

Guidelines

## **TOPIC OF PRACTICAL LESSON No. 1:**

### **Management of patients with tuberculosis. Revealing and diagnosis of tuberculosis. Treatment drug regimens for patients with newly diagnosed tuberculosis and re-treatment.**

Actuality of theme. Tuberculosis is one of the most pressing issues today medical and social problems not only in Ukraine, but also in the whole world. By according to WHO, more than a third of the world's population is infected tuberculosis mycobacteria. Every year in the world, 7-10 million people, therefore WHO declared tuberculosis a global disease in 1993 danger Tuberculosis affects all organs and systems of the human body.

Therefore, doctors of various profiles need knowledge of etiology, pathogenesis and modern classification of tuberculosis.

The purpose of the lesson: to teach students to recognize clinical and radiological forms pulmonary tuberculosis and formulate a diagnosis in accordance with modern classification of tuberculosis.

The student should know:

- the main epidemiological indicators of tuberculosis;
- morphological structure and properties of the causative agent of tuberculosis;
- pathogenesis of tuberculosis;
- principles of construction of tuberculosis classification.

The student should be able to:

- analyze the main sections of the clinical classification of tuberculosis;
- to detect X-ray signs of clinical forms of pulmonary tuberculosis;
- formulate a clinical diagnosis according to the classification of tuberculosis.

Interdisciplinary integration.

Subject to know to be able to

Previous:

Anatomy Anatomy of respiratory organs.

Physiology Physiology of respiratory organs.

Pathological physiology

Pathophysiology of diseases respiratory organs.

Microbiology Morphological structure, properties, pathogenicity and

virulence of MBT, their methods detection in sputum and others pathological materials. Collect material for bacteriological research. Evaluate obtained results

Radiology Radiological features organs of the chest are normal at pathologies, X-ray symptoms and syndromes.

Reveal X-ray changes in the lungs The following: Internal medicine

Clinical manifestations and X-ray picture of respiratory diseases.

Conduct differential diagnosis lung diseases

Internally objective integration:

Clinical manifestations, X-ray picture of various forms tuberculosis

Differentiate clinical forms tuberculosis, determine the type localization, phase process, display it's in the diagnosis.

Content of the topic of the lesson:

The main epidemiological indicators (infection, morbidity, morbidity, mortality) and their dynamics over the past 10-15 years.

The causative agent of tuberculosis, morphological structure, properties. Variability MBT monoresistance, polyresistance, multiresistance, extended resistance, its clinical significance. Atypical mycobacteria.

Stability of MBT in the environment. Tuberculosis infection, ways of penetration and spread of MBT in human body. Local and general body reactions to tuberculosis an infection Natural resistance to tuberculosis and antituberculosis immunity. Humoral and cellular immunity, their mechanisms.

Clinical classification of tuberculosis. Principles of construction of classification

tuberculosis Sections of the classification reflecting the type of tuberculosis process, the main clinical forms, characteristics of the tuberculosis process and its complications, clinical and dispensary categories of patient records, effectiveness of treatment of tuberculosis patients, consequences of tuberculosis.

Formulation of the diagnosis of tuberculosis according to the classification.

Clinical classification of tuberculosis.

I. Type of tuberculosis process:

1. First diagnosed tuberculosis - VDTB (diagnosis date)
2. Relapse of tuberculosis - RTB (date of diagnosis)
3. Chronic tuberculosis - CTB (date of diagnosis)

## II. Clinical forms of tuberculosis:

(codes of MKH 10 revision)

A15 – A16 Pulmonary tuberculosis (TB) (with optional indication forms of damage):

A15 – A16 Primary tuberculosis complex

A19 Disseminated pulmonary tuberculosis

A15 – A16 Focal tuberculosis of the lungs

A15 – A16 Infiltrative pulmonary tuberculosis

A15 – A16 Caseous pneumonia

A15 – A16 Tuberculoma of the lungs

A15 - A16 Fibrous - cavernous tuberculosis of the lungs

A15 – A16 Cirrhotic pulmonary tuberculosis

A15 – A16 Tuberculosis of the lungs, combined with occupational dust lung diseases (coniotuberculosis)

A15 – A18 Extrapulmonary tuberculosis (PTB) (with indication of localization):

A15 – A16 Tuberculosis of bronchi, trachea, larynx and other upper respiratory tract ways

