


ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of «Emergency medicine and nursing» Control and measuring means		044-57/11 () P 1 of 8

CONTROL AND MEASURING MEANS

Questions of the program for midterm control 1

Name of the discipline: «Emergency medical care-1»

Discipline code: EMC-5302-1

Name of EP: 6B10101«General medicine»


Number of academic hours (credits): 150 hours (5 credits)

Course and semester: 5 course, 9 semester

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Protocol № 11 from "18" 06 2024 y.

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of «Emergency medicine and nursing» Control and measuring means	044-57/11 () P 2 of 8

Shymkent, 2024 y.

Questions of the program for midterm control 1

1. Circulation medical sorting system.
2. Categories of urgency of calls, diseases by category, time allotted for call service.
3. Terminal conditions: degrees, clinic, emergency care.
4. Name the signs of clinical death.
5. Acute left ventricular failure, clinic, diagnosis, algorithm of emergency care.
6. Acute right ventricular failure, clinic, diagnosis, algorithm of emergency care.
7. Paroxysmal supraventricular non-pulse tachycardia, clinic, diagnosis, algorithm of emergency care.
8. Ventricular fibrillation, clinic, diagnosis, algorithm of emergency care.
9. Name the asystole clinic, diagnostic criteria, and emergency care algorithm.
10. Acute coronary syndrome, clinic, diagnosis, algorithm of emergency care.

Situational tasks:

1. Call an ambulance at home. The patient is 42 years old, according to his wife, he complained of prolonged chest pains that are not stopped by nitroglycerin for 45 minutes. During the examination, he lost consciousness. There is no respiration and pulse in the carotid artery. Pupils are dilated, there is no reaction to light. The skin is pale, cyanosis is observed.

Determine the patient's emergency condition.

Compose an algorithm of providing emergency care and justify each stage.


2. There was a call to home. An 18-year-old patient with insulin-dependent diabetes mellitus has been suffering from weakness, nausea, vomiting, apathy, and deafness during a week. According to doctor's recommendation she has been receiving 32 units of protophane, and 8 units of actrapid. A more precise medical history of the disease could not be clarified - the patient is from a socially disadvantaged family. There is a rubeosis of face. The skin and mucous membranes are dry. The skin turgor is decreased. «Soft» eyeballs. Heart tones are muffled. Pulse is of a small filling. The arterial pressure is 90/60 mm Hg. The breathing is deep and noisy. During the examination patient has lost consciousness. The required time for transportation to the Central district hospital is two hours.

Determine the patient's emergency condition.

Compose an algorithm of providing emergency care and justify each stage.

3. An elderly patient suddenly developed a sharp pain behind the sternum, followed by a dry cough, dizziness. A little later, dyspnea of the inspiratory type and cyanosis developed in combination with pallor of the skin. A pathological pulsation in the epigastric region is visually detected. Percussion noted an expansion of the right border of the heart, and auscultation found out an accent of the second tone and its bifurcation over the pulmonary artery.

Determine the patient's emergency condition.

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of «Emergency medicine and nursing» Control and measuring means	044-57/11 () P 3 of 8

Compose an algorithm for providing emergency care and justify each stage.

4. Patient L., 47-year-old, complains of severe bursting chest pain that has occurred 20-25 minutes ago, shortness of breath, dizziness, pain in the right hypochondrium, bloating, vomiting, and severe weakness. The patient's condition was found to be severe, there are severe cyanosis of the skin of cast-iron shade of the upper half of the body, swollen cervical veins, pulsation in the epigastric region, edema on the legs. The breathing is rare and arrhythmic, during an auscultation breathing is weakened on the right side. The heart tones are muted, the emphasis of tone II on the pulmonary artery and its bifurcation, there is also a systolic murmur. The blood pressure is reduced, tachycardia. The abdomen is swollen, there is a pain in the right hypochondrium, the liver is enlarged by four cm, painful.

Determine the patient's emergency condition.

Compose an algorithm of providing emergency care and substantiate each stage.

5. An attack occurred today in the morning after breakfast, the heart rate was exceeding 170 beats per minute, was accompanied by a sharp weakness, a feeling of fear, shortness of breath, squeezing pain in the heart. Patient could not manage with the attack herself. She called "103". Objectively: the patient is pale, frightened (1.5 hours have passed since the beginning of the attack). There is a vesicular respiration in the lungs, there is no wheezing, the respiratory frequency is 24 beats per one min. Heart sounds are loud, rhythmic, and there is no noise. The pulse is 190 beat per min., rhythmic, and of a small filling. The blood pressure is 105/70 mmHg. (the usual pressure is 120/70 mmHg). The abdomen is soft and painless. Liver at the edge of the costal arch.

