

*С.Ж.Асфендияров атындағы қазақ
ұлттық медицина университеті*

*Тақырыбы: **Pneumonia***

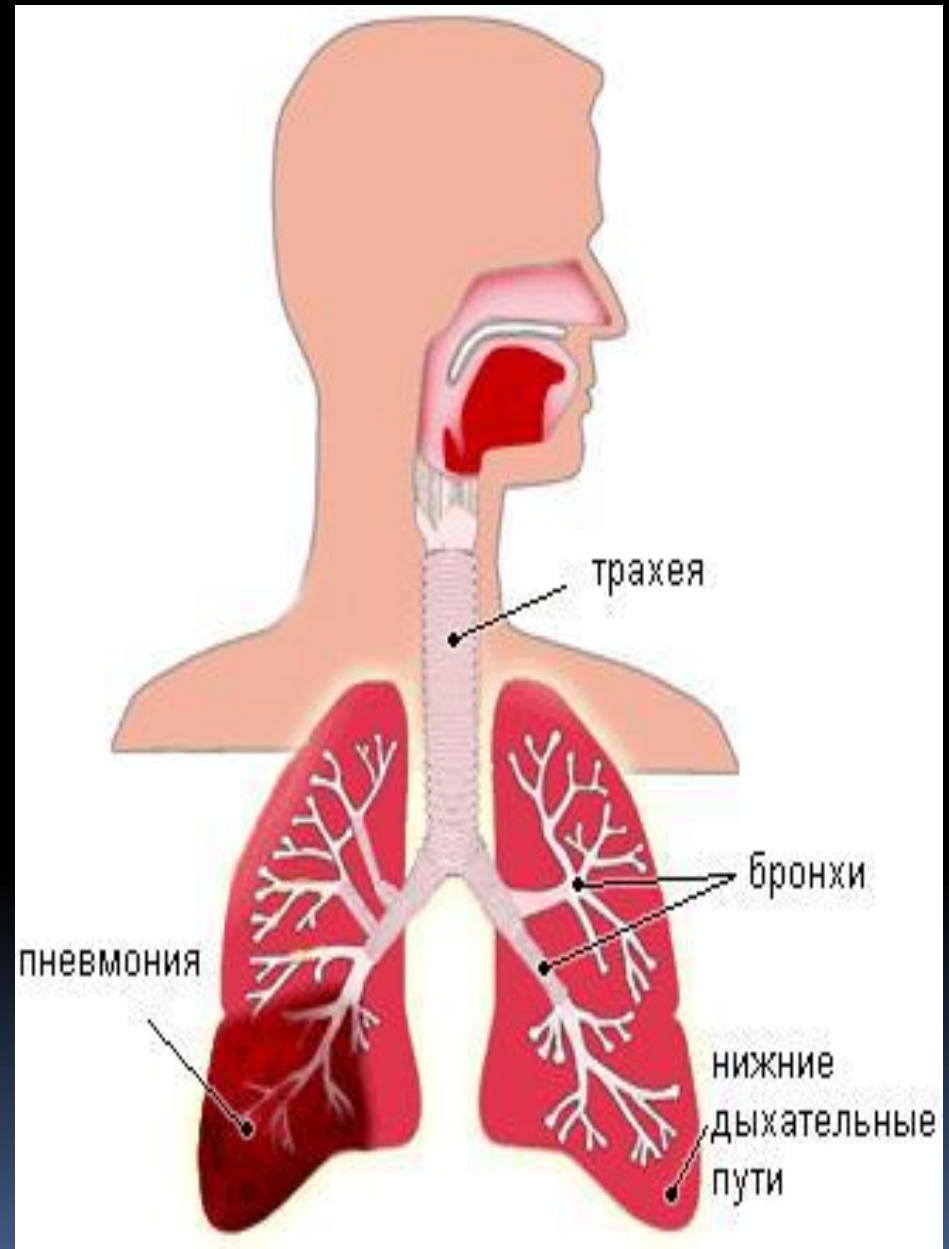
Орындаған: Мағзимова А.