A15 – A16 Tuberculosis of intrathoracic lymph nodes

A15 – A16 Tuberculous pleurisy (including empyema)

A17 Tuberculosis of the nervous system and meninges

A18.0 Tuberculosis of bones and joints

A18.1 Tuberculosis of the genitourinary system

A18.2 Tuberculosis of peripheral lymph nodes

A18.3 Tuberculosis of intestines, peritoneum and mesenteric lymph nodes

A18.4 Tuberculosis of skin and subcutaneous tissue

A18.5 Tuberculosis approx

A18.6 Tuberculosis of the ear

A18.7 Tuberculosis of adrenal glands

A18.8 Tuberculosis of other specified organs and systems

A19 Miliary tuberculosis

## A18 Tuberculosis of unspecified localization

### III. Characteristics of the tubercular process

#### 1. Localization of the lesion

The localization of the lesion in the lungs is indicated by the number (name) of the segments, by the name of lung lobes; and in other organs and systems - by anatomical name lesions.

#### 2. Presence of destruction

(Destr+) available destruction

(Destr-) no destruction

Optionally, the phase of the tuberculosis process should be indicated:

- infiltration, decay (corresponds to Destr+), seeding;

- resorption, compaction, scarring, calcification (calcification).

(MBT+) confirmed by the results of a bacteriological examination

(code A15), in this case specify:

(M+) positive result of smear test for acid-fast

bacteria (KSB);

(K0) cultural research was not conducted;

(K-) negative result of cultural research;

(K+) a positive result of a culture study: in this case

specify:

(Resist0) resistance of MBT to first-line drugs was not investigated;

(Resist-) resistance of MBT to drugs of the first series has not been established;

(Resist+) (abbreviation of first-line antituberculosis drugs)

established the resistance of MBT to drugs of the 1st series (indicate in brackets a list of all drugs and the series to which resistance was established).

(ResistII0) resistance of MBT to drugs of the II series is not researched;

(Resist0) resistance of MBT to first-line drugs was not investigated;

(ResistII-) resistance of MBT to drugs of the II series has not been established;

(ResistII+) (abbreviation of second-line antituberculosis drugs)

established the resistance of MBT to second-line drugs (indicate in brackets a list of all drugs and the series to which resistance was established).

(MBT-) is not confirmed by the results of bacteriological research

(code A16), in this case specify:

(M0) smear was not examined;

(M-) negative result of smear test for acid-fast bacteria

(KSB);

(K0) cultural research was not conducted;

(K-) negative result of cultural research.

(HIST0) histological examination was not performed;

(GIST-) not confirmed by the results of histological examination

(code A16);

(GIST+) confirmed by histological examination

(code A15)

#### IV Complications of tuberculosis

It is necessary to list the complications and indicate their date in parentheses diagnosis

Complications of pulmonary tuberculosis (TB): hemoptysis, pulmonary bleeding, spontaneous pneumothorax, lung failure, chronic pulmonary heart, atelectasis, amyloidosis, etc.

Complications of extrapulmonary tuberculosis (PTB): bronchial stenosis, empyema, pleura, fistula (bronchial, thoracic), renal (adrenal) failure, infertility, adhesion, ankylosis, amyloidosis, etc.

#### V. Clinical and dispensary category of patient records

Category 1 (Kat1)

Category 2 (Kat2)

Category 3 (Kat3)

Category 4 (Kat4)

Category 5 (Cat5): group 5.1; group 5.2; group 5.3; group 5.4; group 5.5.

#### VI Effectiveness of treatment of tuberculosis patients

1. Treatment
2. Clinical and X-ray treatment
3. Treatment is complete
4. Failure of treatment (by smear; by culture; clinical – X-ray)
5. Died
6. Interrupted treatment
7. Transferred to where

## VII. Consequences of tuberculosis (B90)

Residual changes after cured pulmonary tuberculosis: fibrous, fibrotic - focal, bullous - dystrophic, calcifications in the lungs and lymph nodes, pleuropneumosclerosis, cirrhosis, consequences of surgery intervention (indicating the type and date of surgery), etc.

Residual changes after cured extrapulmonary tuberculosis  
 localization: cicatricial changes in various organs and their consequences, calcification, consequences of surgical intervention (indicating the type and date of surgery).

Lesson plan and organizational structure:

Preparatory stage (10-20% of working time): organization of classes, setting an educational goal, control of the initial level of knowledge.