Determine the patient's emergency condition.

Compose an algorithm of providing emergency care and justify each stage.

6. There is a call to the company's workshop to a 60-years-old patient. He complains of a sudden onset of an acute pain behind the sternum, dyspnea, cough with a mucous sputum streaked with blood. The patient prefers to lie down. The skin is pale grey, cyanotic, the neck veins are swollen, and there is a pulsation in the jugular region. The respiratory rate is 40 per min. The blood pressure is 90/60 mm Hg. The pulse is 120 per min.

The border of the relative cardiac dullness is displaced to the right. Systolic murmur on the pulmonary artery is heard. The liver is two cm below the costal margin. Cyanosis, hyperemia and edema of the left shin, soreness on palpation along the vascular bundle were found out.


Determine the patient's emergency condition.

Compose an algorithm for providing emergency care and substantiate each stage.

7. An elderly patient suddenly had acute pain behind the sternum, then a dry cough, dizziness. A little later, inspiratory dyspnea and cyanosis developed in combination with pallor of the skin. Pathological pulsation in the epigastric region is visually determined. Percussion is noted - the expansion of the right border of the heart, auscultatively - the accent of the II tone and its bifurcation over the pulmonary artery.

Determine the patient's emergency situation.

Compose an algorithm for providing emergency care and justify each stage.

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Department of «Emergency medicine and nursing» Control and measuring means	044-57/11 () P 4 of 8	

8. Call to patient K., 48 years old. Complaints of a sudden sharp pain behind the sternum, shortness of breath, cough with streaks of blood, which appeared when trying to get out of bed. A week ago, the patient underwent surgery for hemorrhoidal bleeding. Objectively: the condition is serious. The skin is diffusely cyanotic. Body temperature is 38C. There is swelling and pulsation of the cervical veins; epigastric pulsation, which increases during inspiration. The borders of the relative cardiac dullness are shifted one and a half cm to the right. Heart activity is rhythmic, the accent of the second sound over the pulmonary artery. Heart rate is 106 per 1 min., blood pressure-100/75 mm Hg. In the lungs under the shoulder blade on the right, breathing is weakened; a zone of fine bubbling rales is noted. Respiratory rate – 24 per 1 min. The abdomen is soft and painless. Liver protrudes from under the edge of the costal arch by 2 cm, painful on palpation. ECG: deep S wave in I lead; deep Q wave and negative T in III lead; displacement of the transition zone to the left; P waves in III leads, aVF, V1-2 are M - shaped deformed, widened. In the right thoracic leads, QRS complexes are of the rSR' or rsR' type, having an M-shaped appearance, and besides R' > r'. In the left thoracic leads, I, aVL – broadened and jagged S teeth.

Determine the patient's emergency condition.

Create an algorithm for providing emergency care and substantiate each stage.

9. Patient D., 54 years old, was taken to emergency room with complaints of intensive pain in the chest, accompanied with profuse sweating. The pain has started three hours ago. Repeated administration of nitroglycerin under the tongue had no effect. In the anamnesis: there is a long-term arterial hypertension. Objectively: the condition is serious. The patient is lethargic and sluggish. The skin is pale, cold when touching; there is diffuse cyanosis, "marble pattern" of the skin, and sticky sweat. There is no wheezing in the lungs. Breathing rate is 22 per 1 min. Heart tones are hard to hear. Heart rate is 100 per 1 min., blood pressure-90/60 mm Hg.

ECG: sinus tachycardia; horizontal position of the electrical axis of the heart, signs of left ventricular hypertrophy; Q wave lasts 0.04 s, domed rise of ST, turning into a negative T wave, decrease in the voltage of the R wave in V2-3 leads.

Determine the patient's emergency condition.


Create an algorithm for providing emergency care and substantiate each stage.

10. You are walking down the street and see an alarmed man who calls passers-by for help. To the question: "What have happened to you?" a passerby denotes the man, who is lying on the ground. The season is early autumn.

During examination: consciousness is absent, there are no visible signs of breathing, and the pulse on the carotid arteries is not detected. The skin is of earthy gray color, and is cold during touching. The stiffness in the limbs is determined. The pupils are wide and do not react to light.


Determine the patient's emergency condition.

Create an algorithm for providing emergency care and justify each stage.

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of «Emergency medicine and nursing» Control and measuring means	044-57/11 () P 5 of 8	

Questions of the program for midterm control 2

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Protocol № 11 from "18" 06 2024 y.

