

13. Surgical pathology of the lungs and pleura. Variants of atypical course, possible complications. Principles of diagnosis and treatment

1. Survey radiograph of chest of a 62 year old smoker who often suffers from "pneumonias" showed a triangle shadow in the right lung, its vertex is pointing towards the lung root. It also showed deviation of heart and mediastinum shadows towards the lesion. What is the most probable diagnosis?

A. Central cancer of lung

- B. Lung cyst
- C. Lung abscess
- D. Peripheral cancer of lung
- E. Atelectasis

2. On the 4th day after recovering from a cold a patient was hospitalized with complaints of solitary spittings of mucoid sputum. On the 2nd day there was a single discharge of about 250 ml of purulent blood-streaked sputum. Objectively: the patients condition is moderately severe. Respiratory rate - 28-30/min, Ps- 96 bpm, AP- 110/70 mm Hg. Respiration above the left lung is vesicular, weak above the right lung. There are moist rales of different types above the lower lobe and amphoric breath near the angle of scapula. What is the most likely diagnosis?

A. Acute pulmonary abscess

- B. Acute focal pneumonia
- C. Pyopneumothorax
- D. Pleural empyema
- E. Exudative pleuritic

3. A child undergoes in-patient treatment for acute staphylococcal destruction of the right lung. Unexpectedly he developed acute chest pain on the right, dyspnea, cyanosis. The right side of chest lags behind in the respiratory act. Percussion reveals dullness in the lower parts on the right, bantbox resonance in the upper parts. Borders of the relative cardiac dullness are shifted to the left. What complication has most likely developed?

A. Right-sided pyopneumothorax

- B. Spontaneous pneumothorax
- C. Pleural empyema
- D. Exudative pleuritis
- E. Right lung abscess

4. X-ray picture of chest shows a density and an abrupt decrease in the upper lobe of the right lung. The middle and lower lobe of the right lung exhibit significant pneumatization. The right pulmonary hilum comes up to the dense lobe. In the upper and middle parts of the left pulmonary field there are multiple focal shadows. In the basal region of the left pulmonary field there are clear outlines of

two annular shadows with quite thick and irregular walls. What disease is this X-ray pattern typical for?

A. Fibro-cavernous pulmonary tuberculosis

- B. Pancoast tumour
- C. Abscessing pneumonia
- D. Atelectasis of the right upper lobe
- E. Peripheral cancer

5. A 47-year-old patient complains about cough with purulent sputum, pain in the lower part of the left chest, periodical body temperature rise. She has been suffering from these presentations for about 10 years. Objectively: "drumstick" distal phalanges. What examination would be the most informative for making a diagnosis?

A. Bronchography

- B. Pleural puncture
- C. Bacteriological analysis of sputum
- D. Bronchoscopy
- E. Survey radiograph of lungs

6. A 45-year-old male patient with acute abscess of the left lung has suddenly developed acute chest pain and dyspnea while coughing, tachycardia has increased. The control Ro-gram shows left lung collapse, the air in the left pleural cavity and a horizontal fluid level. What is the mechanism of this complication?

A. Abscess burst into the pleural cavity

- B. Bullae rupture of the left lung
- C. Atelectasis of the left lung
- D. Acute cardiovascular insufficiency
- E. Inflammation spread to the visceral pleura

7. A patient with bilateral hydrothorax has repeatedly undergone pleural puncture on both sides. After a regular puncture the patients condition has become worse: he presents with fever, chest pain. The next day, the attending physician performing pleural puncture revealed some pus on the right. What is the mechanism of acute right-sided empyema development?

A. Contact-and-aspiration

- B. Hematogenous
- C. Lymphogenous
- D. Implantation
- E. Aerial

8. A 38-year-old patient has suddenly developed pain in the left side of his chest, suffocation. Objectively: moderately grave condition, Ps- 100/min, AP- 90/60 mm Hg, breath sounds on the left cannot be auscultated. Chest radiography shows the collapse of the left lung up to 1/2. What kind of treatment should be administered?

A. Passive thoracostomy

- B. Rest, resolution therapy
- C. Operative therapy
- D. Active thoracostomy

E. Pleural puncture

9. A 67 y.o. patient complains of dyspnea, breast pain, common weakness. He has been ill for 5 months. Objectively: to- 37,3°C, Ps- 96/min. Vocal tremor over the right lung cannot be determined, percussion sound is dull, breathing cannot be auscultated. In sputum: blood diffusively mixed with mucus. What is the most probable diagnosis?

- A. **Lung cancer**
- B. Bronchoectatic disease
- C. Macrofocal pneumonia
- D. Focal pulmonary tuberculosis
- E. Exudative pleuritis

10. A 52 year old patient complains about pain in the right part of her chest, dyspnea, cough with a lot of foul-smelling albuminoid sputum in form of "meat slops". Objectively: the patients condition is grave, cyanosis is present, breathing rate is 31/min, percussion sound above the right lung is shortened, auscultation revealed different rales. What is the most probable diagnosis?

- A. **Lung gangrene**
- B. Lung abscess
- C. Multiple bronchiectasis
- D. Chronic pneumonia
- E. Pleura empyema

11. Purulent mediastinitis is diagnosed at a 63-year-old patient. What diseases from the stated below CANNOT cause the purulent mediastinitis?

- A. **Cervical lymphadenitis**
- B. Deep neck phlegmon
- C. Perforation of the thoracic part of the easophagus
- D. Iatrogenic injury of the trachea
- E. Perforation of the cervical part of the easophagus

12. A rounded well-defined shadow was found in the costo-vertebral angle on the chest roentgenogram of an otherwise healthy 9 year old girl. Make a preliminary diagnosis:

- A. **Ganglioneuroma**
- B. Ganglioneuroblastoma
- C. Sarcoma of the vertebra
- D. Sympatogonioma
- E. Sympatoblastoma

13. A 28-year-old female patient has been admitted to a hospital. She states to be ill for 12 years. On examination she has been diagnosed with bronchiectasis with affection of the left lower lobe of lung. What is the optimal treatment tactics for this patient?

- A. **Left lower lobectomy**
- B. Bronchopulmonary lavage
- C. Antibiotic therapy
- D. Left-sided pneumoectomy

E. Active drainage of the left pleural cavity

14. A patient undergoing treatment for the left-sided destructive pneumonia presents with deterioration of his general condition, progressing dyspnea, cyanosis.

Objectively: the left side of chest is not involved in respiration, breathing sounds cannot be auscultated. Radiograph shows a shadow reaching the 5 rib with a horizontal fluid level and a radiolucency above it, the mediastinum is displaced to the right. What is the medical tactics?

A. Thoracostomy

B. Infusion and antibacterial therapy

C. Emergency bronchoscopy

D. Open thoracotomy

E. Endotracheal intubation