


ОҢТҮСТІК ҚАЗАҚСТАН <b>MEDISINA</b> <b>AKADEMIASY</b> «Оңтүстік Қазақстан медицина академиясы» АҚ	 <b>SKMA</b> -1979-	SOUTH KAZAKHSTAN <b>MEDICAL</b> <b>ACADEMY</b> АО «Южно-Казахстанская медицинская академия»
Department of Emergency Medicine and Nursing		044-57/19 ( )
Methodological recommendation for teachers on teaching clinical skills at the practical skills Center		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»  
**Discipline:** «Emergency medical care 1, 2»  
**Course:** 5  
**Department:** «Emergency medical care and nursing»  
**Compiled by:** Yunusmetov E.Sh.





ОҢТҮСТІК ҚАЗАҚСТАН <b>MEDISINA</b> <b>AKADEMIASY</b> «Оңтүстік Қазақстан медицина академиясы» АҚ	 <b>SKMA</b> -1979-	SOUTH KAZAKHSTAN <b>MEDICAL</b> <b>ACADEMY</b> АО «Южно-Казахстанская медицинская академия»
Department of Emergency Medicine and Nursing		044-57/19 ( )
Methodological recommendation for teachers on teaching clinical skills at the practical skills Center		P 3 of 8

**1. Name of the current skill:** Algorithm for providing care for anaphylactic shock.

**2. Learning objectives:** To learn how to assess the condition of patients, to get acquainted with the causes and manifestations of anaphylactic shock, to learn how to conduct timely emergency care.

**3. Time for briefing and working with mannequins:** 7 min.

**4. Time to acquire skills:** 30 min.

**5. Required theoretical knowledge of the skill:**

**Basic knowledge:**

- the main types of allergic reactions;
- methods of diagnosis of anaphylactic shock;
- basic clinical skills;
- the main medicines used in the emergency care of anaphylactic shock.

**By topic of the lesson:**

- the sequence of emergency medical care measures for allergic reactions;
- ensuring the patency of the respiratory tract and the safety of the patient during the entire time of the skill;
- the technique of suction of mucus from the respiratory tract;
- conducting emergency care;
- evaluation of the effectiveness of care for anaphylactic shock;
- errors during emergency care.

**6. Simulator, simulator, dummy, list of models:** intravenous injection simulator, ANNE simulator, nebulizer, phonendoscope, tonometer.

**7. List of medical instruments and equipment:** masks, sterile gloves, sterile bandages, Ambu bag, syringe, patch, 70% alcohol, cotton wool, anti-shock styling, bronchodilators and antihistamines, phys. solution, recycling box.

**8. The execution of skill:**

№	Step-by-step actions	Execution		
		Yes	Yes	Yes
1	Ascertaining anaphylaxis in a patient. Stopping drug infusion. The introduction of epinephrine in / m 0.01 mg / kg. Stop drug administration, remove insect sting, etc. Above the injection site of the medication or sting, if possible, apply a tourniquet, prick it crosswise, and apply ice.			
2	Lay horizontally. Lift the foot end up 40-45°. Turn your head to the side. Extend the lower jaw.			
3	Open a window or supply oxygen. Oxygen enters through a mask, nasal catheter, or through an airway tube, which is installed while maintaining spontaneous breathing and unconsciousness. Catheterization of two peripheral veins. Monitor blood pressure, pulse, respiratory rate, control the level of oxygenation.			
4	When bronchial obstruction, salbutamol 2ml through a			

	spacer or nebulizer. If broncho-obstruction persists, repeat inhalation + aminophylline 5-6 mg / kg (12-15 ml) 2.4% solution IV for physical. solution;			
5	With stridor, adrenaline through a nebulizer 2-5 ml.			
6	IV physical solution 20 ml / kg. The total volume is 1-2 liters.			
7	If there is no stabilization of blood pressure, repeat IV adrenaline, - dopamine 4% -5ml + 500 ml of 0.9% sodium chloride solution 28-30 drops (10 µg / kg / min) per minute. If there is no effect - norepinephrine - 2-4 mg (1-2 ml of 0.2% solution), diluted in 500 ml of 0.9% sodium chloride solution, with an infusion rate of 4-8 µg / min until blood pressure stabilizes;			
8	<ul style="list-style-type: none"> <li>• dexamethasone 16-20 mg IV;</li> <li>• prednisolone 120-150 mg IV;</li> </ul>			
9	H1-histamine blockers: - Clemastine 0.1% -2 ml (2 mg), intravenously or intramuscularly; - chloropyramine hydrochloride 0.2%, intravenously or intramuscularly 1-2 ml; - diphenhydramine 25-50 mg. H2-histamine blockers: Ranitidine -150mg or famotidine 20mg IV.			
10	Send for admission to the intensive care unit.			

### 9. Tasks:

- Assessment of the patient's condition.
- Emergency care for anaphylactic shock.