The main stage (60-90% of working time): formation of professional norms and skills. Students independently and under the supervision of the teacher describe and interpret radiographs, formulate a clinical diagnosis according to classification of tuberculosis.

The final stage (10-20% of working time): level control and correction of professional abilities and skills, summarizing, homework.

Materials for methodological support of the lesson.

Test control.

1. What constituent compounds of MBT are the main carriers of antigenic properties?

A. Squirrels.

B. Carbohydrates.

S. Lipids.

D. Polysaccharides.

E. Mineral salts.

2. Which mycobacteria are called L - form?

A. Vaccine strain MBT.

B. Avisual forms of MBT.

S. Atypical MBT.

D. MBTs that have partially lost their cell wall.

E. Filter forms of MBT.

3. What is primary drug resistance of MBT?

A. Persistence of MBT in newly diagnosed patients who have not yet been treated antimycobacterial drugs.

B. Persistence of MBT in patients with the primary form of tuberculosis.

S. Stability of MBT in patients with chronic forms of tuberculosis.

D. Persistence of MBT in patients with relapses of tuberculosis.

E. Persistence of MBT in patients with small forms of pulmonary tuberculosis.

4. A 20-year-old patient underwent a fluorographic examination in the apex – in the posterior segment of the left lung, a small darkening area was found intensity with indistinct contours up to 1 cm in diameter?

What X-ray syndrome does the identified formation belong to?

A. Clearing syndrome.

B. Round shadow syndrome.

S. Focal shadow syndrome.

D. Syndrome of the changed pulmonary pattern.

E. Dissemination syndrome.

5. What is the most significant morphological feature that determines severity tuberculosis process?

A. Dystrophy.

B. Thoroughbreds.

C. Destruction.

D. Swelling.

E. Metaplasia.

6. What phases is characterized by the progression of tuberculosis?

A. Infiltration, decay, seeding.

B. Resorption, compaction, scarring.

C. Incrustation, mineralization, calcification.

D. Hyperemia, exudation, resorption.

E. Proliferation, metaplasia, degeneration.

7. What is the definition of primary tuberculosis?

A. Tuberculosis diagnosed for the first time.

B. Initial signs of tuberculosis.

S. Non-destructive tuberculosis.

D. Tuberculosis that occurred immediately after infection.

E. Tuberculosis with damage to only one organ or system.

8. The patient is 34 years old. According to clinical and radiological data, it is established diagnosis: VDTB (21.01.2009) of the upper lobe of the right lung (infiltrative), Destr+, MBT+M-K+Resist-GIST0, Cat1Cog1 (2009)

What phase does the abbreviation Destr+ correspond to?

Destr+, MBT+M-K+Resist-GIST0, Cat1Cog1 (2009)

What phase does the abbreviation Destr+ correspond to?

A. Infiltration.

V. Insemination.

S. Sealing.

D. Decay.

E. Absorption.

9. The patient is 40 years old. He is being treated in anti-tuberculosis

dispensary with a diagnosis: CTB (15.02.2000) of the upper lobes of both lungs

(fibrous - cavernous, infiltration and seeding phase), Destr+,

MBT+M+K+Resist-, GIST0, Kat4Kog1 (2000). X-ray in the patient



decay cavities are determined (in the upper lobes of the lungs), multiple fresh foci in both lungs, fibrous deformation of the pulmonary pattern.

What phase of the tuberculosis process corresponds to the presence of multiple fresh ones hearth?

- A. Late phases.
- B. Compaction phases.
- S. Phases of calcification.
- D. Phases of insemination.
- E. Phases of infiltration.

10. A 53-year-old patient underwent X-ray examination in the upper part lobe of the left lung is determined by a ring-shaped shadow with a diameter of 5 cm with thick walls, around fibrous heaviness and foci. In the sputum room detected MBT.

What form of pulmonary tuberculosis is most likely?

- A. Cirrhotic.
- B. Infiltrative.
- S. Disseminated.
- D. Tuberculoma.
- E. Fibrous - cavernous.

General approaches to the diagnosis of tuberculosis. Special methods detection and diagnosis of tuberculosis (microbiological diagnosis, x-ray diagnostics, tuberculin diagnostics).

