect, went to the doctor. Chronic diseases: diabetes mellitus. Drug use, smoking, alcohol abuse - denies. Previous FLG (10 months ago) is normal. Epidemiological history: early tuberculosis was not sick. Tube. contact - a friend is sick with pulmonary tuberculosis.</p> <p>On examination: the condition is closer to satisfactory. Normosthenic body type. Height 178 cm, weight 82 kg. The skin is clean, pale. The chest is of the correct form, the right half of the chest is slightly behind when breathing. Dullness of percussion sound on the right in the upper chest, where weakened vesicular breathing is heard, moist rales. RR - 18 per minute. Heart sounds are muffled, rhythmic. Heart rate - 88 beats per minute, blood pressure - 110/70 mm Hg. The abdomen is soft, painless on palpation in all departments. The liver and spleen are not enlarged. There is no dysuria. The symptom of tapping in the lumbar region is negative.</p> <p>In the analyses: Er - $4.1 \cdot 10^{12} / l$, Hb - 130 g / l, Le - $13.2 \cdot 10^9 / l$, p - 6%, s - 72%, l - 14%, m - 7%, e - 1%, ESR - 41 mm/h.</p> <p>X-ray examination of the chest organs: in the upper field of the right lung (from the top to the anterior segment of the 3rd rib), areas of infiltration are determined. The left lung was without focal and infiltrative changes.</p>
Q	1	
Q	2	<p>The patient underwent a course of antipneumonic treatment with broad-spectrum antibiotics (ceftriaxone) for 2 weeks. As a result of treatment, there is an improvement in well-being: a decrease in cough, weakness, shortness of breath, however, an increase in body temperature to 37.5 ° C remains, mainly in the evening, shortness of breath during physical exertion.</p> <p>In analyzes: Er - $4.2 \cdot 10^{12} / l$, Hb - 132 g / l, Le - $10.8 \cdot 10^9 / l$, p - 5%, s - 70%, l - 15%, m - 9%, e - 1%, ESR - 40 mm/h.</p> <p>At X-ray control: in the upper field of the right lung (from the apex to the anterior segment of the 3rd rib), areas of infiltration remain, their structure has become inhomogeneous.</p> <p>Mantoux test with 2 TU - papule 14 mm. DST - papule 9 mm.</p> <p>In sputum: AFB were not detected by microscopy 3 times. PCR detected MBT DNA; mutations associated with resistance to isoniazid and rifampicin were not identified.</p> <p>CT scan of the chest: in the upper lobe of the right lung (segments 1 and 2) there is an area of infiltration with small decay cavities (the maximum of them is 10mm * 7mm * 5mm), there are numerous hypodense foci in the surrounding lung tissue. In 3, 6 segments of the right lung, 4, 5, 6 segments of the left lung, there are few foci of bronchogenic seeding.</p> <p>Evaluate the results of the Mantoux test with 2 TU and the diaskin test.</p>
Q	3	Suggest the most likely diagnosis.
Q	4	
Q	5	Specify which anti-tuberculosis drugs should be included in the patient's

