

Krok 1 Medicine 2005

13. A 35 y.o. woman was admitted to thoracic surgery department with fever up to 40 C, onset of pain in the side caused by deep breathing, cough with considerable quantity of purulent sputum and blood with bad smell. What is the most likely diagnosis?

- A. Abscess of the lung
- B. Complication of liver echinococcosis
- C. Bronchiectatic disease
- D. Actinomycosis of lungs
- E. Pulmonary tuberculosis

19. A patient complains of a tormental (agonizing) cough with expectoration of up to 600 ml/daily purulent chocolate color sputum with a decay smell. Onset of illness was abrupt, to 39 C, fever of irregular type. There is the area of darkening with a cavity in a center on X-ray film, with irregular contours and level of liquid. What disease is the question?

- A. Gangrene of lung
- B. Tuberculosis
- C. Bronchiectatic illness
- D. Pneumonia complicated by an abscess
- E. Lobar pneumonia

23. A patient with nosocomial pneumonia has signs of collapse. Which of the following pneumonia complication is the most likely to be accompanied with collapse?

- A. Septic shock
- B. Exudative pleuritis
- C. Bronchial obstruction
- D. Toxic hepatitis
- E. Emphysema

23. A patient with nosocomial pneumonia has signs of collapse. Which of the following pneumonia complication is the most likely to be accompanied with collapse?

- A. Septic shock
- B. Exudative pleuritis
- C. Bronchial obstruction
- D. Toxic hepatitis
- E. Emphysema

40. A 36 y.o. patient is diagnosed with right sided pneumothorax. What method of treatment is indicated to the patient?

- A. Surgical drainage of the pleural cavity
- B. Antiinflammation therapy
- C. Symptomatic therapy
- D. Pleural puncture
- E. Thoracotomy

52. A 52 y.o. hard smoker patient complains of persistent cough with purulent sputum discharge especially in mornings, dyspnea provoked even by slight physical exertion, wheezing chest, tachypnoea, general weakness. He considers himself to be ill during 12 years. The overwrought conditions appear 3-4 times per year usually after common cold and have tendency to progress. What disease do you think about first of all?

- A. Chronic obstructive lung disease
- B. Bronchial asthma
- C. Mucoviscidosis (cystic fibrosis)
- D. Bronchoectatic disease
- E. Aspergillosis

77. A worker, aged 38, working in the slate production during 15 years, complains of expiratory exertional dyspnea, dry cough. On examination: deafening of the percussory sounds in interscapular region, rough breath sounds, dry disseminated rales. On fingers' skin – greyish warts. Factory's sectorial doctor suspects asbestosis. Which method is the most informative for diagnosis verification?

- A. Thorax roentgenography
- B. Bronchoscopy
- C. Spirography
- D. Bronchoalveolar lavage
- E. Blood gases examination

130. A 55 y.o. male patient complains of weakness during 2 months, pain in the right side of the thorax, cough, blood-streaked sputum. On X-ray: intensive triangle shadow in the area of lower lobe that is connected to mediastinum. What is the most likely disorder in the lungs?

- A. Central cancer of lungs
- B. Tuberculosis of lungs

- C. Bronchiectasia
- D. Pulmonary infarction
- E. Pleuropneumonia

145. A 20 daily y.o. female patient is suffering from chronic bronchitis. Recently there has been production about 0,5 L of purulent sputum with maximum discharge in the morning. Fingers are like "drum sticks", there are "watching glass" nails. What is the most probable diagnosis?

- A. Bronchiectasia
- B. Pneumonia
- C. Chronic bronchitis
- D. Gangrene of lungs
- E. Tuberculosis

150. A 20 y.o. patient with bronchial asthma experiences dyspnea attacks 3-4 times a week. Nocturnal attacks are 1 time a week. FEV1- 50% of necessary figures, during the day it's variations is 25%. What is the severity of bronchial asthma condition?

- A. Moderate severity condition
- B. Mild condition
- C. Serious condition
- D. Asthmatic status
- E. Intermittent flow

154. A 41 y.o. man complains of acute pain in the right side of the thorax and sudden increase of dyspnea following the lifting of heavy object. The patient's condition is serious: lips and mucous are cyanotic, breathing rate is 28 per min, pulse- 122 bpm., AP- 80/40 mm Hg. There is tympanitis on percussion and weakened breathing on auscultation on the right. S2 is accentuated over pulmonary artery. What is the urgent measure on the prehospital stage?

- A. Air aspiration from the pleural cavity
- B. Epinephrine introduction
- C. Euphilline introduction
- D. Call for cardiologic team
- E. Oxygen inhalation

161. A 52 y.o. male patient has become ill gradually. There is pain in the left side of the thorax during 2 weeks, elevation of temperature till 38 – 39 C. On examination: left chest side falls behind

in breathing movement no voice tremor over the left lung. Dullness that is more intensive in lower parts of this lung. Right heart border is deviated outside. Sharply weakened breathing over the left lung, no rales. Heart sounds are muffled, tachycardia. What is the most probable diagnosis?