Actuality of theme. In recent years, tuberculosis in Ukraine has become a threatening medical-social and national-economic problem, which constitutes a national danger. Doctors of various profiles need knowledge to recognize this disease to prevent its spread tuberculosis and the unification of approaches to providing phthisiopulmonology help to the sick

The purpose of the lesson: to teach students the method of clinical examination of patients on pulmonary tuberculosis and the correct interpretation of the obtained data; elements of deontology when communicating with patients; develop skills

recognition of clinical and radiological forms of pulmonary tuberculosis in compliance with modern classification. Familiarize students with x-ray, laboratory methods of diagnosis of tuberculosis lungs, to teach students tuberculin diagnostics, staging technique tuberculin tests, evaluation of their results, help to master skills of functional research of the external respiratory system.

The student should know:

- local and general symptoms of pulmonary tuberculosis;
- X-ray image of chest organs in different projections in norms;
- concepts of "focus", "infiltrate", "cavity", "fibrosis", etc radiological signs,
- clinical forms of pulmonary tuberculosis in X-ray imaging;
- methods of bacteriological research;
- types of tuberculin and their features;
- indications and contraindications for Mantoux tuberculin tests and Koch;
- criteria of negative, positive and hypersensitive tuberculin reaction;
- tuberculin curve, definition, characteristics;
- post-vaccination and post-infection reaction to tuberculin;
- indicators of peripheral blood in the norm and in inflammatory processes;
- spirometry, its indicators and assessment.

The student should be able to:

- collect the patient's complaints, anamnesis of illness and life;
- identify persons with an increased risk of tuberculosis;
- examine the patient and identify the main symptoms of the disease;
- palpation, percussion and auscultation of chest organs, interpret the obtained results;
- identify and explain pathological changes on radiographs;
- to study a patient's sputum smear under a microscope;
- evaluate the results of sputum culture;
- conduct and evaluate the Mantoux tuberculin test based on its results to identify persons who need additional examination on tuberculosis;

- to evaluate the indicators of the general analysis of peripheral blood in different cases

forms and phases of the tuberculosis process;

- evaluate the results of spirometry;

- justify the clinical diagnosis according to the classification.

Interdisciplinary integration.

Content of the topic of the lesson:

Methods of clinical examination of the patient.

Questioning. The variety of manifestations of pulmonary tuberculosis in depending on the stage and spread of the process. Clinical symptoms of the disease:

a) associated with intoxication syndrome (elevated body temperature, weakness, reduced performance, sweating, loss of appetite, loss

body weight, sleep disturbances, irritability); b) local manifestations of the disease, associated with lung damage (cough, expectoration, hemoptysis, chest pain, shortness of breath).

Anamnesis. The onset of the disease. Past illnesses

("influenza", recurrent pneumonia, accompanying diseases). Value

contact with individuals who allocate MBT. Working and living conditions of the patient.

Abuse of smoking, alcohol, drug addiction. Results and date

preliminary fluorographic examination (in adults), information about BCG vaccination and results of tuberculin diagnostics (in children).

Objective examination data. Review. General condition. Provisions in

the bed Body temperature. Consciousness, skin, visible mucous membranes.

Subcutaneous adipose tissue. Swelling Peripheral lymph nodes.

Head, neck, thyroid condition. Chest: shape,

symmetry, uniformity of participation in the act of breathing. Palpation data (painfulness, voice tremor). Topographic and comparative data

chest percussion. Auscultation: strength and nature of breathing, wheezing, crepitation, their localization, bronchophonia. Cardiovascular system.

Apex thrust. Epigastric pulsation. The limits of the heart. Data auscultation JSC Pulse.

Diseases of other organs, which are accompanied by the corresponding ones clinical symptoms.

X-ray examination. Methods of X-ray examination patients with respiratory tuberculosis. X-ray -, tomo -, fluorography, radioscopy. X-ray image of normal chest organs cells in different projections. X-ray image of partial and segmental structure of the lungs. Clinical forms of pulmonary tuberculosis in X-ray image. Analysis of radiographs, tomograms, fluorogram Computed tomography, bronchography, indications for their use, diagnostic value.

Tuberculin diagnostics.. Mantoux tuberculin test with 2 TO PPD - L. Staging technique. Application of the Mantoux test for determination primary infection, early detection of tuberculosis. Selection of persons, that are subject to revaccination. Using the Mantoux test for detection persons with an increased risk of tuberculosis and those who need examination and supervision of a phthisiologist. Infectious and post-vaccinal sensitivity to tuberculin, differential diagnosis.