№4	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
C	-	<p>A 49-year-old man, unemployed, went to the doctor with complaints of fever up to 39.5°C, cough with mucopurulent sputum, shortness of breath with little physical exertion, weakness, sweating, chest pain, weight loss. From the anamnesis it is known that the patient fell ill acutely 3 days ago. After hypothermia, there was a sharp weakness, chills, cough, pain in the left side of the chest when coughing and deep breathing, sweating, shortness of breath, body temperature increased to 39.5°C. He was treated on his own (taking antipyretics) without effect, his condition worsened, he consulted a doctor. He notes that he has recently lost weight. Smokes (about 30 years, 1 pack of cigarettes a day), abuses alcohol. Denies drug use. I have been at prison since 2000. to 2009 Previous FLG (4 years ago) - the norm. Epidemiological history: early tuberculosis was not sick. Tube. contact - a friend is sick with pulmonary tuberculosis.</p> <p>On examination: a state of moderate severity. Asthenic body type. Height 180 cm, weight 61 kg. The skin is clean, pale. The chest is of the correct form, the left half of the chest lags behind when breathing. Dullness of percussion sound on the left in the upper chest, in the interscapular space, where bronchial breathing is heard, moist rales. RR - 24 per minute. Heart sounds are muffled, rhythmic. Heart rate - 90 beats per minute, blood pressure - 100/65 mm Hg. The abdomen is soft, painless on palpation in all departments. Liver - + 1 cm from under the edge of the costal arch. The spleen is not enlarged. There is no dysuria. The symptom of tapping in the lumbar region is negative.</p> <p>In analyzes: Er - $3.7 \cdot 10^{12} / l$, Hb - 118 g / l, Le - $14.2 \cdot 10^9 / l$, p - 10%, s - 72%, l - 10%, m - 7%, e - 1%, ESR - 61 mm/h.</p> <p>An x-ray examination of the chest organs revealed a massive infiltration zone in the upper lobe and segment 6 of the left lung. The right lung was without focal and infiltrative changes. The root of the right lung is</p>
Q	1	
Q	2	<p>The patient underwent a course of antipneumonic treatment using broad-spectrum antibiotics (amoxiclav, cefotaxime) for 2 weeks. As a result of treatment, there is some improvement in well-being: a decrease in cough, weakness, shortness of breath, however, an increase in body temperature to 38.5 ° C persists, mainly in the evening, shortness of breath during exercise, sweating.</p> <p>In analyzes: Er - $3.8 \cdot 10^{12} / l$, Hb - 120 g / l, Le - $12.8 \cdot 10^9 / l$, p - 9%, s - 71%, l - 10%, m - 9%, e - 1%, ESR - 59 mm/h.</p> <p>At X-ray control: in the upper lobe and the 6th segment of the left lung, areas of infiltration remain, their structure has become inhomogeneous. Mantoux test with 2 TU - prick reaction. DST - prick reaction.</p> <p>In sputum: by microscopy AFB 2+. PCR detected MBT DNA; mutations associated with resistance to isoniazid and rifampicin were not identified. CT scan of the chest: in the upper lobe of the left lung (segments 1, 2 and 3), in segment 6 there are areas of infiltration with numerous small decay cavities (the maximum of them in segment 2 is 15mm * 10mm * 6mm); in the surrounding lung tissue, segments 4 and 5, numerous hypodense foci.</p>
Q	3	Suggest the most likely diagnosis.
Q	4	
Q	5	Specify which anti-tuberculosis drugs should be included in the patient's