Questions of the program for midterm control 2

1. Hypoglycemic coma, clinic, diagnosis, algorithm of emergency care.
2. Hypertensive crises, classification, clinic, diagnosis, algorithm of emergency care.
3. Acute respiratory failure, clinic, diagnosis, algorithm of emergency care.
4. Clinic, diagnosis of asthmatic status, algorithm of emergency care. Indications for hospitalization.
5. Anaphylactic shock, classification, clinic, diagnosis, algorithm of emergency care.
6. Angioedema, clinic, diagnosis, algorithm of emergency care.
7. Myocardial infarction, clinic, diagnosis, algorithm of emergency care.
8. Drug allergy, classification, clinic, diagnosis, algorithm of emergency care.
9. Bronchospasm syndrome, clinic, diagnosis, algorithm of emergency care.
10. Laryngospasm, clinic, diagnosis, emergency care.

Situational tasks:


1. There is a call to home to 57-year-old patient K. There are complains of a headache in occipital region, vomiting, dizziness, flickering of flies in front of the eyes. From an anamnesis, it turned out that these phenomena developed today in the afternoon. He hadn't seen to a doctor before. Headaches have been bothering periodically during several years, but the patient did not attach any importance to them and did not go to doctors.

Objectively: the temperature is 36.4°C. The general condition is moderate. The skin is pale. Respiration is vesicular. The left border of relative cardiac dullness is one cm outward from the midclavicular line. The heart tones are muted, sharp accent of the second tone on the aorta. The heart rate is 92 per min, pulse is firm, tense, 92 per min. The blood pressure is 200/110 mm Hg. No abdominal pathology was detected.

Determine the patient's emergency condition.

Compose an algorithm for providing emergency care and justify each stage.

2. Patient N., 58 years old, went to the emergency department with complaints of pain in the occipital region, such as knife pains of the left half of the chest, general weakness. Suffers from arterial hypertension for 5 years, the blood pressure norm is 150/80 mmHg. He does not take antihypertensive drugs consistently. Objectively: general condition of moderate severity. The

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA АКАДЕМИАСЫ «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of «Emergency medicine and nursing» Control and measuring means	044-57/11 () P 6 of 8

face is hyperemic. The relative border of the heart is shifted to the left 1.5 cm. The work of the heart is rhythmic, the accent of the II tone is above the aorta, there is a weak systolic noise in the heart area, there is no wheezing. Breathing - 22 times per minute. The belly is soft, painless. The liver and spleen are not enlarged. There are no peripheral edema. ECG: the amplitude of the R wave on V5-6 and the amplitude of the S wave on V1-2 are increased, R1 = 25mm, on leads V5-6, I, and VL segment RS-T is shifted below the isoline, on leads V5-6, I, and VL the T wave is two-phase.

Determine the patient's emergency situation.

Compose an algorithm for providing emergency care and justify each stage.

3. You were called to the canteen of the company. A 20-year-old man has developed a convulsive cough and a difficult breathing during a hasty meal and conversation. He complains about the pain in the larynx. The patient is confused, speaks with difficulty, and is afraid. The face is cyanotic. There is a wispiness of the voice. The attacks of convulsive coughing and noisy breathing with difficulty inhaling are being periodically repeated. A body weight corresponds to the patient's height.

Determine the patient's emergency condition.

Compose an algorithm for providing emergency care and justify each stage.

4. There is a 50-year-old man with complaints of expiratory dyspnea of a paroxysmal nature, a cough with difficult-to-remove mucosal sputum. The patient suffers from bronchial asthma. The deterioration of a common condition is associated with a previous acute respiratory viral infection. He was to increase a number of berodual inhalations up to 10 times. During the last two days, the attack is not completely being stopped. Patient's condition is serious. Orthopnea. The respiratory rate is 24 per min. There is a loud, whistling exhalation. The skin is cyanotic, covered with sweat. The breathing is weak, there are areas of "dumb" lungs. The heart rate is 120 per min. The blood pressure is 140/90 mm Hg.

Determine the patient's emergency condition.

Compose an algorithm for providing emergency care and justify each stage.


5. The ambulance team was called to the home to a 30-year-old woman who complains of fever up to 39 during five days, weakness, sweating, pain and heaviness in the right side of the chest, cough with a small amount of sputum, shortness of breath.

Objectively: the patient is forced to sit down due to shortness of breath. The right side of the chest is behind the act of breathing, and the vocal tremor is sharply weakened here. The percussive sound is abruptly shortened. During auscultation on the right side, sharply weakened breathing is heard in the middle parts of the lung, and the breathing is not detected in the lower parts. Pulse rate is 110 beats/min. Blood pressure is 90/60 mm Hg.

