

#### 14. Damage to the thoracic cavity. Clinic and diagnosis of pneumothorax, hemothorax. Heart damage. Clinical-diagnostic and medical-surgical tactics

1. A patient was delivered to a surgical department after a road accident with a closed trauma of chest and right-sided rib fracture. The patient was diagnosed with right-sided pneumothorax, it is indicated to perform drainage of pleural cavity. Pleural puncture should be made in:
  - A. In the 2nd intercostal space along the middle clavicular line**
  - B. In the 7th intercostal space along the scapular line
  - C. In the point of the greatest dullness on percussion
  - D. In the projection of pleural sinus
  - E. In the 6th intercostal space along the posterior axillary line
2. A 36 year old patient was diagnosed with right-sided pneumothorax. What method of treatment is indicated to the patient?
  - A. Surgical treatment: drainage of the pleural cavity**
  - B. Symptomatic therapy
  - C. Thoracotomy
  - D. Pleural puncture
  - E. Antiinflammation therapy
3. The diagnosis of a right-sided pneumothorax is made to a 36- year-old patient. What method of treatment is indicated to the patient?
  - A. Drainage of the pleural cavity**
  - B. Symptomatic therapy
  - C. Antiinflammation therapy
  - D. Pleural puncture
  - E. Thoracotomy
4. 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. Symptomatic therapy
  - C. Antiinflammation therapy
  - D. Pleural puncture
  - E. Thoracotomy
5. A 24 y.o. male patient was transferred to the chest surgery department from general surgical department with acute post-traumatic empyema of pleura. On the X-ray: wide level horizontal of fluid on the right. What method of treatment should be prescribed?
  - A. Punction and drainage of pleural cavity**
  - B. Pneumoectomy
  - C. Lobectomy
  - D. Thoracoplasty
  - E. Decortication of pleura

6. 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?
- Valvular pneumothorax**
  - Closed pneumothorax
  - Open pneumothorax
  - Subcutaneous emphysema
  - Mediastinitis
7. 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?
- Drainage of the left pleural cavity followed by laparotomy**
  - Immediate laparotomy and alcohol-novocaine block of the X rib
  - Immediate upper median laparotomy followed by drainage of the left pleural cavity
  - Anti-shock actions followed by laparotomy after the arterial pressure rise
  - Left-sided thoracotomy immediately followed by laparotomy
8. 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?
- Pleural cavity drainage**
  - Analgetics
  - Oxygenotherapy
  - Intravenous infusions
  - Intubation
9. A 25-year-old victim of a road accident complains of chest pain, dyspnea. Objectively: the patient is in a grave condition, Ps- 120/min, AP- 90/70 mm Hg. There is pathological mobility of fragments of III-V ribs on the right. Percussion reveals a box sound over the right lung, breathing sounds cannot be auscultated on the right. What examination should be administered in the first place?
- X-ray of chest organs**
  - Pleural puncture
  - Bronchoscopy
  - USI of chest organs
  - Thoracoscopy
10. After the pneumatic dilatation of oesophageal structure a patient developed acute retrosternal pain getting worse when throwing the head back and swallowing. Objectively: dilatation of the neck veins, dropped beat pulse, signs of purulent

intoxication, oliguria, emphysema of the upper portion of chest. What disease can be suspected?

**A. Suppurative mediastinitis**

- B. Pleural empyema
- C. Spontaneous pneumothorax
- D. Acute myocardial infarction
- E. Thrombosis of the superior vena cava
- A. Tracheostomy

11. Esophagus wall of a 72 year old patient with severe concomitant pathology was injured during urgent fibroesophagogastroscopy. This resulted in progressing of acute respiratory failure and collapse of the left lung. What aid should be rendered?

**A. Drainage of pleural cavity by Bullaux method, mediastinum drainage, antibacterial therapy**

- B. Endoscopic closure of esophagus wound, drainage
- C. Left-sided thoracotomy, closure of esophagus and mediastinum wound
- D. Buelaus drainage of pleural cavity, antibacterial therapy
- E. Left-sided thoracotomy, closure of esophagus wound

12. 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. Vagosympathetic blockade
- C. Antibiotic administration
- D. Artificial ventilation of lungs
- E. Urgent thoracotomy

13. A 24-year-old patient had been delivered to the thoracic department with a chest injury, a fracture of the IV, V, VI ribs on the right. Plan radiography shows the fluid level in the pleural cavity reaching the III rib on the right. Puncture blood contained clots. What is the optimal treatment tactics?

**A. Emergency thoracotomy**

- B. Thoracentesis and thoracostomy
- C. Pleural puncture
- D. Hemostatic therapy
- E. Medical thoracoscopy