Use of tuberculin samples for differential diagnosis tuberculosis with other diseases. Koch's test.

Microbiological research. Methods of detection of mycobacteria tuberculosis in sputum and other pathological materials, their significance results to confirm tuberculosis and differential diagnosis.

Indications for microbiological examination of sputum and urine in persons with the risk of tuberculosis.

Variability of mycobacteria and their significance for the clinic and treatment tactics.

Determination of sensitivity of MBT to antituberculosis drugs.

Tracheobronchoscopy. Bronchoscope research methods. Indications for bronchoscopy for tuberculosis and other respiratory diseases.

Histological and cytological examination of biopsies. Medicinal bronchoscopy.

Blood and urine tests. Diagnostic value of element changes peripheral blood and ESR in different forms and phases of tuberculosis process

Study of urine analysis of patients with tuberculosis of the lungs, urinary tract and reproductive system, as well as patients with tuberculosis, complicated by amyloid nephrosis

Lesson plan and organizational structure:

Preparatory stage (10-20% of working time): organization of classes, setting educational goals, control of the initial level of knowledge.

The main stage (60-90% of working time): formation of professional skills and skills. Students independently and under the supervision of the teacher carry out curation of the patient, collecting anamnesis, mastering objective skills examination, describe and interpret radiographs, substantiate clinical diagnosis.

The final stage (10-20% of working time): level control and correction professional abilities and skills, summarizing, homework.

Materials for methodological support of the lesson.

Test control.

1. What data are not taken into account when conducting differential diagnosis between infectious and post-vaccination reactions to tuberculin?

- A. Contact with tuberculosis patients.
- B. The intensity of the reaction to the Mantoux test in previous years.
- C. The presence of a post-vaccination scar.
- D. Time of BCG vaccination.
- E. Presence of pneumonia in the anamnesis.

2. In a two-year-old child, the reaction to the Mantoux test with 2 TO PPD-L - infiltrate with a diameter of 7 mm, at three years - 3 mm. Post-vaccination scar 4 mm in size. What is the nature of the reaction to tuberculin observed in

child?

- A. Infectious allergy.
- B. "Virage" of the tuberculin reaction.
- S. The child is sick with tuberculosis.
- D. Post-vaccine allergy.
- E. Mantoux reaction is positive.

3. A 35-year-old patient is being treated in an anti-tuberculosis unit dispensary for infiltrative tuberculosis of the left upper lobe lungs (lobites) in the phase of decay. No changes during physical examination discovered How the patient should breathe correctly to increase informativeness of the auscultation method?

- A. Breathe often.
- B. Breathe deeply.
- C. To cough hard.
- D. Cough lightly and take a deep breath.
- E. Breathe with an open mouth.

4. In a patient with tuberculosis, the lungs are heard under the left shoulder blade mid-vesicular rales. What do these changes indicate?

- A. Focal changes in lung tissue.
- V. Bronchitis.
- S. The presence of decay cavities.
- D. Spontaneous pneumothorax.
- E. Atelectasis

5. In a 20-year-old patient, during a fluorographic examination, an area of darkening was found in the apical-posterior segment of the left lung of low intensity with indistinct contours up to 1 cm in diameter. To which X-ray syndrome belongs to the detected formation?

- A. Clearing syndrome.
- B. Round shadow syndrome.
- S. Focal shadow syndrome.

D. Syndrome of the changed pulmonary pattern.

E. Dissemination syndrome.

6. A 43-year-old patient. He is undergoing a course of antimycobacterial therapy due to CTB (12.12.1998) of the upper lobe of the left lung (fibrous cavernous, infiltration and in-semination phase), Destr+, MBT+M+K+ResistO, HISTO, Kat4 Kog4 (2004). What research is needed first conduct to the patient to prescribe the optimal combination chemotherapy drugs?

A. Determine the type of MBT.

B. Determine the presence of secondary flora.

S. To determine the sensitivity of MBT to antimycobacterial drugs.

D. To determine the massiveness of bacterial excretion.

E. To determine the virulence of MBT.

7. A 32-year-old patient was diagnosed with pulmonary tuberculosis (February 15, 2007)

(disseminated, infiltration and decay phase), Destr+ MBT+M+K+ResistO,

HISTO, Kat1 Kog1 (2007). What method allows you to determine sensitivity mycobacteria to antituberculosis drugs?