№5	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
C	-	<p>In a 45-year-old man, changes in the lungs were revealed during prophylactic fluorography.</p> <p>No active complaints. From the anamnesis it is known that for a long time he notes a rare cough, mostly dry, sometimes with the release of a small amount of sputum. He did not go to the doctor, as he connects the presence of a cough with a long smoking experience. Smokes (more than 30 years, 1-2 packs of cigarettes a day), alcohol abuse - denies. Drug use is denied. Previous FLG (3 years ago) - the norm. My father died of lung cancer at the age of 56. Epidemiological history: early tuberculosis was not sick. Tube. contact - at the place of work 4 years ago.</p> <p>On examination: the condition is satisfactory. Asthenic body type. Height 176 cm, weight 70 kg. The skin is clean, physiological color. The chest is of the correct form, both halves of the chest are evenly involved in the act of breathing. Percussion sound clear pulmonary. Breathing is vesicular, rales are not clearly heard. RR - 18 per minute. Heart sounds are rhythmic, clear. Heart rate - 72 beats per minute, blood pressure - 120/70 mm Hg. The abdomen is soft, painless on palpation in all departments. The liver and spleen are not enlarged. There is no dysuria. The symptom of tapping in the lumbar region is negative.</p> <p>In the analyses: Er - $4.3 \cdot 10^{12} / l$, Hb - 136 g / l, Le - $7.2 \cdot 10^9 / l$, p - 2%, s - 66%, l - 23%, m - 7%, e - 2%, ESR - 16 mm/h.</p> <p>CT scan of the chest: in the 2nd segment of the right lung, a round-shaped formation with clear contours measuring 20mm * 15mm * 12mm (height) with single hyperdense inclusions is determined, which does not accumulate a contrast agent during bolus administration. In other segments of the right lung and in the left lung - without focal and infiltrative changes.</p> <p>Mantoux test with 2 TU - papule 9 mm. DST - papule 4 mm.</p> <p>In sputum: no abnormal cells were found. AFB by microscopy were not detected 3 times. PCR MBT DNA was not detected.</p> <p>Ultrasound of the abdominal organs and kidneys: focal pathology is not located.</p>
Q	1	Evaluate the results of the Mantoux test with 2 TU and the diaskin test.
Q	2	
Q	3	<p>The patient underwent FBS with a biopsy. Conclusion: catarrhal bronchitis B2,1 degree of intensity of inflammation. Cytological examination: isolated epithelioid cells were found. Histology: single granulomas with epithelioid cells and Pirogov-Langhans cells were found in the material, with caseous necrosis in the center.</p> <p>In smears from the catheter – by microscopy 7 AFB. BAL: MSCs-AFB were not found, BACTEC - isolated MBT culture sensitive to isoniazid, rifampicin, ethambutol, pyrazinamide, resistant to streptomycin.</p> <p>Suggest the most likely diagnosis.</p>
Q	4	
Q	5	Specify which anti-tuberculosis drugs should be included in the patient's
№6	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS

C	-	<p>A 37-year-old man, changes in the lungs were detected during prophylactic fluorography at work. He does not complain, but with active questioning of the patient, it was established that in the morning there is a "smoker's cough" with a small amount of mucoid macrota and that over the past six months the patient has lost 6-7 kg.</p> <p>From the anamnesis it is known that the patient has been smoking for about 18 years up to 1 pack of cigarettes (about 20 pieces) per day. Smoker index = 18. Alcohol abuse and drug use denies. Epidemiological history: previously had no tuberculosis. There was a contact (rare according to the words) with a colleague at work, a patient with pulmonary tuberculosis.</p> <p>On examination: the condition is satisfactory. Asthenic body type. Height 178 cm, weight 63 kg. The skin is clean, normal color. The chest of the correct form, actively participates in the act of breathing. Auscultatory - vesicular breathing, no wheezing. RR - 18 in minute. Heart sounds are clear rhythmic, heart rate is 78 in minute. BP - 115/75 mm Hg. The abdomen is soft, painless on palpation. The liver and spleen are not enlarged. There are no dysuric disorders. Symptoms of tingling in the lumbar region are negative.</p> <p>In analyses: Er - $5.2 \cdot 10^{12}/l$; Hb - 128g/l; Le - $9.0 \cdot 10^9 / l$; P - 6%; C - 62%; L - 24%; M - 5%; E - 3%; ESR - 19 mm / hour.</p> <p>When X-ray fluorographic examination of the chest (on R-gr and fluorography): on the right without visible changes, on the left in the apex of the lung and subclavian, multiple foci of low intensity are visible without clear contours.</p> <p>Diaskintest - 12 mm papule.</p> <p>Sputum microscopy did not reveal AFB.</p>
Q	1	Suggest the most likely diagnosis.
Q	2	
Q	3	Specify what additional methods of examination should be applied for
Q	4	Indicate which regimen, which anti-tuberculosis drugs should be included
Q	5	After 3 months of chemotherapy, the patient noted weight gain, resorption of foci in the apex of the left lung, the formation of an irregularly shaped small (d - 2 cm) focus with clear contours was noted on the left

