


ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казakhstanская медицинская академия»
Department: «Propedeutics internal diseases»		044 – 47/11 ()
Methodical instruction		1 p. from 6

**Methodological recommendation for teaching clinical skills at
the Practical Skills Center (Pulmonary auscultation in bronchopulmonary pathology)**

(using the execution algorithm)

Specialty: 6B10101 – "General medicine"


Discipline: "Propaedeutics of internal diseases"

Course: 3

Department: "Propaedeutics of internal diseases"

Compiled by: Bekmurzayeva E.K., Toktarova G.A.


Shymkent, 2022.

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казakhstanская медицинская академия»
Department: «Propedeutics internal diseases»		044 – 47/11 ()
Methodical instruction		2 p. from 6

Considered at the meeting of the department


Protocol № 4A, " 13 " 12. 2022y.

Head of the Department, MD, Professor Бекмурзаева - Bekmurzayeva E.K.

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department: «Propedeutics internal diseases»		044 – 47/11 ()
Methodical instruction		3 p. from 6

- 1. Clinical skill name:** " Auscultation of the lungs in bronchopulmonary pathology "
- 2. The purpose of training:** formation of skills for auscultation of the lungs in bronchopulmonary pathology.
- 3. Time to demonstrate skills in the preliminary briefing and dummy:** 5 min.
- 4. Time to master the skill:** 15-20 min.
- 5. Necessary theoretical knowledge to master the skill:**
 1. Training in auscultation techniques for bronchopulmonary diseases.
 2. Training in auscultation techniques for bronchopulmonary diseases.
 3. Identify the main breathing noises in the patient.
 4. Analyze the main breathing noises of the patient.
 5. Involvement of students in the detection of pathology.
 6. Involving students in identifying the main breathing noises.
 7. Involving students in identifying additional breathing noises.
 8. Diagnosis of lung auscultation data in bronchopulmonary diseases.
 9. Substantiation of lung auscultation data in bronchopulmonary diseases.
 10. Conclusion of lung auscultation data for bronchopulmonary diseases.
- 6. Simulator, simulator, dummy, list of models:**
 - LSAT
 - phonendoscope
 - x-ray image
- 7. List of medical instruments and equipment:**
 - phonendoscope, special medical glove and cap
- 8. Skill execution algorithm:**

№	Step-by-step actions	Implementations		
		Yes	No	Notes
1	Welcomed the patient			
2	Explained to the patient about bronchopulmonary auscultation			
3	She asked me to keep my hands down my body			
4	He opened his mouth slightly and asked me to breathe through my nose			
5	Leaning on the patient with his left hand, he stood comfortably in front of him			
6	Placing the stethoscope in the right-hand groove, he listened to at least one phase of inhalation and exhalation. Performed auscultation with a two-way comparison			
7	I stethoscope to intercostal L.according to parasternalis, auscultation was performed at symmetrical points			
8	II intercostal space of L.parasternalis and L.medioclavicularis performed auscultation of symmetrical points along lines in the center			
9	III intercostal space L.medioclavicularis performed auscultation at symmetrical points along the line			
10	The patient was asked to put both hands on the back of his head			
11	On both sides, the middle line of the armpits was			


ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department: «Propedeutics internal diseases»		044 – 47/11 ()
Methodical instruction		4 p. from 6

	inserted deeper into the armpit armhole and auscultation was performed at symmetrical points			
12	Along the middle line of the armpits IV placed a stethoscope on the intercostal span and performed auscultation at symmetrical points			
13	Along the middle line of the armpits, V placed the stethoscope on the intercostal span and performed auscultation at symmetrical points			
14	He placed a stethoscope over the shoulder blade from the patient's back and performed auscultation at symmetrical points			
15	The patient was asked to cross his arms in front and press them to his shoulders			
16	At the upper level of the scapula, the stethoscope was subjected to auscultation at symmetrical points, placing the stethoscope closer to the scapula than further from the spine			
17	At the lower level of the scapula, auscultation was performed at symmetrical points, placing the stethoscope further from the spinal column, closer to the scapula			
18	Performed auscultation along the line of the scapula to symmetrical points under the scapula			
19	In the same way as above, another wall was lowered onto the partition and performed auscultation at symmetrical points			
20	Gave a description of the result of auscultation ("vesicular breathing in the lungs, no additional noises are heard" or describes breathing and additional noises in pathological cases)			

9.Tasks: show the technique of bronchopulmonary auscultation, analyze the main respiratory sounds and their changes in patients with various respiratory diseases, identify and differentiate indirect respiratory sounds.

