


ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of "Emergency Medical Care and Nursing"	044-57/11 ()
Methodological recommendations for teachers on teaching clinical skills at the Practical Skills Center (using the implementation algorithm)	P 1 of 8

Methodological recommendation for teachers on teaching clinical skills at the Practical Skills Center

(using the execution algorithm)

Specialty: 6b10101 "general medicine"

Subject: "Emergency Medical Care - 1, 2"

Course: 5

Department: emergency medical care and nursing

Developer: Yerimbet B. M.



1. Name of clinical skill: Algorithm of extended cardiopulmonary resuscitation (not a shock rhythm)

2. Learning objectives: To have advanced CPR skills.

3. Time required for preliminary instruction and demonstration of the skill on a dummy: 5 min.

4 Time required for self-mastery of the skill: 10 min.

5. The necessary theoretical knowledge to master the clinical skill:

- advanced resuscitation algorithm
- algorithms and indications of defibrillation
- contraindications to defibrillation
- ensuring the patency of the respiratory tract and ventilation
- reversible causes
- diagnosis and treatment of reversible causes of circulatory arrest
- ways of drug administration
- medications for CPR

6. A list of simulators, mannequins, models, visual aids: a dummy simulator "Volodya" for extended cardiopulmonary resuscitation.

7. List of medical devices and equipment: masks, sterile gloves, Ambu bag, laryngoscope, intubation tube, venous catheter, electric pump, sterile cotton balls, syringes for injection 2.0, 5.0, 10.0, 20.0 ml, oxygen for inhalation, 70% ethyl alcohol solution, saline solution (0.9% - 400.0 ml), epinephrine 0.18% -1.0 ml, atropine 0.1% -1.0 ml (1 mg).

8. Skill execution algorithm:

№	Step-by-step actions		Execution		
			Yes	No	Remark
1	Assessment of vital parameters. Patient preparation. Performing one CPR period	Assessment of consciousness (call out and pat on the shoulders) Put on a flat surface, free the chest from clothes, raise the tip of the legs by 30-40 degrees, ensure the patency of the upper respiratory tract. Assessment of breathing (see, hear, feel). Assessment of the circulatory system (pulsation of the carotid artery on both sides). Performing one CPR period (5 cycles of 30 compression; 2 times of ventilator)			


2	Heart rate assessment using a defibrillator.	Turning on the defibrillator Installing electrodes, connecting a monitor, determining the type of circulatory arrest. Defibrillation is not required.			
3	Provision of venous access	Venipuncture of the peripheral vein.			
4	Drug administration	Intravenous administration of 1 mg of epinephrine, 10 ml of isotonic sodium chloride solution. Repeat every 3-5 minutes.			
5	Performing one CPR period	Performing one CPR period (5 cycles of 30 compression; 2 times of ventilator)			
6	Heart rate assessment using a defibrillator.	Defibrillation is not required.			
7	Performing one CPR period	Performing one CPR period (5 cycles of 30 compression; 2 times of ventilator)			
8	Drug administration	Atropine 0.1% IV or 1.0 ml (1 mg) per bone. Repeat every 3 minutes. If the standard dose does not help, the dose can be increased to 3 mg, the total to 0.04 mg / kg.			
9	Status monitoring	Heart rate measurement, oxygen saturation and capnography			
	Total:				

9. Tasks:

- Assessment of the patient's condition.
- Conducting extended cardiopulmonary resuscitation according to the protocol.