- A. Exudative pleuritis
- B. Spontaneous pneumothorax
- C. Atelectasis of lung
- D. Cirrhotic tuberculosis
- E. Infarction-pneumonia

191. A 25 y.o. patient was admitted with chest trauma. Clinical and X-ray examination have revealed tense pneumothorax on the left. What emergency treatment should be undertaken?

- A. Pleural cavity drainage
- B. Intravenous infusions
- C. Oxygenotherapy
- D. Intubation
- E. Analgetics

Krok 1 Medicine 2006

24. A 35 y.o. woman was admitted to thoracic surgery department with fever up to 40 C, onset of pain in the side caused by deep breathing, cough with considerable quantity of purulent sputum and blood with bad smell. What is the most likely diagnosis?

- A. Abscess of the lung
- B. Complication of liver echinococcosis
- C. Bronchiectatic disease
- D. Actinomycosis of lungs
- E. Pulmonary tuberculosis

55. A 56 y.o. woman has an acute onset of fever up to 39°C with chills, cough, and pain on respiration in the right side of her chest. On physical examination: HR- 90/min, BP- 95/60 mm Hg, Ps- 26/min. There is dullness over the right lung. On X-ray: infiltrate in the right middle lobe of the lung on palpation. What is the diagnosis?

- A. Community-acquired lobar pneumonia with moderate severity
- B. Community-acquired bronchopneumonia
- C. Acute pleurisy

- D. Acute lung abscess
- E. Hospital-acquired lobar pneumonia

76. A 52 y.o. hard smoker complains of persistent cough with purulent sputum discharge especially in the mornings, dyspnea provoked even by slight physical exercises, wheezing chest, tachypnoe, general weakness. He considers himself to be ill for 12 years. The foresaid presentations appear 3-4 times per year usually after a common cold and have tendency to progress. What disease do you think about first of all?

- A. Chronic obstructive lung disease
- B. Bronchial asthma
- C. Mucoviscidosis (cystic fibrosis)
- D. Bronchoectatic disease
- E. Aspergillosis

77. 3 weeks ago a patient was ill with

146. A 32 y.o. patient who has been staying in a hospital on account of acute abscess of his right lung suddenly felt pain after coughing in the right half of thorax, he got heavy breathing, cyanosis. What complication is the most probable?

- A. Pyopneumothorax
- B. Infarction-pneumonia
- C. Myocardial infarction
- D. Esophagus perforation
- E. Exudative pleurisy

147. Fluorography of a 45 y.o. man revealed some foci of small intensity with nondistinct outlines on the top of his right lung. The patient doesn't feel worse. He has been smoking for many years. Objectively: vesicular resonance over lungs, respiration is vesicular, rales are absent. Blood count is not changed. What is the most probable diagnosis?

- A. Focal pulmonary tuberculosis
- B. Peripheral cancer of lung
- C. Eosinophilic pneumonia
- D. Bronchiolitis
- E. Disseminated pulmonary tuberculosis

192. A 67 y.o. patient complains of dyspnea, breast pain, common weakness. He has been ill for 5 months. Objectively: t0- 37,30?, 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. Cancer of lung
- B. Macrofocal pneumonia
- C. Bronchoectatic disease
- D. Focal pulmonary tuberculosis
- E. Exudative pleuritis

Krok 2 Medicine 2007

63. A 30 y.o. man presents with a history of recurrent pneumonias and a chronic cough production of foul smelling, purulent sputum, occasionally blood tinged, which is worse in the morning and on lying down. On physical examination, the patient appears chronically ill with clubbing of fingers, inspiratory rales at the base of lungs posteriorly. Most likely diagnosis:

- A. Bronchoectasis
- B. Chronic bronchitis
- C. Disseminated pulmonary tuberculosis
- D. Pulmonary neoplasm
- E. Chronic obstructive emphysema

68. A 56 y.o. woman has an acute onset of fever up to 39°C with chills, cough, and pain on respiration in the right side of her chest. On physical examination: HR-90/min, BP- 95/60 mm Hg, RR- 26/min. There is dullness over the right lung on percussion. On X-ray: infiltrate in the right middle lobe of the lung. What is the diagnosis?

- A. Community-acquired lobar pneumonia with moderate severity
- B. Community-acquired bronchopneumonia
- C. Acute pleurisy
- D. Acute lung abscess
- E. Hospital-acquired lobar pneumonia

71. A 38 y.o. woman is seriously ill. She complains of frequent paroxysms of expiratory dyspnea. The last paroxysm lasted over 12 hours and failed to respond to theophylline. The skin is palish gray,

moist, RR of 26/min. On auscultation, breath sounds are absent over some areas. Your preliminary diagnosis?