№7	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
C	-	<p>A 54-year-old woman consulted a doctor with complaints of subfebrile temperature up to 37.5o, weakness, sweating, weight loss by 4 kg in two months.</p> <p>From the anamnesis it is known that the deterioration of health worries about 2-3 months. The patient has been suffering from type II diabetes mellitus for more than 10 years and is being treated with a diet and hypoglycemic pills. She notes that recently she was treated with a violation, often did not follow the diet and medication regimen.</p> <p>The use of alcohol and drugs is denied. Epidemiological history: previously had no tuberculosis. Tube contact denies.</p> <p>On examination: the condition is satisfactory. Nutrition increased. Height 164 cm. Weight - 90 kg. The skin is clean, pale. The chest of the correct form, actively participates in the act of breathing. Percussion - yany pulmonary sound. Auscultatory - broncho-vesicular breathing, single wet</p>

		<p>rales on the right. RR - 18 in minute. Heart sounds are muffled, rhythmic. Heart rate - 88 in minute. BP - 140/90 mm Hg. The abdomen is soft, painless on palpation. There are no dysuric disorders. The symptom of tingling of the lumbar region is negative.</p> <p>In analyzes: Er - $4.1 \cdot 10^{12}/l$; Hb - 124 g/l; Le - $8.4 \cdot 10^9 / l$; P - 9%; C - 61%; L - 25%; M - 3%; E - 2%; ESR - 17 mm / hour. Glucose on an empty stomach - 8.9 mmol / l.</p> <p>X-ray examination (classical chest X-ray): in the upper lobe of the right lung, a group of large and medium-sized foci of low intensity is determined without clear contours with enlightenment in the center.</p> <p>Diaskintest - papule 14 mm.</p> <p>In sputum, AFB 2+ was detected by microscopy, and DNA of Mycobacterium tuberculosis was detected by PCR.</p>
Q	1	Suggest the most likely diagnosis.
Q	2	
Q	3	Specify what additional methods of examination should be applied for
Q	4	With what diseases it is necessary to carry out differential diagnostics of the process that the patient has.
Q	5	Specify which anti-tuberculosis drugs should be included in the patient's

№8	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
C	-	<p>A 29-year-old man, pathology in the lungs was detected during prophylactic fluorography when applying for a job in a sausage shop. Makes no complaints. From the anamnesis it is known that 3 months ago he returned from prison. For about 7 years he suffered from stomach ulcers, now he is in remission (according to the words). Smoked for about 10 years, 1 pack of cigarettes a day. Alcohol abuse and drug use denies. Epidemiological history: in conclusion, he had contact with patients with pulmonary tuberculosis.</p> <p>On examination: the condition is satisfactory. Asthenic physique. Height 182 cm. Weight 70 kg. The skin is clean, normal color. The chest is asthenic, actively involved in breathing. Percussion pulmonary sound. Auscultatory breathing is vesicular, no wheezing. RR - 16 in minute. Heart sounds are clear, rhythmic. Heart rate - 76 in minute, BP 110/65 mm Hg. The abdomen is soft, painless on palpation. The liver and spleen are not enlarged. There are no dysuric disorders. The symptom of tapping in the lumbar region is negative.</p> <p>In analyzes: Er - $4.8 \cdot 10^{12}/l$; Hb - 135 g/l; Le - $9.2 \cdot 10^9 / l$; P - 4%; C - 64%; L - 27%; M - 4%; E - 1%; ESR - 15 mm / hour.</p> <p>X-ray tomographic examination of the chest (fluorogram and CT): on the right without visible changes, on the left - in the apex and S2 (second segment), small high-intensity foci with clear contours and medium-sized foci of low intensity without clear contours are visible.</p> <p>Diaskintest - papule 13 mm.</p> <p>Sputum microscopy did not reveal AFB.</p>
Q	1	Suggest the most likely diagnosis.
Q	2	
Q	3	Specify what additional methods of examination should be applied for
Q	4	Indicate which regimen and which anti-tuberculosis drugs should be

Q	5	After 60 doses of chemotherapy, the patient shows partial resorption of lesions in S1-2 on the left, however, some of the lesions remain and