A. Bacterioscopic.

B. Bacteriological.

S. PCR.

D. ELISA.

E. Biological.

8. What is the vital capacity of the lungs in healthy people?

A. 1000 - 3000 ml.

B. 1500 - 3500 ml.

S. 3500 - 5000 ml.

D. 6000 - 8000 ml.

E. 500 - 800 ml.

9. The child is 3 years old. Vaccinated in the maternity hospital. There is on the left shoulder

post-vaccination scar with a diameter of 7 mm. At the age of 1, Mantoux test with 2 TO

PPD-L was 10 mm, at 2 years - 8 mm, at 3 years - 14 mm. What about

what is most likely evidenced by such dynamics of the tuberculin test?

A. A child's disease of the secondary form of pulmonary tuberculosis.

B. Presence of post-vaccination immunity.

C. Presence of infectious immunity.

D. The presence of a hyperergic reaction to tuberculin.

E. Formation of negative energy.

10. The patient is 45 years old. He is being treated in anti-tuberculosis dispensary regarding the recurrence of S2 tuberculosis of the left lung (infiltrative tuberculosis). MBT is found in the sputum of the patient, although Destructive changes are not detected on the X-ray examination. Which the x-ray method of research should be performed on the patient for detection sources of bacterial excretion?

A. Tomography.

V. Bronchography.

C. Aiming radiography.

D. Roentgenoscopy.

E. Lateral X-ray.

General principles of treatment of tuberculosis patients.

Antimycobacterial drugs. Standard treatment regimens for patients for tuberculosis

Actuality of theme. Implementation of etiotropic drugs in medical practice

antituberculosis drugs changed the prognosis of patients with tuberculosis,

led to a significant decrease in mortality, made it possible to cure

severe forms of tuberculosis. Cessation of bacterial excretion in the majority

patients reduces their epidemiological danger and becomes an important factor



prevention of new cases of tuberculosis infection and disease.

The purpose of the lesson: to teach students how to treat tuberculosis patients.

The student should know:

- classification of anti-tuberculosis drugs, their properties, dosage, side effects;
- general principles of treatment of tuberculosis patients;
- modern schemes of etiotropic chemotherapy of tuberculosis;
- criteria for clinical treatment of tuberculosis patients.

The student should be able to:

- prescribe treatment for different categories of tuberculosis patients;
- diagnose side effects of anti-tuberculosis drugs and determine their prevention measures

Interdisciplinary integration.

Subject to know to be able to

Previous:

Anatomy Anatomy of respiratory organs.

Physiology Physiology of respiratory organs.

Pathological physiology

Pathophysiology of diseases respiratory organs.

Microbiology Morphological structure, properties, pathogenicity and virulence of MBT, their methods detection in sputum and others pathological materials, methods determination of MBT resistance to antituberculosis drugs

Collect material for bacteriological research. Evaluate obtained results

Content of the topic of the lesson:

General principles of antimycobacterial therapy: complexity, combination, controllability, two-phase treatment, duration and continuity, stage sequence, individual approach, free of charge.

Antimycobacterial (antituberculosis) drugs: classification, mechanisms of their action, properties (bacteriostatic or bactericidal activity, the ability to penetrate cell membranes), dosage, routes and multiplicity

introduction into the patient's body. Adverse reactions to antimycobacterials drugs, their prevention and elimination methods.

Lesson plan and organizational structure:

Preparatory stage (10-20% of working time): organization of classes, setting educational goals, control of the initial level of knowledge.

The main stage (60-90% of working time): formation of professional skills and skills Students independently and under the supervision of the teacher carry out curation of patients: collecting anamnesis, mastering objective skills examination, interpret X-ray and laboratory data, substantiate clinical diagnosis, prescribe complex antimycobacterial, pathogenetic and symptomatic therapy.

The final stage (10-20% of working time): level control and correction professional abilities and skills, summarizing, homework.

Materials for methodological support of the lesson.

Test control.

1. What is the optimal duration of the main antimycobacterial course therapy of a patient with VDTB (23.05.2008) of the upper lobe of the left lung (focal, infiltration phase), Destr-MBT-M-K-, Hist0, Cat3 Kog2(2008) ?