- A. Bronchial asthma, status asthmaticus
- B. Chronic obstructive bronchitis
- C. Atopic bronchial asthma, respiratory failure of the III degree
- D. Bronchiectasis, respiratory failure of the II-III degree
- E. Ischemic heart disease, pulmonary edema

86. The patient has sustained blunt trauma to the chest. Which of the following would most likely be the cause of acute cardiopulmonary collapse?

- A. Pneumothorax
- B. Hemothorax
- C. Pulmonary contusion
- D. Rib fractures
- E. Acute adult respiratory distress syndrome (ARDS)

138. A patient has been suffering from morning cough accompanied by discharge of small amount of sputum, dyspnea for 8 years. He has been smoking for 10 years. Objectively: cyanosis, prolonged expiration, dry rales. What is the most probable diagnosis?

- A. Chronic obstructive bronchitis
- B. Chronic non-obstructive bronchitis
- C. Idiopathic fibrosing alveolitis
- D. Multiple bronchiectasis
- E. Bronchial asthma

141. Fluorography of a 45 y.o. man revealed some little intensive foci with indistinct outlines on the top of his right lung for the first time. The patient doesn't feel worse. He has been smoking for many years. Objectively: pulmonary sound above lungs on percussion, respiration is vesicular, no rales. Blood count is unchanged. What is the most probable diagnosis?

- A. Focal pulmonary tuberculosis
- B. Peripheral cancer of lung
- C. Eosinophilic pneumonia
- D. Bronchopneumonia
- E. Disseminated pulmonary tuberculosis

160. A worker at a porcelain factory who has been in service for 10 years complains of cough, dyspnea, ache in his chest. What occupational disease are these complaints most typical for?

- A. Silicosis
- B. Multiple bronchiectasis
- C. Chronic dust bronchitis
- D. Occupational bronchial asthma
- E. Chronic cor pulmonale

172. X-ray pattern of thorax organs revealed a large intensive in homogeneous opacity with indistinct outlines on the right side at the level of the 4-th rib. In the centre of this opacity there is a horizontal level and clearing of lung tissue above it. What disease does this X-ray pattern correspond with?

- A. Abscess of the right lung
- B. Peripheral cancer
- C. Tuberculoma of the right lung
- D. Right-sided pneumothorax

189. A 67 y.o. patient complains of dyspnea, breast pain, common weakness. He has been ill for 5 months. Objectively: t₀- 37,3?, 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. Macrofocal pneumonia
- C. Bronchoectatic disease
- D. Focal pulmonary tuberculosis
- E. Exudative pleuritis

Krok 2 Medicine 2008

23. Five days after a total hip replacement a 72 year old woman becomes acutely short of breath, siaphoretic and hypotensive. Both lung fields are clear to auscultation and percussion, but examination of the neck reveals mild jugular venous distension with prominent A waves. Heart sounds are normal. ECG shows sinus tachycardia with a new right bundle branch block and minor nonspecific ST – T wave changes. The most likely diagnosis is:

- A. Pulmonary thromboembolism
- B. Acute myocardial infarction
- C. Aortic dissection

D. Pericarditis

E. Aspiration

76. A 56 year old woman has an acute onset of fever up to 39°C with chills, cough, and pain on respiration in the right side of her chest. On physical examination: HR - 90/min, BP- 95/60 mm Hg, RR-26/min. There is dullness over the right lung on percussion. On X-ray: infiltrate in the right middle lobe of the lung. What is the diagnosis?

A. Community-acquired lobar pneumonia of moderate severity

B. Community-acquired bronchopneumonia

C. Acute pleuritis

D. Acute lung abscess

E. Nosocomial lobar pneumonia

77. A 26 year old man was admitted to the hospital because of stabbing back pain on inspiration and dyspnea. Examination results: BT of 37°C, Ps of 24/min, HR of 92/min, vesicular breath sounds. There is a dry, grating, low-pitched sound heard on both expiration and inspiration in the left inferior lateral part of the chest. What is the most likely diagnosis?

A. Acute fibrinous pleuritis

B. Myocarditis

C. Pneumonia

D. Acute bronchitis

E. Pneumothorax

91. A patient complains about strong dyspnea that is getting worse during physical activity. Presentations appeared suddenly 2 hours ago at work: acute chest pain on the left, cough. The pain was abating, but dyspnea, dizziness, pallor, cold sweat and cyanosis were progressing. Vesicular respiration is absent, X-ray picture shows a shadow on the left. What pathology might be suspected?