№9	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
C	-	<p>A 27-year-old woman consulted a doctor complaining of pain in her left side, aggravated by bending over to the healthy side and breathing; at 39°C, chills and sweating.</p> <p>From the anamnesis it is known that the pains arose after hypothermia. Tuberculous contact with a relative. The patient notes that after 2-3 days the intensity of the pain gradually decreased, but shortness of breath appeared. According to the words, during prophylactic fluorography 10 years ago, calcifications were found in the tops. DOES NOT smoke, does not abuse alcohol.</p> <p>On examination: the condition is closer to moderate severity. Asthenic physique. Height 172 cm, weight 59 kg. The skin is clean, pale, the patient prefers to lie on the left side, since there is no pain. The left half of the chest falls sharply behind when breathing. RR - 30 in minute. On the left, the lower intercostal spaces are smoothed. Percussion is determined by the dullness of the lung sound on the left along the scapular and axillary lines. At the bottom left, voice trembling is not carried out. Auscultatory breathing on the left is sharply weakened. The borders of the heart are shifted to the right. Heart sounds are muffled, speeded up to 120 in '. BP 110/80 mm Hg The abdomen is soft, painless on palpation. The liver and spleen are not enlarged. There are no dysuric disorders. The symptom of tapping in the lumbar region is negative.</p> <p>In analyses: Er – 4.0*10¹²/l; Hb - 120 g/l; Le - 11.02 * 10⁹ / l; P - 12%; C - 59%; L - 11%; M - 12%; E - 6%; ESR - 40 mm/hour.</p> <p>The patient does not secrete sputum, there is practically no cough.</p> <p>ON the survey radiograph: shadows with lime deposits are determined in the tops of the lungs. In the lower parts of the chest on the left, there are homogeneous blackouts with an oblique upper border running at the level of the anterior segment of the IV rib.</p>
Q	1	Suggest the most likely diagnosis.
Q	2	
Q	3	Specify what basic additional methods of examination the patient needs to carry out.
Q	4	Specify which instrumental method of treatment should be prescribed and performed for the patient.
Q	5	Specify which anti-tuberculosis drugs and according to what regimen the

№10	-	READ THE INDIVIDUAL TASK AND GIVE DETAILED ANSWERS TO THE QUESTIONS
C	-	<p>A 45-year-old man went to the doctor with complaints of a sudden onset of cough with a large amount of sputum, chest pain on the right side, shortness of breath and sudden temperature rises up to 39-39.5°C.</p> <p>From the anamnesis it is known that he has been feeling worse for the last few months, has lost a lot of weight (by 6-7 kg). Sick of fibrous-cavernous tuberculosis of the right lung for five years, was treated</p>

		<p>intermittently, not carefully, refused the operation. He uses alcohol systematically, but is not registered with a narcologist. Denies taking drugs.</p> <p>On examination: the condition is closer to moderate severity. Nutrition is reduced. Height 176 cm, weight 52 kg. The skin is pale. The chest on the right lags behind when breathing, the lower intercostal spaces are smoothed, their palpation is painful. The lower pulmonary edge on the right is motionless. Percussion is determined by an intense dullness of the lung sound on the right. On the right in this area, voice trembling is not carried out. On auscultation, there is hard breathing on the left, various wet rales in the upper parts on the right, and no breathing in the lower parts. The abdomen is soft, painless on palpation. The liver and spleen are not enlarged. There are no dysuric disorders. The symptom of tapping in the lumbar region is negative.</p> <p>In analyzes: Er - $3.8 \cdot 10^{12}/l$; Hb - 110 g/l; Le - $12.0 \cdot 10^9 / l$; P - 15%; C - 63%; L - 10%; M - 12%; ESR - 47 mm / hour.</p> <p>The patient does not secrete sputum, there is practically no cough.</p> <p>During X-ray examination on the left on the survey radiograph there are foci of bronchogenic seeding, on the right in the lower sections there is a homogeneous darkening with a horizontal border. In the upper sections there are fibro-cirrhotic changes with decay cavities, foci and areas of infiltration.</p> <p>Diaskintest - papule 12 mm.</p> <p>In sputum MBT +2 scopically. Earlier in the crops, a MBT culture resistant to isoniazid and rifampicin was isolated.</p>
Q	1	Suggest the most likely diagnosis.
Q	2	
Q	3	Specify what basic additional methods of examination the patient needs to carry out.
Q	4	Indicate which regimen and which anti-tuberculosis drugs should be
Q	5	What treatment should be recommended?

