

**Control and measuring means  
List of practical skills in the discipline**

**Discipline:** «Propaedeutics of pediatric diseases»

**Code of discipline:** PPD 3226

**Name of EP:** 6B10115 «Medicine»

**Amount of study hours/credits:** 150 hours/5 credits

**Course and semester of study:** 3rd year, 7 semester

<b>ОҢТҮСТІК-ҚАЗАҚСТАН MEDISINA АКАДЕМИЯСЫ</b> <b>«Оңтүстік Қазақстан медицина академиясы» АҚ</b>	 <b>SOUTH KAZAKHSTAN MEDICAL ACADEMY</b> <b>АО «Южно-Казахстанская медицинская академия»</b>
Department of Pediatrics 1	38/11
Lecture complex on discipline "Propaedeutics of pediatric diseases "	Page 2.from 8

Compiler:

1. Head of Department, PhD Kemelbekov K.S
2. Associate Professor Baimakhanova B.B
3. Assistant Absadyk A.E

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Head of the Department, PhD ass. professor



K. S. Kemelbekov.

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### Nebulizer therapy in children

<b>№</b>	<b>Criteria for assessing steps</b>	<b>Score in points</b>			
1.	Introduced oneself to the patient, explained the purpose of the medical intervention, received patient consent. Conducted hand hygiene. Put on gloves.	0,5	0,3	0,2	0,1-0
2.	He placed the patient comfortably on a chair. Checked the child's free nasal breathing.	0,5	0,3	0,2	0,1-0
3.	He explained to patient the principle of process of the nebulizer	0,5	0,4	0,2	0,1-0
4.	Prepare the necessary equipment	0,5	0,4	0,2	0,1-0
5.	Correctly assembled the nebulizer: in a plastic tube connected the atomizer, in the upper tube (directed to the patient) attached the mouthpiece (or mask)	0,5	0,4	0,3	0,1-0
6.	Connect the machine to the electricity and pressed the "enter" button	0,5	0,4	0,3	0,1-0
7.	After the procedure, the child rinsed his mouth with boiled water cooled to room temperature.	0,5	0,4	0,3	0,1-0
8.	After nebulizer inhalation, pressed the "stop" button	0,5	0,4	0,3	0,1-0

### Methods of the peakflowmetry in children

<b>№</b>	<b>Criteria for assessing steps</b>	<b>Score in points</b>			
1.	Introduced oneself to the patient, explained the purpose of the medical intervention, received patient consent. Conducted hand hygiene. Put on gloves.	0,5	0,3	0,2	0,1-0
2.	Attach the mouthpiece to peakflowmetry. Put the arrow of the device on the zero mark of the scale.	0,5	0,3	0,2	0,1-0
3.	Asked the child to hold the peak flow meter in a horizontal position.	0,5	0,4	0,2	0,1-0
4.	Suggested that the patient take a deep breath, then clasp the mouthpiece of the device with his lips and make the fastest and strongest exhalation through the mouth.	0,5	0,4	0,2	0,1-0
5.	The exhaled air exerts pressure on the valve of the device, which moves along the arrow-pointer scale. The arrow shows the peak exhalation rate (PER), usually in liters per minute. Noted the result on the scale.	0,5	0,4	0,3	0,1-0
6.	In one study, he made three attempts, each time returning the arrow to zero.	0,5	0,4	0,3	0,1-0
7.	Of the three results obtained, the patient chose the largest (best) and noted it in the observation diary.	0,5	0,4	0,3	0,1-0
8.	Made the right conclusion.	0,5	0,4	0,3	0,1-0