**10. Materials for self-assessment on the topic of the lesson:****Test questions:**

1. Brain death is indicated by the results
 - A.ECG
 - B.spirometry
 - C.phonocardiography
 - D.electroencephalograms
2. The main signs of clinical death
 - A.filamentous pulse on the carotid artery
 - B.absence of pulse on the radial artery
 - C.absence of a pulse on the carotid artery
 - D.Pupil dilation
3. The first stage of resuscitation measures
 - A. "Safar's triple reception"
 - B. VENTILATOR
 - C. Indirect heart massage
 - D. ensuring the patency of the respiratory tract
4. Indications for cardiopulmonary resuscitation
 - A. agony and pre-diagonal state
 - B. all suddenly developed terminal conditions
 - C. Clinical death
 - D. Clinical death and biological death
5. When a corpse is found, the SMP paramedic interacts
 - A.with the SMP dispatcher
 - B.with relatives of the victim
 - C.with employees of the internal affairs bodies
 - D.with the senior doctor of the SMP station
6. In case of cardiac arrest, a combination of drugs is used
 - A. adrenaline, cordarone
 - B. atropine, mezaton, sodium bicarbonate
 - C. Calcium chloride, lidocaine, mezaton
 - D. Euphyllin, potassium chloride, sodium bicarbonate
7. During indirect heart massage, compression on the sternum of an adult is performed
 - A.with the whole palm
 - B.With one finger
 - C.The proximal part of the palm
 - D.Three fingers
8. A single dose of adrenaline during cardiopulmonary resuscitation for an adult
 - A.0,5-1,0 ml of 0.1% solution
 - B.1,0-1,5 ml of 0.1% solution
 - C. 2.0 ml of 0.1 % solution
 - D.up to 0.5 ml of 0.1 % solution
9. The location of the palm during indirect heart massage
 - A. in the 5th intercostal space on the left
 - B.at the border of the upper and middle third of the sternum
 - C. on the lower third of the sternum
 - D.in the middle of the sternum

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10. Resuscitation studies questions
- A. diagnosis of clinical death
 - B. Treatment of post-resuscitation disease
 - C. Prevention of extreme conditions
 - D. Functioning of basic life systems


11. Criteria for evaluating the performance of the skill:

№	Implementations	Evaluation criteria
1	Completed	According to the clinical skills, the student completed 9 step-by-step actions. Correctly assessed the condition of the unconscious patient and completely performed cardiopulmonary resuscitation. Correctly assessed the effectiveness of the activities carried out.
2	Partially completed	According to the clinical skills, the student completed 4-5 steps of 9 step-by-step actions. He did not fully assess the condition of the unconscious patient and performed cardiopulmonary resuscitation. I did not correctly determine the effectiveness of the activities carried out.
3	Failed:	According to clinical skills, the student did not complete 9 step-by-step actions. I could not correctly assess the condition of the unconscious patient and perform cardiopulmonary resuscitation. I did not evaluate the effectiveness of the activities carried out.

12. Literature:

Basic literature:

1. The State program for the development of healthcare of the Republic of Kazakhstan "Densalyk" for 2021-2024
2. Order of the Ministry of Health of the Republic of Kazakhstan dated July 3, 2017 No. 450 "On approval of the Rules for emergency medical care in the Republic of Kazakhstan".
3. Vertkin A., Sveshnikov K. Guidelines for emergency medical care. Moscow. - Publishing House E. – 2017. – 560 p.
4. Emergency care in a therapeutic clinic. Edited by A.V. Gordienko. – SpecLit. – 2017. – 229 p.
5. Emergency outpatient cardiology: a brief guide / V. V. Ruksin. - 2nd ed. - Moscow: GEOTAR-Media, 2016.- 255 s

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6. Emergency medical care. Clinical recommendations. Edited by S.F. Bagnenko. - GEOTAR-Media. – 2018. – 896 p.

Additional literature:

1. Emergency cardiology. Edited by P.P. Ogurtsov, V.E. Dvornikov. - GEOTAR-Media. – 2016. – 272 p.
2. Clinical protocol of diagnosis and treatment "Sudden death". Approved by the Joint Commission on the Quality of Medical Services of the Ministry of Health of the Republic of Kazakhstan dated June 23, 2016. Protocol No. 5.
3. Emergency medical care. Clinical recommendations / ed.: S.F. Bagnenko. - M.: [B. I.], 2015. - 871 p.
4. Emergency care for children: reference book: trans. from it. / - Moscow : Medpress-inform, 2014.

**13. The standard of correct answers for the assessment material:**

№	the answers
1	D
2	B
3	D
4	C
5	C
6	A
7	C
8	A
9	C
10	A