4.4 Current control is carried out by the discipline teacher when conducting classes in the form of essay:

1. Morphology of the respiratory system. Classification of the structure of the acinus.
2. Molecular genetic methods for diagnosing tuberculosis.
3. Tuberculosis masks.
4. Heredity in tuberculosis.
5. Deontology in phthisiology, the rights of a patient with tuberculosis, his obligations in relation to medical workers and others. Bioethics is new in the development of ethics.
6. Social protection of medical workers of anti-tuberculosis institutions.
7. Classification of anti-tuberculosis drugs, pharmacokinetics, pharmacodynamics of isoniazid, rifampicin, streptomycin, pyrazinamide and ethambutol.
8. Classification of adverse reactions of anti-tuberculosis drugs. Adverse reactions from isoniazid, rifampicin, streptomycin. Emergency care for isoniazid poisoning.
9. Immunocorrection in the treatment of a patient with tuberculosis.
10. Sarcoidosis of the respiratory system.
11. The influence of social factors on the occurrence of tuberculosis in children.
12. Tuberculous meningitis.
13. Tuberculosis and HIV infection.
14. Hemoptysis, pulmonary bleeding.
15. Spontaneous pneumothorax, emergency care.

16. Tuberculosis and pregnancy.
17. Features of tuberculosis in the elderly and the elderly.
18. Pulmonary tuberculosis combined with other diseases.
19. Differential diagnosis of infiltrative pulmonary tuberculosis.
20. Tuberculosis of the upper respiratory tract, oral cavity, trachea, bronchi.
21. Atelectasis.
22. Differential diagnosis of exudative pleurisy.
23. Extrapulmonary tuberculosis.
24. Mycobacteriosis of the respiratory system.
25. Emergency care for anaphylactic shock.

4.5 Current control is carried out by the discipline teacher when conducting classes in the form of individual survey:

1. Basic principles of healthcare in the Russian Federation.
2. Tuberculosis in combination with bronchitis and pneumonia.
3. Standard and individual chemotherapy regimens as the main component of the treatment of patients with tuberculosis.
4. National project "Health".
5. Tuberculosis in combination with bronchial asthma, COPD and other allergic lung diseases.
6. Indications for an individual approach to the treatment of patients with tuberculosis and the exclusivity of its use. The presence of contraindications to taking certain chemotherapy drugs.
7. Principles and main directions of anti-tuberculosis work in the Russian Federation.
8. Tuberculosis and pneumoconiosis.
9. Mono and polyresistance of mycobacteria. The concepts of plural widespread and total drug resistance.
10. Legislation of the Russian Federation and departmental regulatory and methodological documentation in the field of anti-tuberculosis work.
11. Tuberculosis and lung cancer.
12. Criteria for cure and effectiveness of treatment of patients with tuberculosis. The concept of the quality of life of patients with tuberculosis as an indicator of the success of treatment.
13. Groups of dispensary observation (DO) and dispensary registration (DR) of patients with tuberculosis.
14. Tuberculosis and diseases of the circulatory system.
15. The role of CCMC in the appointment of an individual chemotherapy regimen.
16. Terms of treatment and observation of patients with tuberculosis. The procedure and criteria for transferring from one dispensary observation group to another and deregistration.
17. Tuberculosis and liver diseases.
18. Features of treatment of patients with tuberculosis with various forms drug resistance.
19. Types of anti-tuberculosis health facilities in the Russian Federation. Their approximate structure.
20. Tuberculosis and endocrine diseases.
21. Surgical and other invasive methods of treating patients tuberculosis.
22. Organization of the work of the TB dispensary.
23. Tuberculosis and mental illness.
24. Anti-tuberculosis drugs. Classification and nomenclature anti-tuberculosis drugs.
25. Characteristics of active and passive detection of patients with tuberculosis.
26. Tuberculosis and HIV/AIDS infection.
27. Combined anti-tuberculosis drugs. Advantages and disadvantages of the application.
28. Laboratory diagnosis of tuberculosis.