- A. 2 months
- B. 4 months
- S. 6 months
- D. 8 months
- E. 10 months

2. What is the optimal scheme of antimycobacterial therapy in the initial phase of a patient with VDTB (3.07.2008) of the upper lobe of the left lung (tuberculoma), Destr-, MBT-M-K-, Hist0, Cat?

- A. Isoniazid + rifampicin + streptomycin + pyrazinamide
- B. Isoniazid + rifampicin + pyrazinamide + protionamide
- S. Isoniazid + streptomycin + pyrazinamide + ethionamide

D. Rifampicin + streptomycin + ethambutol + ofloxacin

E. Pyrazinamide+kanamycin+ethambutol+isoniazid

3. What drug is prescribed to prevent neurotoxic effects

isoniazid?

A. Vitamin C

B. Vitamin A

C. Vitamin B6

D. Vitamin E

E. Diazolin

4. In which form and complication of pulmonary tuberculosis is it most appropriate prescribe prednisolone?

A. Infiltrative pulmonary tuberculosis complicated by exudative pleurisy

B. Chronic disseminated pulmonary tuberculosis, chronic pulmonary heart

S. Fibrous-cavernous tuberculosis of the lungs, amyloidosis of internal organs

D. Tuberculoma of the upper lobe of the right lung

E. Cirrhotic tuberculosis of the lungs

5. A 50-year-old patient was being treated for tuberculosis

inpatients Clinical diagnosis: VDTB (13.04.2008) of the upper lobe of the left lung (caseous pneumonia), Destr+, MBT+M+K+Resist+(H) Hist0, Cat1Kog2(2008).

Before receiving the results of MBT sensitivity, the patient underwent the following treatment: Isoniazid+Rifampicin+Streptomycin+Pyrazinamide. Which

Is it better to prescribe the drug instead of isoniazid?

A. Rifabutyn

V. Ftivazid

S. Ofloxacin

D. PASK

E. Kanamitsy

6. Which of the drugs can cause dysfunction n. opticus?

- A. Isoniazid
- V. Ethambutol
- S. Pyrazinamide
- D. Rifampicin
- E. Streptomycin

7. What combination of drugs should be prescribed to the patient with the revealed reactivation of tuberculosis before the results of the study sensitivity of MBT to anti-tuberculosis drugs?

- A. Isoniazid, streptomycin, kanamycin, ethambutol, ethionamide
- B. Isoniazid, rifampicin, ethambutol, pyrazinamide, streptomycin
- C. Isoniazid, rifampicin, streptomycin, pyrazinamide, amoxicillin
- D. Isoniazid, rifampicin, ethambutol, PASK, ethionamide
- E. Rifampicin, streptomycin, kanamycin, florimycin, biomycin

8. What disease significantly worsens the tolerability of pyrazinamide?

- A. Chronic bronchitis
- B. Chronic hepatitis
- C. Chronic colitis
- D. Chronic gastritis
- E. Ischemic heart disease

9. The patient is 42 years old. He is undergoing inpatient treatment with a diagnosis of:

VDTB (1.01.2008) of the upper lobe of the left lung (infiltrative, disintegration phase and sowing), Destr+, MBT+M+K+Resist-, Hist0, Kat1Kog1(2008). Assigned: Isoniazid 0.3 + rifampicin 0.6 + pyrazinamide 2.0 + streptomycin 1.0. By 2.5 months of treatment is determined on a review X-ray

resorption of a significant number of foci and infiltration. Cavity decay remains, but its size has decreased. Bacterial excretion continues. What will be the further tactics of managing the patient?

- A. Apply operative intervention
- B. Continue treatment according to the scheme: Isoniazid 0.3 + rifampicin 0.6 + pyrazinamide 2.0 + streptomycin 1.0
- C. Continue treatment according to the scheme: Isoniazid 0.3 + rifampicin 0.6 + pyrazinamide 2.0 + ethambutol 1.2
- D. Continue treatment according to the scheme: Isoniazid 0.3 + rifampicin 0.6 + pyrazinamide 2.0
- E. Continue treatment according to the scheme: Isoniazid 0.3 + rifampicin 0.6 + streptomycin 1.0.

10. What criterion determines the purpose of a certain scheme antituberculosis therapy for a patient with chronic pulmonary tuberculosis?

- A. Duration of therapy
- B. The results of the study of the function of external breathing
- C. The results of the sensitivity study of the causative agent
- D. Presence or absence of bacterial excretion
- E. Presence or absence of bronchial lesions