SCIENCE AND INNOVATION

INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 1 ISSUE 7 UIF-2022: 8.2 | ISSN: 2181-3337

## PNEUMONIA (ZOTILJAM) — IN CHILDREN AND ADULTS, SIGNS AND SYMPTOMS, TREATMENT, TYPES

Madaminov Muxammadvali Ikromjon oʻgʻli

Tashkent Medical Academy

https://doi.org/10.5281/zenodo.7295203

Abstract. Pneumonia or zotiljam is an inflammation of the lungs, which belongs to the category of acute infectious diseases. Pneumonia can be caused by viruses, bacteria and fungi. There are also types such as aspiration pneumonia and paracancer pneumonia, which develops around the center of a cancerous tumor in the lung tissue. As soon as the first symptoms of pneumonia appear, you should immediately consult a doctor.

The inflammatory process of the lungs is a serious disease that can have a negative impact on health. Before the discovery of antibiotics, pneumonia had an 80% mortality rate. Currently, the death rate due to the development of pneumonia in different regions reaches 5-40%, mainly severe complications occur in the elderly.

If pneumonia is detected in time and the necessary treatment measures are applied, the disease will be cured in 10-14 days and will not leave any complications. Modern drugs help prevent serious complications and treat almost any form of pneumonia without complications. At the same time, remember that for effective treatment and successful prevention of complications, the treatment of this disease must be carried out by a specialist.

*Keywords*: Pneumonia, signs and symptoms of pneumonia in adults and children, classification of pneumonia.

# ПНЕВМОНИЯ (ЗОТИЛЯМ) — У ДЕТЕЙ И ВЗРОСЛЫХ, ПРИЗНАКИ И СИМПТОМЫ, ЛЕЧЕНИЕ, ВИДЫ

Аннотация. Пневмония или зотилям – это воспаление легких, которое относится к разряду острых инфекционных заболеваний. Пневмония может быть вызвана вирусами, бактериями и грибками. Существуют также такие виды, как аспирационная пневмония и парараковая пневмония, которая развивается вокруг центра раковой опухоли в легочной ткани. Как только появляются первые симптомы пневмонии, следует немедленно обратиться к врачу.

Воспалительный процесс легких – серьезное заболевание, которое может негативно сказаться на здоровье. До открытия антибиотиков смертность от пневмонии составляла 80%. В настоящее время смертность вследствие развития пневмонии в разных регионах достигает 5-40%, в основном тяжелые осложнения возникают у лиц пожилого возраста.

При своевременном обнаружении пневмонии и применении необходимых лечебных мероприятий болезнь будет излечена за 10-14 дней и не оставит никаких осложнений. Современные препараты позволяют предотвратить серьезные осложнения и без осложнений вылечить практически любую форму пневмонии. При этом помните, что для эффективного лечения и успешной профилактики осложнений лечение этого заболевания должен проводить специалист.

**Ключевые слова:** Пневмония, признаки и симптомы пневмонии у взрослых и детей, классификация пневмоний.

#### **INTRODUCTION**

## WHAT IS PNEUMONIA?

Pneumonia is an inflammatory process in lung tissues. In many cases, the cause of the disease is infections. There are different ways of infection entering the body: most often through airborne droplets, in rare cases - through blood.

Some of the microorganisms responsible for the development of pneumonia are always present in the human body. When the level of immune protection is normal, it successfully fights against such infections, with a decrease in the level of protective forces (hypothermia [chilling], primary diseases), an inflammatory process develops in the lungs.

Most often, the etiology of pneumonia includes diseases of the upper respiratory tract. An inflammatory process can develop in the lungs against the background of respiratory diseases such as flatulence, tracheitis, acute or chronic bronchitis. The cause of the disease may be acute diseases of other organs and systems, complications after surgery, and other factors that have a negative impact on immunity.

# METHOD AND METHODOLOGY

### SIGNS AND SYMPTOMS OF PNEUMONIA IN ADULTS AND CHILDREN

The symptoms of the disease depend on the causative agent, the age of the patient, and the state of health. The disease develops acutely or imperceptibly; it can have classical symptoms or be asymptomatic (without symptoms), in the form of atypical pneumonia. The most severe form of the disease with serious pulmonary complications is noted in elderly patients, those receiving drugs that weaken the immune system, and children with a weak immune system.

CLINICAL MANIFESTATIONS OF PULMONARY INFLAMMATION: SYMPTOMS OF PNEUMONIA IN ADULTS

Among adults, the factor that most affects the process of lung inflammation (zotiljam) is hypothermia. In such cases, the characteristic symptoms of pneumonia include:

Sudden development of hyperthermia in the body, sudden rise in temperature and reaching febrile indicators (39°C);

Symptoms of intoxication of the body (fatigue, weakness, headache);

Dry or wet cough lasting 3-5 days, sputum discharge is also observed;

Pain on the side of the inflamed lung during coughing or breathing (bilateral pain if both lungs are inflamed). Sometimes clear wheezing is heard;

Shortness of breath due to respiratory failure and widespread lung damage.

The clinical picture of the disease may not correspond to its classical course. Clinical signs and severity of the disease depend on the type of inflammatory process. For example, an atypical (unusual) course of the disease is observed in the development of bilateral pneumonia (complex) due to the H1N1 influenza virus or the well-known swine flu, and as a result, the virus can cause serious complications.

In many cases, pneumonia is accompanied by flu-like symptoms and develops against the background of acute respiratory diseases, ARVI. Complications of pneumonia often occur as a result of self-medication, for example, taking antipyretic drugs and improper use of folk remedies. This contributes to the spread of infection to the lower respiratory tract and the formation of infectious foci in the lungs. Thus, recovery from pneumonia is achieved by completing a full course of treatment and timely diagnosis.