29. Tuberculosis in the elderly and senile.
30. Collapse therapy. Pneumothorax and pneumoperitoneum. Mechanisms of therapeutic effect. Indications and contraindications. Complications and effectiveness of application.
31. Radiation methods for the study of tuberculosis. radiation load. Regulatory regulation. Radiation safety standards (RSS).
32. Tuberculosis, pregnancy and motherhood.
33. Pathogenetic treatment of patients with tuberculosis. Concept and role pathogenetic therapy in the complex treatment of patients with tuberculosis.
34. Skin tests in the active detection of patients with tuberculosis. Comparative characteristics of the Mantoux test with 2TE and the test with recombinant tuberculosis allergen.
35. Biological sampling (sputum, blood, urine, spinal liquid, tissues) their transportation and storage.
36. Rehabilitation of patients with tuberculosis.
37. Immunological diagnostics in the active detection of tuberculosis.
38. Screening methods and laboratory techniques.
39. Tuberculosis vaccination as a factor in increasing the adaptive potential of the population through its immunization.
40. Types of sanatoriums, their structure. Indications and contraindications for sanatorium treatment. Terms of treatment.
41. Organization of early detection of patients with tuberculosis among the adult population through fluorographic preventive examinations.
42. Cultural methods for the study of tuberculosis. Studies on solid and liquid nutrient media. MBT drug resistance study.
43. Medical and social expertise in tuberculosis.
44. Risk groups for tuberculosis, depending on the profession, social status and the presence of other chronic diseases.
45. Molecular biological methods for the identification of mycobacteria tuberculosis and determination of their drug resistance. Biochips and polymerase chain reaction. Species and strain identification.
46. Detection of tuberculosis in children and adolescents.
47. Definition and classification of foci of tuberculosis infection.
48. Legal aspects of vaccination.
49. The concept of risk groups of children and adolescents for tuberculosis. Policy documents that define the procedure for working with children and adolescents from risk groups.
50. Basic principles of treatment and rehabilitation of patients with tuberculosis.
51. Immunoprophylaxis of tuberculosis - basic provisions (basics for the formation of acquired immunity, the main properties of anti-tuberculosis vaccines).

5. The content of the assessment tools of mid-term assessment

Mid-term assessment is carried out in the form of an exam.

5.1 The list of control tasks and other materials necessary for the assessment of knowledge, skills and work experience.

5.1.1. Questions for the discipline exam «Phthisiatry»

Question	Competence code (according to the WPD)
1. Antituberculosis drugs. Classification. Dose. Side effects.	UC-1, UC-6, GPC-1, GPC-5,

	GPC-7, PC-1, PC-3, PC-5, PC-6, PC-7
2. BCG – vaccine. Indications. Contraindications. Technique. Complications.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
3. Caseous pneumonia. Pathogenesis, diagnosis. Treatment.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
4. Cavernous tuberculosis. Fibrocavernous tuberculosis.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
5. Cirrhotic tuberculosis. Clinical picture, diagnosis. Treatment and outcomes.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
6. Classification of tuberculosis. Russian classification of tuberculosis. Making of clinical diagnosis.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
7. Epidemiology of tuberculosis. Main epidemic indexes of tuberculosis. State of the art in this field.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
8. Etiological factors of tuberculosis. Pathogenesis of tuberculosis. Allergy and immunity of tuberculosis.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
9. Focal pulmonary tuberculosis. Pathogenesis, clinical picture, diagnosis. Treatment and outcomes.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
10. General principles of TB treatment. Methods of treatment. Classification of antituberculosis drugs.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
11. Groups of individuals with a high risk for tuberculosis (medical and social). Frequency of their examination in Russia.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
12. History of Phthiology in the world and in Russia. State of the art in this field. Significance of social and medical factors.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
13. Infiltrative pulmonary tuberculosis. Pathogenesis, clinical picture, diagnosis. Differential diagnosis. Treatment and outcomes.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC

14. Methods of examination of TB patients. Collection of sputum. Kinds of bacteriologic and X-ray examination. Endoscopic methods for the diagnosing TB.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
15. Methods of examination of TB patients. History talking, physical and lab examination.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
16. Miliary lung tuberculosis. Pathogenesis, form of miliary tuberculosis, clinical picture, diagnosis. Differential diagnosis. Treatment and outcomes.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
17. Obligatory diagnostic minimum. The role of a general practioner.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
18. Primary tuberculosis. Primary TB complex. Diagnosis. Treatment and outcomes.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
19. Primary tuberculosis. TB bronchoadenitis. Diagnosis. Treatment and outcomes.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
20. Primary tuberculosis. TB intoxications. Diagnosis. Treatment.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
21. Significance of early TB patient's recognition. Methods of TB revealing.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
22. Skin tuberculin tests. Indications. Contraindications. Technique of Mantoux test.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
23. Subacute disseminated tuberculosis. Chronic disseminated tuberculosis. Pathogenesis, diagnosis. Differential diagnosis. Treatment.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
24. Surgery for pulmonary tuberculosis. Classification.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
25. TB pleurisy. Clinical picture, diagnosis. Differential diagnosis. Treatment and outcomes.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC
26. Tuberculoma of the lung. Pathogenesis, diagnosis. Differential diagnosis of the round shadows in the lungs. Treatment.	UC-1, UC-6, GPC-1, GPC-5, GPC-7, PC-1, PC-3, PC

6. Criteria for evaluating learning outcomes

For the exam:

Learning outcomes	Assessment of competence developed			
	unsatisfactory	satisfactory	good	excellent
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were bad mistakes	The minimum acceptable level of knowledge. A lot of light mistakes were made	The level of knowledge in the volume corresponding to the training program. A few light mistakes were made	The level of knowledge in the volume corresponding to the training program, without errors
Availability of skills	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes	Basic skills are demonstrated. Typical problems with light mistakes have been solved. All tasks have been completed, but not in full.	All basic skills are demonstrated. All the main tasks have been solved with light mistakes. All tasks have been completed, in full, but some of them with shortcomings	All the basic skills were demonstrated, all the main tasks were solved with some minor shortcomings, all the tasks were completed in full
Availability of skills (possession of experience)	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes	There is a minimal set of skills for solving standard tasks with some shortcomings	Basic skills in solving standard tasks with some shortcomings are demonstrated	Skills in solving non-standard tasks without mistakes and shortcomings are demonstrated
Characteristics of competence formation*	The competence is not fully formed. The available knowledge and skills are not enough to solve professional tasks. Repeated training is required	The formation of competence meets the minimum requirements. The available knowledge and abilities are generally sufficient to solve professional tasks, but additional practice is required for most practical tasks	The formation of competence generally meets the requirements, but there are shortcomings. The available knowledge, skills and motivation are generally sufficient to solve professional tasks, but additional practice is required for some	The formation of competence fully meets the requirements. The available knowledge, skills and motivation are fully sufficient to solve complex professional tasks

Learning outcomes	Assessment of competence developed			
	unsatisfactory	satisfactory	good	excellent
			professional tasks	
The level of competence formation	Low	Below average	Intermediate	High

For testing:

Mark "5" (Excellent) - points (100-90%)

Mark "4" (Good) - points (89-80%)

Mark "3" (Satisfactory) - points (79-70%)

Less than 70% – Unsatisfactory – Mark "2"

Developer:

Naumov A.G., teaching assistant at the department of phthysiology named after I. S. Nikolaev.

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