Тобы: ЖМ16-018-01

Тексерген:

- Despite the achievements of modern medicine and the emergence of new effective antibacterial drugs, pneumonia is an extremely common and life-threatening disease. According to the frequency of fatalities, pneumonia stands at the first among all infectious diseases of the place. Reduce the incidence does not work for many years

Pneumonia - acute infectious inflammation of the lower respiratory tract with mandatory involvement of lung tissue (alveoli, bronchi, bronchioles).



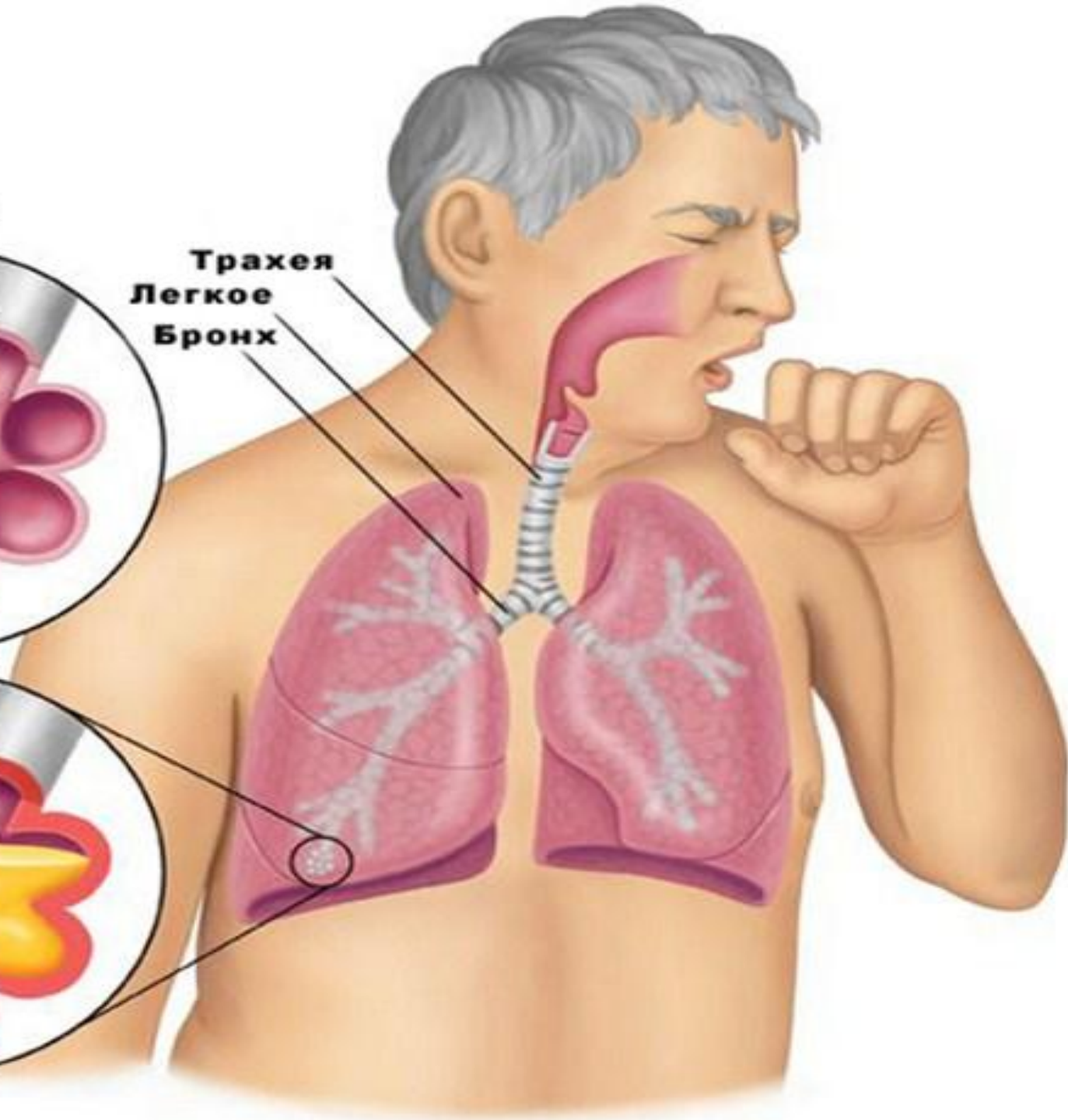
Currently, several types of pneumonia are distinguished:

- 1) **Community**-acquired pneumonia is the most common type of disease.
- 2) **Nosocomial or hospital pneumonia**. This form refers to the disease that developed when the patient was in the hospital for more than 72 hours. At the time of admission, the patient did not have clinical manifestations of pneumonia.
- 3) **Aspiration pneumonia** - occurs as a result of ingress of food, water, foreign objects into the respiratory tract.
- 4) **Atypical pneumonia**. A type of disease caused by an atypical microflora (chlamydia, mycoplasmas, legionella, etc.).

НОРМА



Трахея
Легкое
Бронх



CAUSES OF PNEUMONIA

- Pneumonia is, above all, a bacterial disease
- The main pathogens of pneumonia:
pneumococcus (*Streptococcus pneumoniae*),
staphylococcus aureus, *Haemophilus influenzae* and atypical infections *Chlamydia pneumoniae*, *Mycoplasma pneumoniae*, *Legionella pneumoniae*. More rarely, the cause of acute pneumonia may be *Klebsiella pneumoniae*, *E. coli* (*Escherichia coli*), *Pseudomonas aeruginosa*, *Acinetobacter*, etc. They are more common in patients with severe comorbidities, in patients with weakened immune system

- Пусковым фактором развития пневмонии могут быть различные вирусные инфекции. Они вызывают воспаление верхних дыхательных путей и обеспечивают «комфортные условия» для развития бактериальных возбудителей.



Risk factors that increase the likelihood of developing pneumonia:

- 1) Diseases of internal organs, primarily of the kidneys, heart, lungs, in the stage of decompensation.
- 2) Immunodeficiency.
- 3) Oncological diseases.
- 4) Conducting artificial ventilation.
- 5) Diseases of the central nervous system, including epilepsy.
- 6) Age is more than 60 years.
- 7) General anesthesia

The main symptoms of pneumonia are fever with a rise in temperature to 38-39.5 degrees C, cough more often with the departure of abundant sputum, dyspnoea with physical exertion and at rest. Sometimes patients may experience discomfort or pain in the chest.



Возможные осложнения пневмонии и прогноз

Пневмония может привести к развитию целого ряда осложнений со стороны легких: абсцессу легких, пневмотораксу, эмпиеме плевры и т.д. Наиболее тяжелое осложнение – развитие дыхательной недостаточности. Её развитие более вероятно у пожилых больных, пациентов с сопутствующими хроническими заболеваниями легких (бронхоэктазами, хронической обструктивной болезнью легких, хроническим обструктивным бронхитом и т.д.) и сердца. Дыхательная недостаточность у таких больных может стать причиной смерти. Также к летальному исходу может привести развитие сердечно-сосудистой недостаточности.

What tests should I take if I suspect a pneumonia

- If you suspect a pneumonia and the appearance of the corresponding symptoms, you will definitely need to do a clinical blood test. A sharp increase in leukocytes, an increase in the number of stab neutrophils, and ESR - can indicate acute bacterial inflammation. In this case, an increase in the concentration of leukocytes more than $10 * 10^9$ with a high degree of probability indicates the development of pneumonia. Reduction of leukocytes less than $3 * 10^9$ or a rise of more than $25 * 10^9$ are unfavorable prognostic factors indicating a severe course of the disease and a high risk of complications.

Indispensable for the formulation of an accurate diagnosis of pneumonia is the chest X-ray. It is carried out in a straight line, and if necessary in the lateral projection and allows not only to establish the diagnosis of acute pneumonia and to identify possible complications, but also to evaluate the effectiveness of treatment.