Determine the patient's emergency condition.

Compose an algorithm for providing emergency care and substantiate each stage.

6. At night, an ambulance team was called to the home to a 40-year-old patient, who complained of the lack of air (he was to sit up in the bed and to lower his legs), dyspnea with obstructed inspiration, dry cough, extremely weakness, fear of death. In anamnesis, he had massive heart attack two years ago. Objectively: the skin is cyanotic and moist. In the lungs, on the

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Department of «Emergency medicine and nursing» Control and measuring means	044-57/11 () P 7 of 8

background of weakened vesicular respiration, wet wheezing, mainly in the lower parts, is heard. Heart sounds are muffled, rhythmic, pulse is 98 beats/min. Blood pressure is 160/90 mm Hg. Determine the patient's emergency condition.

Compose an algorithm for providing emergency care and substantiate each stage

7. Patient N., 58 years old, went to the emergency department with complaints of pain in the occipital region, such as knife pains of the left half of the chest, general weakness. Suffers from arterial hypertension for 5 years, the blood pressure norm is 150/80 mmHg. He does not take antihypertensive drugs consistently. Objectively: general condition of moderate severity. The face is hyperemic. The relative border of the heart is shifted to the left 1.5 cm. The work of the heart is rhythmic, the accent of the II tone is above the aorta, there is a weak systolic noise in the heart area, there is no wheezing. Breathing - 22 times per minute. The belly is soft, painless. The liver and spleen are not enlarged. There are no peripheral edema. ECG: the amplitude of the R wave on V5-6 and the amplitude of the S wave on V1-2 are increased, R1 = 25mm, on leads V5-6, I, and VL segment RS-T is shifted below the isoline, on leads V5-6, I, and VL the T wave is two-phase.

Determine the patient's emergency situation.

Compose an algorithm for providing emergency care and justify each stage.

8. Patient V., 43 years old, went to the paramedic with complaints of daily attacks of suffocation, particularly, exhalation is difficult, general weakness, malaise. After the attack, there is a small amount of viscous vitreous sputum. She is being ill for two years, exacerbation in early autumn. The patient is allergic to penicillin.

Objectively: the condition is of moderate severity. The patient is sitting with her hands on the edge of the bed. The skin is clean, with a cyanotic tint. The chest is barrel-shaped, the intercostal spaces are dilated, and there is swelling of the cervical veins, the involvement of auxiliary muscles. Breathing is noisy, 22 breathing movements per minute. During percussion, a box sound is noted, auscultation revealed dry wheezing sounds on the background of weakened vesicular respiration. Respiratory rate is 22 per minute. Heart sounds are rhythmic, clear, 92 beats/minute, blood pressure is 140/70 mm Hg.

Determine the patient's emergency condition.


Create an algorithm for providing emergency care and justify each stage.

9. Patient G., 54 years old. Complaints of shortness of breath. He has been suffering from asthma for nine years. Takes eufillin, and berotek inhalations. The attacks are repeated three-four times a month. This deterioration of the condition occurred an hour ago, inhalation of berotek was without effect. Objectively: consciousness is clear, skin is cyanotic, and there is an expiratory dyspnea. In the lungs, hard breathing, dry wheezing. Respiratory rate is 21 per min, heart rate is 92 in min. Blood pressure is 130/90 mm Hg, PEF-80% of the norm.

Determine the patient's emergency condition.

Create an algorithm for providing emergency care and justify each stage.

10. Patient N., 42 years old, complains of an attack of suffocation with predominant difficulty in exhaling, spastic unproductive cough. The first reported symptoms appeared during the full flowering season three years ago. Since then, the attacks resume when contacting with household chemicals, perfumes.

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA АКАДЕМИАСЫ «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of «Emergency medicine and nursing» Control and measuring means	044-57/11 () P 8 of 8

Objectively: the condition is of moderate severity. Physical activity is limited. The patient is agitated. Speech is limited to short phrases. There is pronounced retraction of the jugular fossa, the involvement of auxiliary respiratory muscles. Patient's position: standing with hands resting on the windowsill. The limits of relative dullness of the heart are within the normal range. Heart activity is rhythmic. Heart rate is 90 per min, blood pressure-130/90 mm Hg. In the lungs, breathing is weakened, dry scattered wheezes in all the pulmonary fields. Respiratory rate – 27 per min.


The abdomen is soft and painless. The liver and spleen are not enlarged.

Peak flowmetry: PEF: 60% of the required value.

Determine the patient's emergency condition.

Create an algorithm for providing emergency care and substantiate each stage.

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