A. Spontaneous left-sided pneumothorax

B. Pulmonary infarction

C. Pleuritis

D. Left-sided pneumonia

E. Pulmonary abscess

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

179. 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 patient's 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. Pleura empyema
- D. Multiple bronchiectasis
- E. Chronic pneumonia

Krok 2 Medicine 2009

11. Five days after a total hip joint replacement a 72 year old woman becomes acutely short of breath, diaphoretic and hypotensive. Both lung fields are clear to auscultation and percussion, but examination of the neck reveals mild jugular venous distension with prominent A waves. Heart sounds are normal. ECG shows sinus tachycardia with a new right bundle branch block and minor nonspecific ST – T wave changes. The most likely diagnosis is:

- A. Pulmonary thromboembolism
- B. Acute myocardial infarction
- C. Aortic dissection
- D. Pericarditis
- E. Aspiration

14.

What is the maximum duration of medical certificate in case of tuberculosis?

- A. 2 months
- B. Week

- C. 2 weeks
- D. Month
- E. 10 months

62. A patient complains about severe dyspnea that is getting worse during physical activity. Presentations appeared suddenly 2 hours ago at work: acute chest pain on the left, cough. The pain was abating, but dyspnea, dizziness, pallor, cold sweat and cyanosis were progressing. Vesicular respiration is absent, X-ray picture shows a shadow on the left. What pathology might be suspected?

- A. Spontaneous left-sided pneumothorax
- B. Pulmonary infarction
- C. Pleuritis
- D. Left-sided pneumonia
- E. Pulmonary abscess

84. Examination of a 22 year old man suffering from polyarthralgia and high fever revealed right-sided exudative pleuritis. X-ray picture showed a homogenous shadow below the IV rib on the right. In the II segment there were single dense focal shadows. Mantoux test with 2 TU resulted in formation of a papula 16 mm large. Pleural liquid has increased protein concentration, Rivalta's reaction is positive, there was also increased number of leukocytes with prevailing lymphocytes. What is the most probable etiology of pleuritis?

- A. Tuberculous
- B. Cancerous
- C. Staphylococcal
- D. Viral
- E. Autoimmune

97. A 52 year old male patient complains about attacks of asphyxia, pain in his left side during respiration. These manifestations turned up all of a sudden. It is known from his anamnesis that he had been treated for thrombophlebitis of the right leg for the last month. In the admission ward the patient suddenly lost consciousness, there was a sudden attack of asphyxia and pain in his left side. Objectively: heart rate - 102/min, respiratory rate - 28/min, AP- 90/70 mm Hg. Auscultation revealed diastolic shock above the pulmonary artery, gallop rhythm, small bubbling rales above the lungs under the scapula on the right, pleural friction rub. What examination method will be the most informative for a diagnosis?

- A. Angiography of pulmonary vessels

- B. Echocardiography
- C. Study of external respiration function
- D. ECG
- E. Coagulogram

148. A 36 year old man was delivered to the surgical department an hour after a road accident. His condition is getting worse: respiratory insufficiency is progressing, there are cardiac abnormalities. Clinical and roentgenological investigations revealed mediastinal displacement. What process has caused this complication?

- A. Valvular pneumothorax
- B. Open pneumothorax
- C. Closed pneumothorax
- D. Subcutaneous emphysema
- E. Mediastinitis

Krok 2 Medicine 2010

47. A 25-year-old man was admitted to a hospital with a 2 month history of cough and fever. A chest x-ray showed extensive left upper lobe disease with a 2 cm cavity. All three points were strongly positive on direct smear and grew M. Tuberculosis, fully sensitive to all first-line drugs. Patient must be treated with:

- A. Isoniazid + rifampicin + pyrazinamide
- B. Streptomycin + isoniazid
- C. Isoniazid + ethambutol
- D. Kanamycin + ethambutol + pyrazinamide
- E. P-aminosalicylic acid + streptomycin

76. On the 4th day after suturing the perforative stomach ulcer a patient with pulmonary emphysema developed spontaneous pneumothorax. What is the best place for pleural drainage?

- A. The second intercostal space along the medioclavicular line
- B. The eighth intercostal space along the posterior axillary furrow
- C. The seventh intercostal space along the anterior axillary furrow
- D. The sixth intercostal space along the anterior axillary furrow
- E. The fifth intercostal space along the medioclavicular line

83. A 52-year-old male patient complains about attacks of asphyxia, pain in his right side during respiration. These manifestations turned up all of a sudden. It is known from his anamnesis that he had been treated for thrombophlebitis of the right leg for the last month. In the admission ward the patient suddenly lost consciousness, there was a sudden attack of asphyxia and pain in his side. Objectively: heart rate - 102/min, respiratory rate- 28/min, AP- 90/70 mm Hg. Auscultation revealed diastolic shock above the pulmonary artery, gallop rhythm, small bubbling rales above the lungs under the scapula on the right, pleural friction rub. What examination method will be the most informative for a diagnosis?