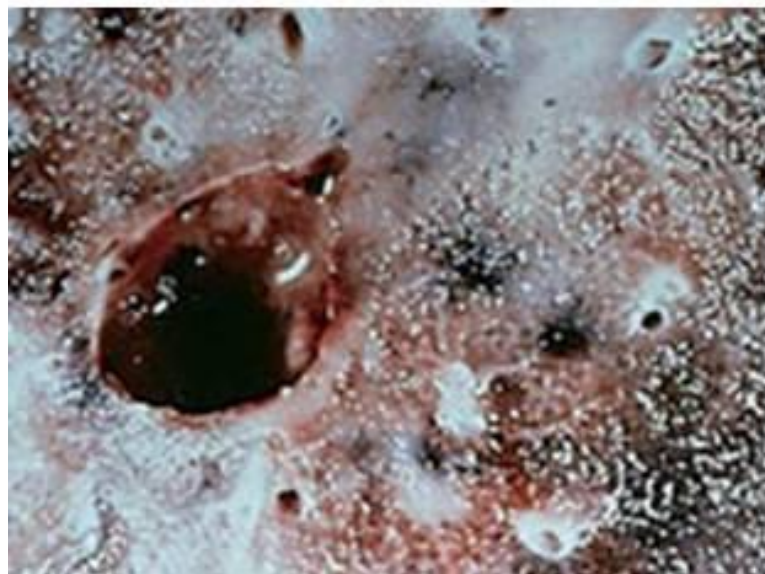
Unfortunately, in a number of cases, radiography is not informative. In such situations, a more accurate method of research is used - computed tomography of the lungs. When does it make sense to resort to this variant of diagnosis?

- 1) if the patient has all the signs of acute pneumonia, but the X-ray examination does not allow to identify the focus of inflammation.**
- 2) with relapsing pneumonia (more than 3 episodes), provided that the focus of inflammation is located in the same lobe of the lungs.**
- 3) if the x-ray picture does not correspond to the clinical manifestations of the disease. For example, the patient has signs of acute pneumonia, and on the roentgenogram a picture of atelectasis, etc.**