### Methods of measuring blood pressure in children

№	Criteria for assessing steps	Score in points			
		0,4	0,3	0,2	0
1.	Introduced oneself to the patient, explained the purpose of the medical intervention, received patient consent	0,4	0,3	0,2	0
2.	Conducted hand hygiene Prepare the necessary equipment for measuring blood pressure: tonometer (Korotkov apparatus) for the child, stethoscope	0,4	0,3	0,2	0
3.	Blood pressure can be measured in the patient's sitting or lying position after 5-10 minutes of rest. If the child receives medication, the time of the last dose should be recorded on the naked shoulder 2 cm above the elbow fold, a cuff is placed so that it can be brought under the finger of the researcher	0,4	0,3	0,2	0
4.	The zero division of the tonometer scale is located at the level of the studied artery and the heart of the child	0,4	0,3	0,2	0
5.	Above the place of pulsation of the radial artery in the elbow bend apply a stethoscope	0,4	0,3	0,2	0
6.	Gradually, the balloon is pumped air into the cuff, fix the moment when the sound of blood pulsation in the vessel disappears. After that a few more injection movements	0,4	0,3	0,2	0
7.	Then should gradually reduce the pressure in the cuff, opening the valve of the cylinder. At the moment of occurrence of sonic booms registers the indicator of the pressure gauge	0,4	0,3	0,2	0
8.	The first short, but quite loud sonic boom corresponds to the value of the maximum (MX), or systolic pressure.	0,4	0,3	0,2	0
9.	With a further decrease in pressure in the cuff tones gradually weaken to disappear and correspond to diastolic pressure.	0,4	0,3	0,2	0
10.	Blood pressure can be measured in the patient's sitting or lying position after 5-10 minutes of rest. If the child receives medication, the time of the last dose should be recorded on the naked shoulder 2 cm above the elbow fold, a cuff is placed so that it can be brought under the finger of the researcher	0,4	0,3	0,2	0

### Methods of recording an ECG in children

№	Criteria for assessing steps	Score in points			
		0,4	0,3	0,2	0,1-0
1.	Introduced oneself to the patient, explained the purpose of the medical intervention, received patient consent	0,4	0,3	0,2	0,1-0
2.	Conducted hand hygiene	0,4	0,3	0,2	0,1-0
3.	Offer the patient to undress to the waist and free the shins from clothing, offered to take a horizontal position on the couch lying on his back	0,4	0,3	0,2	0,1-0
4.	Treated with alcohol in places where electrodes are applied, moistened the place of application of electrodes 5-10% sodium chloride solution or a special gel	0,4	0,3	0,2	0,1-0

5.	<p>Wires cable leads attached to the electrodes on the limbs in the following order:</p> <ul style="list-style-type: none"> <li>- Red - on the right hand,</li> <li>- Yellow - on the left hand,</li> <li>- Green-on the left leg,</li> <li>- Black- on the right leg.</li> </ul> <p>These electrodes will give a record of standard ECG leads, denoted by Roman numerals: I, II, III; and amplified from the extremities: aVR, aVL, aVF.</p>	0,4	0,3	0,2	0,1-0
6.	<p>Positioned the 6 thoracic electrodes in the following way:</p> <p>V1-red electrode-IV intercostal space at the right edge of the sternum,</p> <p>V2-yellow-IV intercostal space at the left edge of the sternum,</p> <p>V3-green-in the center between V2 and V4,</p> <p>V4-brown-in the V intercostal space on the midclavicular line,</p> <p>V5-black-along the same horizontal line on the anterior-axillary line,</p> <p>V6-violet- along the same horizontal line on the mid-axillary line.</p> <p>These electrodes will give a record of Wilson's single-pole thoracic leads.</p>	0,4	0,3	0,2	0,1-0
7.	Pressed the switch on the electrocardiograph	0,4	0,3	0,2	0,1-0
8.	<p>Register a calibration millivolt – control pulse with an amplitude of 1 mV equal to 10 mm.</p> <p>Record the ECG in 12 leads alternately, in each lead at least 4 cardiac cycles (PQRST), at a paper speed of 50 mm / sec, a smaller speed of 25 mm / sec to use for rhythm disturbances,</p>	0,4	0,3	0,2	0,1-0
9.	Turned off the electrocardiograph. Released the patient from the electrodes and allowed to stand.	0,4	0,3	0,2	0,1-0
10.	On the ECG-tape recorded the patient's name, age, date of study.	0,4	0,3	0,2	0,1-0





