

## Modern methods of diagnosis and treatment of diseases of the cardiovascular system. Syndromes of chest pain, respiratory and heart failure

1. A patient suddenly felt an acute chest pain irradiating to the left arm. Objectively: the patient is excited, with pale skin. Breathing rate - 38/min, AP - 180/110 mm Hg. Later the patient lost consciousness and fell down. Pulse on the great vessels was absent, the pupils were equally dilated. What is the most likely diagnosis?  
**A. Clinical death**  
B. Coma  
C. Disorder of the cerebral circulation  
D. Heart attack  
E. Agonal state
2. A 52 year old man has recurrent transient ischemic attacks. Auscultation of the carotid arteries detected murmur. What diagnostic method is to be applied in the first place?  
**A. Ultrasound dopplerography**  
B. MRI of the brain  
C. Electroencephalography  
D. Cerebral angiography  
E. CT of the brain
3. During dynamic investigation of a patient the increase of central venous pressure is combined with the decrease of arterial pressure. What process is proved by such combination?  
**A. Developing of cardiac insufficiency**  
B. Depositing of blood in venous channel  
C. Presence of hypervolemia  
D. Increase of bleeding speed  
E. Shunting  
F.
4. A 19 year old girl was admitted to emergency department: unconsciousness, cyanosis, myotic pupils are present, superficial breathing is 12/min. BP is 90/60 mm Hg, Ps- 78/min. Choose the action necessary in this clinical situation:  
**A. Controlled respiration**  
B. Oxygen inhalation  
C. Cordiamine injection  
D. Caffeine injection  
E. Gastric lavage
5. What develops most often after accidental intake of Hydrochloric acid?  
**A. Cardiac insufficiency**  
B. Deyladss syndrome  
C. Acute pancreatitis  
D. Cushings syndrome  
E. Kutlings syndrome

6. A 19 y.o. man was admitted to the reception department in 20 minutes after being wounded with the knife to the left chest. The patient is confused. The heart rate is 96 bpm and BP- 80/60 mm Hg. There are the dilated neck veins, sharply diminished apical beat and evident heart enlargement. What kind of penetrative chest wound complications has developed in patient?
- Pericardium tamponade**
  - Valve-like pneumothorax
  - Open pneumothorax
  - Massive hemothorax
  - Closed pneumothorax
7. A 30-year-old man has suffered from traffic accident. Consciousness is absent. Pulse on the carotid artery is undeterminable, no respiration. There is a wide leather belt on man's waist. What measures are to be taken?
- Conduct an artificial ventilation of lungs and closed-chest cardiac massage after having released from the belt**
  - Start immediate artificial ventilation of lungs and closed-chest cardiac massage
  - Do not touch the victim until the arrival of the police
  - Put the victim with his back on the shield
  - Turn the victim to the right side
8. An hour before an elective surgery, a 56-year-old patient of the surgical department got a dramatic increase in blood pressure, tachycardia, hand tremor. The patient is confused, anxious, depressed, fearful, is pessimistic about the operation outcome, refuses the surgery. What tactics should be chosen by a surgeon?
- Start the surgery after correction of blood pressure**
  - Predict the psychological state of the patient
  - Organize monitoring of the patient by his family members
  - Organize monitoring of the patient by medical personnel and mental health counselor
  - Isolate the patient
9. On the 2nd day after a surgery for toxic mixed goiter IV a 35-year-old patient complains of heart pain. ECG shows prolonged QT intervals. Chvostek's and Trousseau symptoms cannot be clearly defined. The patient is provisionally diagnosed with latent tetany. What study will allow to confirm the diagnosis?
- Determination of blood calcium and phosphorus**
  - Determination of potassium
  - Determination of thyroid hormones
  - Determination of sodium
  - Determination of thyrotropic hormone
10. 4 weeks after myocardial infarction a 56-year-old patient developed acute heart pain, pronounced dyspnea. Objectively: the patient's condition is extremely grave, there is marked cyanosis of face, swelling and throbbing of neck veins, peripheral pulse is absent, the carotid artery pulse is rhythmic, 130 bpm, AP is 60/20 mm Hg. Auscultation of heart reveals extremely muffled sounds, percussion reveals

heart border extension in both directions. What is the optimal treatment tactics for this patient?

- A. **Pericardiocentesis and immediate thoracotomy**
- B. Conservative treatment, infusion of adrenomimetics
- C. Pleural cavity drainage
- D. Oxygen inhalation
- E. Puncture of the pleural cavity on the left

11. A week ago a 65-year-old patient suffered an acute myocardial infarction, his general condition deteriorated: he complains of dyspnea at rest, pronounced weakness. Objectively: edema of the lower extremities, ascites is present. Heart borders are extended, paradoxical pulse is 2 cm displaced from the apex beat to the left. What is the most likely diagnosis?

- A. **Acute cardiac aneurysm**
- B. Acute pericarditis
- C. Recurrent myocardial infarction
- D. Cardiosclerotic aneurysm
- E. Pulmonary embolism