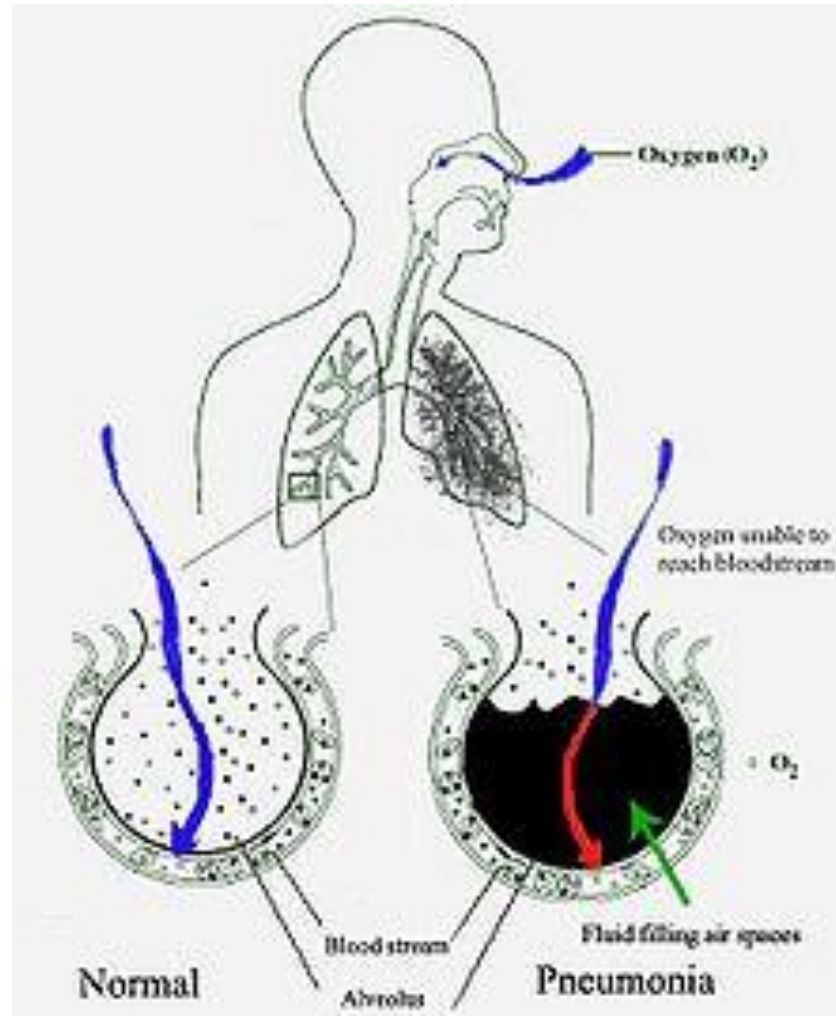
Осложнения пневмонии

- воспаления плевры
- отек легких,
- абсцесс легкого
- нарушения дыхания



Treatment of pneumonia

Uncomplicated forms of pneumonia can be treated by general practitioners: physicians, pediatricians, family doctors and general practitioners. The patient's serious condition requires hospitalization, preferably in specialized hospitals (pulmonology department).



Indications for hospitalization for pneumonia:

- 1) Objective examination data: impairment of consciousness, respiratory rate more than 30 per minute, reduction of diastolic pressure less than 60 mm Hg, and systolic pressure less than 90 mm Hg, an increase in the heart rate more than 125 per minute.
- 2) Body temperature is less than 35.5 ° C or more than 40.0 ° C.
- 3) Reduction of oxygen saturation of blood is less than 92% of the norm.
- 4) Changes in laboratory parameters: the concentration of leukocytes is less than 4 or more 25 per 10⁹ per liter, a decrease in hemoglobin of less than 90 grams per liter, a rise in creatinine of more than 177 μmol per liter.
- 5) Changes on the roentgenogram: changes in more than one lobe, the presence of a cavity, effusion in the pleura.
- 6) Presence of foci of infection in other organs and systems (bacterial arthritis, meningitis, sepsis, etc.).
- 7) Decompensation of concomitant diseases of the heart, liver, kidneys, etc.
- 8) Impossibility of adequate home therapy on social indications.

Профилактика пневмонии

- Доказано эффективной мерой профилактики заболеваний легких, в том числе пневмонии, является отказ от курения. Часто пневмония развивается после перенесенной вирусной инфекции, поэтому ежегодная вакцинация от гриппа также считается превентивной мерой.
- Также для профилактики пневмонии рекомендуется проводить вакцинацию препаратом **ПНЕВМО-23** один раз в пять лет. Наиболее частым инфекционным возбудителем, вызывающим развитие пневмонии, является пневмококк. **Вакцина ПНЕВМО-23** создаёт иммунитет к данному возбудителю пневмонии.

FEATURES OF NUTRITION AND LIFESTYLE FOR THE TREATMENT AND PREVENTION OF PNEUMONIA

- The regime is bed, in the stage of recovery - half-bed. Categorically you can not smoke. Sufficient liquid intake is necessary. Recommended rates - not less than 2.5-3 liters per day. In the daily diet should be a sufficient number of proteins and carbohydrates and vitamins, especially A, B and C.
- Most patients benefit from breathing exercises. For example, according to the technique of Strelnikova or Buteyko. Old practical guidelines on pulmonology recommended that patients puff balls in their spare time.
- Before you do breathing exercises, consult your doctor if you can do it. In a number of conditions, for example, with abscess of the lungs, certain diseases of the heart, breathing exercises are contraindicated.

Пайдаланылган әдебиеттер:

www.google.com

Учебник английского языка:

A.M. Maslova

Z.I. Winestein

L.S. Plebeyskay

THANK YOU FOR ATTENTION!