- A. Angiography of pulmonary vessels
- B. Echocardiography
- C. Study of external respiration function
- D. ECG
- E. Coagulogram

85. 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 patient's condition is moderately severe. Respiratory rate - 28-30/min, Ps- 96 bpm, AP- 110/70mm 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. Exudative pleuritis
- C. Acute focal pneumonia
- D. Pleural empyema
- E. Pyopneumothorax

133. A 36-year-old man was delivered to the surgical department an hour after a road accident. His condition is getting worse: respiratory insufficiency is progressing, there are cardiac abnormalities. Clinical and roentgenological investigations revealed mediastinal displacement. What process has caused this complication?

- A. Valvular pneumothorax
- B. Open pneumothorax
- C. Closed pneumothorax
- D. Subcutaneous emphysema
- E. Mediastinitis

136. A 26-year-old male patient complains of piercing pain during breathing, cough, dyspnea. Objectively: $t_{0} - 37,3^{\circ}\text{C}$, respiration rate - 19/min, heart rate - 92/min; AP- 120/80 mm Hg. Vesicular respiration. In the inferolateral parts of chest auscultation in both inspiration and expiration phase revealed noise that was getting stronger at phonendoscope pressing and can be still heard after cough. ECG showed no pathological changes. What is the most likely diagnosis?

- A. Acute pleuritis
- B. Intercostal neuralgia
- C. Subcutaneous emphysema
- D. Spontaneous pneumothorax
- E. Pericarditis sicca

139. A 22-year-old patient is a clerk. His working day runs in a conditioned room. In summer he was taken by an acute disease with the following symptoms: fever, dyspnea, dry cough, pleural pain, myalgia, arthralgia. Objectively: moist rales on the right, pleural friction rub. X-ray picture showed infiltration of the inferior lobe. In blood: WBC - $11 \cdot 10^9/\text{l}$, stab neutrophils - 6%, segmented neutrophils - 70%, lymphocytes - 8%, ESR - 42 mm/h. What is the etiological factor pneumonia?

- A. Legionella
- B. Mycoplasma
- C. Streptococcus
- D. Staphylococcus
- E. Pneumococcus

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

8. A hospital has admitted a 52-year-old patient with disseminated pulmonary tuberculosis, complaints of acute pain in the right half of chest, that developed after going upstairs to the 3rd floor; cough, dyspnea at rest, marked cyanosis. What kind of complication should be suspected first of all?

- A. Spontaneous pneumothorax
- B. Cardiac failure
- C. Pulmonary failure
- D. Pleuritis
- E. Acute myocardial infarction

78. Topographic percussion of lungs in a patient who got a serious job-related barotrauma revealed that the lower lung borders were located one rib below normal, there was a significant increase in both lung height and Kronig's isthmus. What disease should be suspected in the first place?

- A. Pulmonary emphysema
- B. Exudative pleuritis
- C. Chronic bronchitis
- D. Bronchial asthma
- E. Pneumothorax

121. A 45-year-old patient, a sailor, was hospitalized on the 2nd day of the disease. A week ago he returned from India. Complains of body temperature of 41°C, severe headache, dyspnea, cough with frothy rusty sputum. Objectively: the patient is pale, mucous membranes are cyanotic, breathing rate - 24/min, tachycardia is present. In lungs: diminished breath sounds, moist rales over both lungs, crepitation. What is the most likely diagnosis?

- A. Pneumonic plague
- B. Miliary tuberculosis
- C. Influenza
- D. Ornithosis
- E. Sepsis

128. 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. Bronchoscopy

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

129.

A 49-year-old patient complains of dyspnea, cough. There are no sputum discharges. He has repeatedly used salbutamol and intal but with no effect. Objectively: he is only able to sit while leaning on the table. Cyanosis of face, acrocyanosis are present. Breathing is shallow, laboured, in some parts it cannot be auscultated; there are diffuse rales, expiration is significantly prolonged. Heart sounds are muffled, tachycardia is present. Ps - 112/min., AP - 110/70 mmHg. Liver is located near the costal arch. There are no peripheral edemata. What is your provisional diagnosis?

- A. Status asthmaticus
- B. Chronic obstructive bronchitis
- C. Bronchiale asthma, moderate gravity
- D. Foreign object aspiration
- E. Cardiac asthma

195. A patient is 50 years old, works as a builder with 20 years of service record. He was admitted to the hospital for chest pain, dry cough, minor dyspnea. Objectively: sallow skin, acrocyanosis, asbestos warts on the hands. In lungs - rough respiration, diffuse dry rales. The x-ray picture shows intensification of pulmonary pattern, signs of pulmonary emphysema. What is the most likely diagnosis?

- A. Asbestosis
- B. Lung cancer
- C. Pneumonia
- D. Chronic obstructive bronchitis
- E. Tuberculosis

Krok 2 Medicine 2012

10. 4 days ago a 32-year-old patient caught a cold: he presented with sore throat, fatigue. The next morning he felt worse, developed dry cough, body temperature rose up to 38,2oC, there appeared muco-purulent expectoration. Percussion revealed vesicular resonance over lungs, vesicular breathing weakened below the angle of the right scapula, fine sonorous and sibilant wheezes. What is the most likely diagnosis?