10. Materials for evaluation on the topic of the lesson:


1. vesicular breathing is monitored in all areas except:
 - a) below the second wall on the anterior surface of the lung
 - b) in the axillary areas
 - c) below the angles of the scapula
 - d) in the interscapular space III-IY at the level of the thoracic spine
2. bronchial breathing in a healthy person is monitored throughout the site, except for:
 - a) below the second wall on the anterior surface of the lung
 - b) the handle of the chest
 - c) III-IY in the interscapular space at the level of the thoracic spine
 - d) above the larynx
3. the main mechanism of vesicular respiration:
 - a) the passage of air through the vocal opening during inhalation and exhalation

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department: «Propedeutics internal diseases»		044 – 47/11 ()
Methodical instruction		5 p. from 6

- b) the vortex movement of air during the transition from the larynx to the bronchus
- c) filling of the alveolar walls with air during the inhalation phase and at the beginning of exhalation
- d) fluctuations of the alveolar walls when filled with air
4. The main mechanism of bronchial respiration:
- a) passage of air through the vocal orifice during inhalation and exhalation
- b) vortex movement of air during the transition from the larynx to the bronchus
- c) filling of the alveolar walls with air during the inhalation phase and at the beginning of exhalation
- d) fluctuations of the alveolar walls when filled with air
5. physiological weakening of vesicular respiration occurs in all cases except:
- a) strong development of the chest muscles
- b) in persons with a high level of nutrition
- c) accumulation of fluid in the pleural cavity
- d) with shallow breathing
6. Which of the following syndromes is accompanied by pathological bronchial breathing:
- a) bronchial obstruction syndrome
- b) pulmonary tissue compaction syndrome
- c) fluid accumulation syndrome in the pleural cavity
- d) syndrome of increased airiness of lung tissue
7. leads to pathological weakening of vesicular respiration:
- a) inflammatory edema of the walls of the alveoli
- b) insufficient air supply to the alveoli through the air- due to their partial obstruction of the nasal passages
- c) spasm of the smooth muscles of the small bronchi
- d) accumulation of fluid in the pleural cavity
8. dry whistling wheezes appear.
- a) when the alveolus filled with liquid sticks
- b) narrowing of the bronchial cavity due to bronchospasm or edema mucous membrane
- c) when fluid passes through the bronchi
- d) when air passes through the glottis
9. what diseases of the bronchopulmonary system cause pathological bronchial respiration:
- a) bronchial asthma
- b) emphysema of the lungs
- c) secondary stage of large-sized pneumonia
- d) exudative pleurisy
10. when does Amphoric breathing work?
- a) open pneumothorax
- b) when the alveoli are completely filled with exudate
- c) in the presence of a pulmonary cavity associated with large bronchi
- d) accumulation of fluid in the pleural cavity

11. Criteria for evaluating the performance of a skill

№	Implementations	Evaluation criteria
1	Completed	All steps are taken into account when performed correctly.
2	Half done	It is counted for small errors.

ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	 SKMA -1979-	SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department: «Propedeutics internal diseases»		044 – 47/11 ()
Methodical instruction		6 p. from 6

3	Did not complete	Gross mistakes were made during the execution of the task.
---	------------------	--

12. Literature:

1. Глобальная стратегия диагностики, лечения и профилактики хронической обструктивной болезни легких (пересмотр 2017 г.)
2. Пропедевтика внутренних болезней, Мухин Н.А., Моесеев М.А., учебник 2014г., 2-е изд. Дополнено и переработанное.
3. Пропедевтика внутренних болезней, Василенко В.Х., учебник 2014г.
Дополнительная:
4. Федеральные клинические рекомендации по диагностике и лечению бронхиальной астмы 2016 // www.pulmonology.ru
5. Global Strategy for Asthma Management and Prevention. Revised 2016 // www.ginasthma.com.
6. Global Initiative for Chronic Obstructive Lung Disease. Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease. Revised 2016 // www.goldcopd.com.
7. Miller M.R., Hankinson J., Brusasco V. et al. Standardisation of spirometry. «Series ATS/ERS task force: standardisation of lung function testing». Edited by V. Brusasco, R. Grapo and G. Viegi. Number 2 in this Series // Eur. Respir. J. 2005. V. 26. P. 319-338

13. Standards of correct answers

- | | |
|-----|------|
| 1-г | 6-б |
| 2-а | 7-в |
| 3-в | 8-б |
| 4-а | 9-в |
| 5-в | 10-в |