Methodological guidelines for the acquisition of clinical skills in the TDO (using the execution algorithm)

Methodological manual for the teacher on teaching clinical skills at the Center for practical skills (using the algorithm of execution)

Rules and techniques for measuring blood pressure.

Specialty: GM Course: 2

Department: "Introduction to the clinic"

Compiled by: Orynbasar S



OŃTÚSTIK QAZAQSTAN

MEDISINA

AKADEMIASY

«Оңтүстік Қазақстан медицина академиясы» АҚ

DEPARTMENT OF «Introduction to the clinic»

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Reviewed and discussed at the meeting of the department Protocol No. 5 25 .11.2022

Head of the Department

Zhumadilova A.R.

- 1.Name of the clinical skill: Measurement of arterial pressure
- **2.The purpose of the training:** Blood pressure measurement and first aid.
- **3.Time required for preliminary instruction and demonstration of the skill on a dummy:** 5 minutes.
- 4. Time required to master the skill on your own: 10 minutes
- **5.Learning objectives:**

The student should know:

- * San.epid mode of the treatment room
- * The procedure for performing i $\setminus v$, i $\setminus m$, in $\setminus d$ for injections with an increase in blood pressure
- * Procedure for the use of drugs
- * Know the specifics of the administration of antihypertensive drugs

The student must be able to.

* Be able to provide first aid to a patient with a sudden increase in blood pressure6. Trainer: AD-MER

Theoretical knowledge necessary for mastering clinical skills:

- 1 Ability to correctly find the topographical location of the ulnar artery.
- 2 Ability to communicate with patients.
- 3 Proficiency in general deontological theories.
- 4 Mastery of sterilization measures.
- 5 Mastering the correct placement of the cuff of the tonometer.
- **7.List of medical devices and equipment:** blood pressure monitor, medications to reduce blood pressure.

8.Execution algorithm:

			Evaluation criteria	
	The algorithm of events	not	yes	
№		0	1	
1	Introduce yourself Explain the upcoming manipulation and get the patient's consent			
2	Wash your hands, put on gloves			
3	To seat or lay the patient, depending on his condition			
4	Expose the patient's hand, placing it palm up, at the level of the heart and place a roller or fist under the patient's elbow			
5	Place the cuff of the tonometer on the patient's shoulder by -3 2cm above the elbow bend (a finger should pass freely between the cuff and the			

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	patient's hand)	
6	Find pulsation palpation on the elbow apteria, attach a phonendoscope and connect the cuff with the tonometer	
7	Gradually pump air with a balloon until the pulsation disappears + 20-30 mm of mercury column in addition	
8	With the help of the cylinder valve, gradually reduce the movement in the cuff by opening the valve slightly with the thumb and index finger of the right hand counterclockwise	
9	To remember the appearance of the first tone on the scale on the tonometer is systolic pressure. Note on the scale on the tonometer the cessation of the last loud tone, with a gradual decrease in pressure - this is diastolic pressure.	
10	To get accurate results, measure the pressure 3 times on different hands. Take the minimum value of A\D and write the data to the dynamic observation sheet	

Evaluation criterion

Time allotted for the task - 5 minutes

Maximum score: (100%)

Score: (%)

Full name and signature of the teacher who evaluated the criterion:

Test

- 1. A 63-year-old woman complains of severe headaches and heart disease. The patient's face is puffy, the eyelids are swollen, blood pressure is 180/120 mm Hg. define an emergency
- 1) angina pectoris;
- 2) hypertensive crisis;
- +3) heart asthma;
- 4) myocardial infarction;
- 5) pulmonary edema
- 2. The patient must have a nosebleed during the emergency room
- 1) turned to the left;
- 2) lowered, chin pressed to the chest;
- + 3) turned to the right;
- 4) throw back;
- 5) doesn't matter.
- 3. It is recommended to use for emergency treatment of high blood pressure.
- 1) nifedipine;

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- 2) nitroglycerin;
- 3) nalaxone;
- +4) captopril;
- 5) Norvax.
- 4. Complicated hypertensive crisis is characterized by
- 1) sudden onset;
- 2) tachycardia;
- 3) a significant increase in blood pressure;
- + 4) moisture of the skin;
- 5) increase in pulse pressure.
- 5. A 57-year-old woman complains of severe headache, pain in the heart. The patient's face is puffy, the eyelids are edematous, BP is 170/110 mm Hg. Art. Define an emergency
- 1) angina attack;
- 2) hypertensive crisis;
- 3) pulmonary edema.
- 4) myocardial infarction;
- +5) cardiac asthma;
- 6. Hypertensive crisis is a condition characterized by
- 1) loss of consciousness;
- 2) a sharp decrease in blood pressure;
- 3) a sharp increase in blood pressure;
- + 4) involuntary urination;
- 5) convulsions.
- 7. Hypoglycemic coma develops when
- 1) untimely food intake;
- + 2) violation of the diet;
- 3) excess weight;
- 4) insufficiency of thyroid function;
- 5) cessation of insulin administration.
- 8. Hypoglycemic state is characterized by
- 1) bradycardia;
- 2) dry skin;
- 3) convulsions;
- 4) feeling of hunger;

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+ 5) all of the above is true.

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- 9. The head of a patient with a nosebleed in emergency care should be
- 1) turned to the left;
- 2) lowered down, the chin is pressed to the chest;
- + 3) turned to the right;
- 4) thrown back;
- 5) doesn't matter.
- 10. Which of the drugs is not used in hypertensive crisis
- 1) lasix;
- 2) no-shpa;
- + 3) clonidine:
- 4) magnesium sulfate;
- 5) nifedipine.

Performance evaluation criteria:

Completely completed the task.

Did not complete the task in whole or in part.

Didn't complete the task at all.

Answers: 1-s 2-s 3-d 4-d 5-s 6-d 7-b 8-e 9-d 10-s

Literature:

- 1) change the templates (images) of SOPs for PHC (rules, instructions, procedures, algorithm) of the Accreditation Center (as of 06/06/2013) with additions by the participants of the workshop on 05/27/2013.
- 2) CINAHL NursingbEBSCO Publishing, (Ipswich, Massachusetts), 2018 Dec 28.:
- 3) http://web.b.ebscohost.com/nup/detali/vid=4&sid=b85faf7c-a1be-4631-85a-c2004b2046ee%40pdc-

vsesssmgr01&bdata=JnNpdGU9bnVwLWxpdmUmc2NvcGU9c210ZQ%3d#AN =T703863&db=nup

- 4) Methodological recommendations "Standardization of clinical and non-clinical production processes in medical organizations, their implementation and monitoring", RSE on REM "RCHR" of the Ministry of Health of the Republic of Kazakhstan, 2017.
- 5) American Association of Critical Nurses. (2016). AACN practice alert: Obtainig accurate noninvasive blood pressure measurements in adults.Retrieved November 28, 2018, from https://www.aacn.org/clinical-resources/practicealerts/obtaining-accurate-noninvasive-blood-pressure-measurements-in- adults (PP)

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6) American Heart Association. (2017).Monitoring your blood pressure at home.Retrieved November 29, 2018, from https://www.heart.org/en/health-topics/highblood-pressure/understanding-blood-pressure-readings/monitoring-your- bloodpressure-at-home.