- A. Focal right-sided pneumonia
- B. Bronchial asthma
- C. Acute bronchitis
- D. Pulmonary carcinoma
- E. Pulmonary gangrene

25. A 54-year-old drowned man was rescued from the water and delivered to the shore. Objectively: the man is unconscious, pale, breathing cannot be auscultated, pulse is thready. Resuscitation measures allowed to save the patient. What complications may develop in the near future?

- A. Pulmonary edema
- B. Respiratory arrest
- C. Encephalopathy
- D. Cardiac arrest
- E. Bronchospasm

30. A 55-year-old male had been treated at the surgical department for acute lower- extremity thrombophlebitis. On the 7th day of treatment he suddenly developed pain in the left part of chest, dyspnea and cough. Body temperature was 36,1°C, respiratory rate - 36/min. The patient was also found to have diminished breath sounds without wheezing. Ps- 140/min, thready. AP- 70/50 mm Hg. The ECG shows Q?-S syndrome. What is the most likely diagnosis?

- A. Pulmonary embolism
- B. Myocardial infarction
- C. Cardiac asthma
- D. Bronchial asthma
- E. Pneumothorax

39. A survey radiograph of a miner (24 years of service record, the dust concentration in the workplace is at the rate of 260-280 mg/m³ with 15% of free silica) shows lung changes that are typical for pneumoconiosis. What type of pneumoconiosis is it?

- A. Anthracosilicosis
- B. Carboconiosis
- C. Silicatosis
- D. Anthracosilicatosi
- E. Silicosis

49. 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 patient's condition is moderately severe. Respiratory rate - 28-30/min, Ps- 96 bpm, AP- 110/70mm 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. Exudative pleuritis
- C. Acute focal pneumonia
- D. Pleural empyema
- E. Pyopneumothorax

74. A patient has chronic heart failure of the II stage. He takes furosemide regularly three times a week. He had developed bronchopneumonia and had been administered combined pharmacotherapy. On the fifth day of therapy the patient complained of hearing impairment. What drug coadministered with furosemide might have caused the hearing loss?

- A. Gentamicin
- B. Linex
- C. Nystatin
- D. Tavegil
- E. Mucaltin

89. A 56-year-old patient complains of having persistent chest pain on the right for the last 2 months. The pain is not associated with respiration. He also complains of cough with blood-streaked sputum, weakness, decreased performance, fatigue. Chest radiograph shows a globular shade of 4x6 cm connected to the root of the lung in the lower part of the right lung. What is the most likely diagnosis?

- A. Peripheral lung cancer
- B. Metastasis
- C. Lung abscess
- D. Pneumonia
- E. Tuberculoma

95. A 36-year-old man was delivered to the surgical department an hour after a road accident. His condition is getting worse: respiratory insufficiency is progressing, there are cardiac abnormalities.

Clinical and roentgenological investigations revealed mediastinal displacement. What process has caused this complication?

- A. Valvular pneumothorax
- B. Open pneumothorax
- C. Closed pneumothorax
- D. Subcutaneous emphysema
- E. Mediastinitis

96. A 26-year-old male patient complains of piercing pain during breathing, cough, dyspnea. Objectively: $t_{0} - 37,3^{\circ}\text{C}$, respiration rate - 19/min, heart rate = 92/min; AP- 120/80 mm Hg. Vesicular respiration. In the inferolateral parts of chest auscultation in both inspiration and expiration phase revealed noise that was getting stronger at phonendoscope pressing and can be still heard after cough. ECG showed no pathological changes. What is the most likely diagnosis?

- A. Acute pleuritis
- B. Intercostal neuralgia
- C. Subcutaneous emphysema
- D. Spontaneous pneumothorax
- E. Pericarditis sicca

98. A 25-year-old patient complains of general weakness, dry cough, sweating, subfebrile temperature. Objectively: lung auscultation reveals vesicular respiration with no wheezing. Fluorogram shows focal shadows of high intensity in the 1-2 segments of the right lung. Mantoux test gave a reaction of 16 mm of induration. What clinical form of tuberculosis is most likely?

- A. Focal
- B. Infiltrative
- C. Disseminated
- D. Tuberculoma
- E. Miliary

99. A 22-year-old patient is a clerk. His working day runs in a conditioned room. In summer he was taken by an acute disease with the following symptoms: fever, dyspnea, dry cough, pleural pain, myalgia, arthralgia. Objectively: moist rales on the right, pleural friction rub. X-ray picture showed infiltration of the inferior lobe. In blood: WBC - $11 \cdot 10^9/l$, stab neutrophils - 6%, segmented neutrophils - 70%, lymphocytes - 8%, ESR - 42 mm/h. What is the etiological factor of pneumonia?