### 10. The materials for the lesson:

#### Test questions:

1. Correlate the correct pathophysiological mechanism in anaphylactic shock to the stage of intensive therapy:

A. a sharp increase in preload, a decrease in vascular tone. The use of glucocorticosteroids, adrenaline

B. increased permeability of functional tissue barriers. The use of infusion therapy for the elimination of sludge syndrome

C. the development of DIC syndrome against the background of a decrease in the volume of blood flow. The use of glucocorticosteroids to prevent hypocoagulation


D. a sharp decrease in preload, vascular tone. The use of infusion therapy, adrenaline, prednisone

E. decrease in preload, moderate increase in postload, decrease in blood pressure. The use of glucocorticosteroids as an inotropic drug


2. The patient developed clinical death "at the tip of the needle" after intravenous administration of sibazone. The most probable cause of clinical death:

A. acute myocardial infarction

B. anaphylactic shock

ОҢТҮСТІК ҚАЗАҚСТАН <b>MEDISINA</b> <b>AKADEMIASY</b> «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN <b>MEDICAL</b> <b>ACADEMY</b> АО «Южно-Казахстанская медицинская академия»
Department of Emergency Medicine and Nursing	044-57/19 ( )
Methodological recommendation for teachers on teaching clinical skills at the practical skills Center	P 5 of 8

- C. pulmonary embolism  
 D. septic shock  
 E. cerebral edema
3. The drug of choice for anaphylactic shock is:  
 A. adrenaline  
 B. antihistamines  
 C. antibiotics and hormones  
 E. calcium chloride
4. The lightning-fast form of anaphylactic shock is characterized by:  
 A. slow development, a collaptoid state  
 B. minor hemodynamic disorders, the patient is conscious  
 C. rapid development, a collaptoid state  
 D. convulsions bronchospasm, pallor of the skin, blood pressure 80/40 mmHg,  
 E. swelling of the face, tongue, decreased blood pressure, tachycardia
5. The forms of anaphylactic shock do not include:  
 A. hemodynamic  
 B. asphyxiating  
 C. abdominal  
 D. infectious  
 E. typical
6. The initial dose of adrenaline in anaphylactic shock is ... ml  
 . A. 1  
 B. 2  
 C. 3  
 D. 1.5  
 E. 0.5
7. The estimated dose of prednisone for anaphylactic shock is ... mg / kg  
 . A. 0.5  
 B. 0.1  
 C. 1  
 D. 5  
 E. 2
8. The patient, 15 minutes after the start of transfusion, had shortness of breath, chills, headache, abdominal pain, a sharp decrease in blood pressure, tachycardia, the complication observed in the patient is ... .  
 A. air embolism  
 B. anaphylactic shock  
 C. hyperkalemia  
 D. acute myocardial infarction  
 E. hemorrhagic shock
9. An immediate threat to life in anaphylactic shock is  
 A. violations of the patency of the upper respiratory tract  
 B. swallowing disorders  
 C. arterial hypertension  
 D. skin rashes  
 E. abdominal pain

ОҢТҮСТІК ҚАЗАҚСТАН <b>MEDISINA</b> <b>AKADEMIASY</b> «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN <b>MEDICAL</b> <b>ACADEMY</b> АО «Южно-Казахстанская медицинская академия»
Department of Emergency Medicine and Nursing	044-57/19 ( )
Methodological recommendation for teachers on teaching clinical skills at the practical skills Center	P 6 of 8

10. Any form of anaphylactic shock is characterized by the presence of
- A. generalized seizures
  - B. pronounced hemodynamic disorders
  - C. laryngeal edema
  - D. skin rashes
  - E. abdominal pain syndrome

### 11. Criteria for the evaluation of the implementation of:

**Completed:** according to clinical skills, the student completed 10 step-by-step actions. Correctly assessed the patient's condition and carried out effective emergency care completely correctly. Correctly assessed the effectiveness of the activities carried out.

**Partially completed:** according to clinical skills, the student completed 5-6 steps of 10 step-by-step actions. I did not fully assess the patient's condition and performed emergency care. I did not correctly determine the effectiveness of the activities carried out.

**Not completed:** according to clinical skills, the student did not complete 10 step-by-step actions. I could not correctly assess the patient's condition and emergency care. The effectiveness of the activities carried out was not evaluated.


### 12. References:

#### Basic literature:

1. The state program of healthcare development of the Republic of Kazakhstan "Health" on 2021-2024 years
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. – E. publishing house – 2017. - 560 p.
4. Emergency care in a therapeutic clinic. Under the editorship of A. V. Gordienko. - Speclit. - 2017. - 229 p.
5. Urgent outpatient and polyclinic cardiology: a brief guide / V. V. Ruksin. - 2nd ed. - Moscow: GEOTAR-Media, 2016. - 255 p
6. Emergency medical care. Clinical recommendations. Under the editorship of S. F. Bagnenko. - GEOTAR-Media. - 2018. - 896 p.

#### Additional literature:

1. Acute cardiac care. 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. by S. F. Bagnenko, Moscow: [B. I.], 2015. -871 p.
4. Emergency care for children: Handbook: translated from German. / - M. : Medpress-inform, 2014.

ОҢТҮСТІК ҚАЗАҚСТАН <b>MEDISINA</b> <b>AKADEMIASY</b> «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN <b>MEDICAL</b> <b>ACADEMY</b> АО «Южно-Казахстанская медицинская академия»
Department of Emergency Medicine and Nursing		044-57/19 ( )
Methodological recommendation for teachers on teaching clinical skills at the practical skills Center		P 7 of 8

**13. Standard of correct answers based on evaluation materials:**

<b>1</b>	<b>Д</b>
<b>2</b>	<b>В</b>
<b>3</b>	<b>А</b>
<b>4</b>	<b>С</b>
<b>5</b>	<b>Д</b>
<b>6</b>	<b>Е</b>
<b>7</b>	<b>Е</b>
<b>8</b>	<b>В</b>
<b>9</b>	<b>А</b>
<b>10</b>	<b>В</b>