- A. Legionella

- B. Mycoplasma
- C. Streptococcus
- D. Staphylococcus
- E. Pneumococcus

101. A 49-year-old patient complains of dyspnea, cough. There are no sputum discharges. He has repeatedly used salbutamol and intal but with no effect. Objectively: he is only able to sit while leaning on the table. Cyanosis of face, acrocyanosis are present. Breathing is shallow, laboured, in some parts it cannot be auscultated; there are diffuse rales, expiration is significantly prolonged. Heart sounds are muffled, tachycardia is present. Ps - 112/min., AP- 110/70 mm Hg. Liver is located near the costal arch. There are no peripheral edemata. What is your provisional diagnosis?

- A. Status asthmaticus
- B. Chronic obstructive bronchitis
- C. Bronchial asthma, moderate gravity
- D. Foreign object aspiration
- E. Cardiac asthma

157. A 35-year-old victim of a road accident has got an injury of the right side of his chest. Objectively: respiration rate - 28-30/min, respiration is shallow, restricted respiratory excursion and acrocyanosis are present. Ps 110 bpm, AP- 90/60 mm Hg. Respiratory sounds over the right lung cannot be auscultated. Chest radiograph shows fractures of the VI-VII ribs on the right, the right pleural cavity contains both air and fluid, with the fluid at about the level of the V rib, the shadow of the mediastinum is displaced to the left. What first aid should be provided to the victim?

- A. Puncture of the pleural cavity
- B. Antibiotic administration
- C. Vagosympathetic blockade
- D. Artificial ventilation of lungs
- E. Urgent thoracotomy

160. 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. Open thoracotomy
- C. Endotracheal intubation
- D. Infusion and antibacterial therapy
- E. Emergency bronchoscopy

Krok 2 Medicine 2013

13. A 64-year-old patient complains of severe pain in the right side of chest, dyspnea, dry cough which appeared suddenly on exertion. Objectively: the right side of the chest lags behind in the act of breathing. Percussion reveals tympanic sound. Auscultation reveals pronouncedly diminished breath sounds on the right. Ps-100/min, weak, arrhythmic. AP- 100/50 mm Hg. Cardiac sounds are decreased. What disease can be suspected in this patient?

- A. Right-sided pneumothorax
- B. Right-sided hydrothorax
- C. Right-sided dry pleurisy
- D. Right-sided pleuropneumonia
- E. PATE

29. A 32-year-old patient has developed an acute condition after hypothermia: temperature - 40°C, cough with 200 ml of sputum per day. The sputum is purulent, foul-smelling. To the right of the lower lobe the mixed moist rales can be auscultated. Blood test results: WBCs - $18,0 \cdot 10^9/l$, ESR - 45 mm/h. Radiographically: in the lower lobe of the right lung there is a thick-walled cavity up to 6 cm in diameter with a high horizontal level. What is the most likely diagnosis?

- A. Lung abscess
- B. Fibro-cavernous pulmonary tuberculosis
- C. Lung cyst
- D. Decomposing lung carcinoma
- E. Infiltrative pulmonary tuberculosis

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

84. A 45-year-old patient, a sailor, was hospitalized on the 2nd day of the disease. A week ago he returned from India. Complains of body temperature of 41°C, severe headache, dyspnea, cough with frothy rusty sputum. Objectively: the patient is pale, mucous membranes are cyanotic, breathing rate is 24/min, tachycardia is present. In lungs: diminished breath sounds, moist rales over both lungs, crepitation. What is the most likely diagnosis?

- A. Pneumonic plaque
- B. Miliary tuberculosis
- C. Influenza
- D. Ornithosis
- E. Sepsis

91. A 49-year-old patient complains of dyspnea, cough. There are no sputum discharges. He has repeatedly used salbutamol and intal but with no effect. Objectively: he is only able to sit while leaning on the table. Cyanosis of face, acrocyanosis are present. Breathing is shallow, laboured, in some parts it cannot be auscultated; there are diffuse rales, expiration is significantly prolonged. Heart sounds are muffled, tachycardia is present. Ps - 112/min, AP- 110/70 mm Hg. Liver is located near the costal arch. There are no peripheral edemata. provisional diagnosis?

- A. Status asthmaticus
- B. Chronic obstructive bronchitis
- C. Bronchial asthma, moderate gravity
- D. Foreign object aspiration
- E. Cardiac asthma

106. Examination of a 38-year-old patient who had been hit with a blunt object on the left side of chest revealed a fracture of the X rib with fragments displacement, parietal pneumothorax. The patient complains of pain in the left subcostal area. Objectively: the patient is pale, AP- 80/40 mm Hg, Ps- 138/min, of poor volume. USI reveals fluid in the left abdomen. Splenic rupture is present. What treatment tactics should be chosen?

- A. Drainage of the left pleural cavity followed by laparotomy

- B. Immediate upper median laparotomy followed by drainage of the left pleural cavity
- C. Immediate laparotomy and alcohol-novocaine block of the X rib
- D. Anti-shock actions followed by laparotomy after the arterial pressure rise
- E. Left-sided thoracotomy immediately followed by laparotomy

105. A 45-year-old 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 collapsed left lung, 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. Inflammation spread to the visceral pleura
- D. Atelectasis of the left lung
- E. Acute cardiovascular insufficiency

110. 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. Pleural puncture
- D. Operative therapy
- E. Active thoracostomy

158. A 58-year-old patient complains of a headache in the occipital region, nausea, choking, opplotentes. The presentations appeared after a physical exertion. Objectively: the patient is excited. Face is hyperemic. Skin is pale. Heart sounds are regular, the 2nd aortic sound is accentuated. AP- 240/120 mm Hg, HR-92/min. Auscultation reveals some fine moist rales in the lower parts of the lungs. Liver is not enlarged. ECG shows signs of hypertrophy and left ventricular overload.

What is the most likely diagnosis?

- A. Complicated hypertensive crisis, pulmonary edema
- B. Acute myocardial infarction, pulmonary edema
- C. Bronchial asthma exacerbation
- D. Uncomplicated hypertensive crisis

E. Community-acquired pneumonia

Krok 2 Medicine 2014

47. A 63-year-old male patient complains of cough with expectoration of mucous blood-streaked sputum, asthma, low-grade fever, general weakness. He has been a smoker since childhood. Objectively: $T = 37.4^{\circ}\text{C}$, respiratory rate is 26/min, $Ps = 82/\text{min}$, rhythmic. $AP = 130/85 \text{ mm Hg}$. There is limited breathing movement in the right side of chest cavity, as well as percussive dullness and diminished breath sounds. Radiograph shows a homogeneous opacity of the pulmonary field on the right with the mediastinum displacement to the affected side. What is the most likely diagnosis?

- A. Central lung cancer
- B. Pleural effusion
- C. Pleuropneumonia
- D. Pulmonary tuberculosis
- E. Bronchiectasis

68. Two years ago, a 46-year-old patient was diagnosed with stage I silicosis. Currently the patient complains of escalating dyspnea, pain in the infrascapular regions. Radiograph shows a diffuse enhancement and distortion of lung markings, as well as multiple nodular shadows 2-4 mm in diameter. There is interlobar pleural density on the right. Dense shadows are found in the hilar regions. Specify the form of radiographic pulmonary fibrosis in this case:

- A. Nodular
- B. Interstitial
- C. Interstitial nodular
- D. Nodal
- E. Tumor-like

99. 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. Inflammation spread to the visceral pleura
- D. Atelectasis of the left lung

E. Acute cardiovascular insufficiency

130. A 29-year-old unconscious patient has been delivered to a hospital. Objectively: skin and mucous membranes are pale, cyanotic, breath sounds are dramatically diminished on the right and cannot be auscultated in the lower parts, at the level of the 6 rib along the anterior axillary line there is a wound hole with moderate bleeding and passage of air during inspiration. Radiography reveals a bullet in the pleural cavity. What is the medical tactics of choice?

- A. Emergency thoracotomy
- B. Thoracoscopy with removal of bullet
- C. Converting a tension pneumothorax into a simple (open) pneumothorax
- D. Thoracostomy
- E. Tight bandage on a wound

154. A 21-year-old female patient has been hospitalized on an emergency basis because of severe dyspnea, pain in the left side of chest. Body temperature is 38,8oC. The condition developed three days ago. Respiratory rate is 42/min, auscultation reveals shallow breathing. There is percussive dullness on the right starting from the middle of the blade, breath sounds cannot be heard. The left border of heart is 3 cm displaced outwards. Embryocardia is present, HR is 110/min. The right hypochondrium is painful on palpation. What urgent therapeutic measures should be taken in this situation?

- A. Emergency puncture of the pleural cavity
- B. Administration of penicillin antibiotics
- C. Injection of Lasix
- D. Injection of cardiac glycosides
- E. Transferring the patient to the thoracic surgery department

190. A 42-year-old male patient has been delivered to a hospital in a grave condition with dyspnea, cough with expectoration of purulent sputum, fever up to 39,5oC. The first symptoms appeared 3 weeks ago. Two weeks ago, a local therapist diagnosed him with acute right-sided pneumonia. Over the last 3 days, the patient's condition deteriorated: there was a progress of dyspnea, weakness, lack of appetite. Chest radiography confirms a rounded shadow in the lower lobe of the right lung with a horizontal fluid level, the right sinus is not clearly visualized. What is the most likely diagnosis?

- A. Abscess of the right lung
- B. Acute pleuropneumonia
- C. Right pulmonary empyema

D. Atelectasis of the right lung

E. Pleural effusion