SYMPTOMS OF LUNG INFLAMMATION OR ZOTILJAM (PNEUMONIA) IN CHILDREN

The incidence rate in children depends on age: children under 3 years old are sick 2-3 times more often than children older than 3 years (1.5-2 out of 100 children). Pneumonia in breastfed babies often develops as a result of aspiration due to vomiting, birth defects, foreign bodies falling into the respiratory tract.

Symptoms of pneumonia in children differ depending on age, etiology and spread of the inflammatory process. Children under one year of age have the following symptoms:

Drowsiness, weakness, general restlessness, lack of appetite;

Frequent crying for no reason;

Fever, often at subfebrile limits (37-38°C);

Increased breathing rate;

Unilateral asthma - symptoms of low expansion of one lung, one side of the chest does not expand much due to breathing disorders;

Symptoms of respiratory failure are cyanosis of the nasolabial triangle (blue tint), especially when crying, feeding, and when there is high excitement, the tips of the fingers turn blue.

Symptoms of pneumonia in older children are similar to the symptoms of pneumonia in adults: fever, weakness, drowsiness, profuse sweating, loss of appetite, loss of interest in favorite activities, most of the lungs are inflamed. the development of respiratory failure.

### **RESEARCH RESULTS**

CLASSIFICATION OF PNEUMONIA

The classification of forms of pneumonia (zotiljam) as a well-studied disease is based on several factors that allow patients to make an accurate diagnosis of the disease and treat it more effectively.

CLASSIFICATION ACCORDING TO THE CONDITIONS OF THE SURFACE

Hospital-acquired pneumonia, hospital-acquired pneumonia and hospital-acquired pneumonia are distinguished.

Nosocomial pneumonia is a form of pneumonia that develops in the hospital 48 hours after the patient was admitted to the hospital with other indications. Due to the fact that infectious pathogens resistant to antibacterial drugs often develop rapidly in hospitals and clinics, this type of pneumonia has specific characteristics and treatment is also specific. Therefore, this type of pneumonia is different.

Out-of-hospital, it is a form of aspiration, developed due to the penetration of masses or solid bodies from the oral cavity, nose or stomach into the lower respiratory tract. The presence of disease-causing microbes in such bodies leads to the development and spread of infection in the lungs. This type of pneumonia can also be caused by exposure to cold.

CLASSIFICATION BY THE QUANTITY OF LUNG INJURY

Depending on the spread of the inflammatory process and the size of the damaged lung tissue, the disease is divided into several types.

SYMPTOMS OF FOCUS PNEUMONIA

The focal form of the disease is characterized by the exact location of the inflammatory process. Often this form develops as a complication of viral diseases. There is a dry cough changing to wet form, high body temperature, pain during coughing, purulent sputum migration.

A SINGLE FORM OF THE DISEASE

This disease process affects only the right or left lung and can involve a small part or all of the lung. Depending on the size of the damage, the type of the trigger, the general condition of the patient, the symptoms may be obvious or asymptomatic.

### BILATERAL PNEUMONIA

Inflammation observed in both, right and left lungs. In this case, the inflammatory process can involve certain parts of the lungs or the whole part. The main difference is that regardless of the size of the injury, it affects both lungs.

## CRUPOUS PNEUMONIA

This form of pneumonia is characterized by the most specific clinical images. The characteristic external symptoms of the croupous form are a sharp increase in body temperature (40 °C and above), severe pain, and a characteristic orange color of sputum.

The causative agent of croupous pneumonia is often pneumococci. Timely appointment of antibacterial drugs (the most prescribed antibiotics belong to the penicillin group) is effective in the treatment of croup and other forms of pneumococcal pneumonia.

### INFLAMMATION OF PARTS OF THE LUNGS

The lung is an organ consisting of conditional parts (segments): the right lung consists of 3 parts, the left lung - 2 parts (see Fig. 1). If one part of the lung is inflamed, it is a partial inflammation, if two parts are inflamed, it is called bisegmental inflammation. Segmental inflammation can be unilateral or bilateral.

Inflammation of two segments of the left lung is total pneumonia, and inflammation of two segments of the right lung is subtotal pneumonia. The more segments are inflamed, the more severe the disease.

# CLASSIFICATION OF PNEUMONIA ACCORDING TO THE CAUSE OF THE DISEASE

Diagnosis according to the cause of the disease is mainly related to the selection of treatments and drugs. Pneumonia is divided into several types according to the causes of origin and the type of infectious agent:

### VIRAL PNEUMONIA

Viruses can be a complication or primary etiology of pneumonia, influenza, parainfluenza or ARVI (adenovirus form). Since diagnostic methods are not well studied, it is difficult to determine which virus caused pneumonia. For this reason, general antiviral drugs are often used in the treatment, and the treatment is symptomatic.

If antibiotics are prescribed for viral pneumonia, it means that there are secondary or primary diseases or there is a possibility of an additional bacterial infection.

### DISCUSSION

# BACTERIAL INFECTIONS IN THE ETIOLOGY OF PNEUMONIA

Bacterial pneumonia is one of the most common types of pneumonia. There are several groups of bacteria that can cause inflammation of the lower respiratory tract. Among them, the most common causes of pneumonia are pneumococci, streptococci, staphylococci, mycoplasma, chlamydia, anthrax, and others.

The disease is successfully treated when the bacterium that causes the disease is correctly identified and an effective antibiotic is selected. It is also important to study antibiotic resistance of bacteria belonging to one group.

# CHARACTERISTICS OF STAPHALOCOCCAL PNEUMONIA

The staphylococcal form is often a complication after ARVI. The disease is manifested by significant signs of intoxication, red color of sputum, weakness, dizziness.

### CAUSE OF MYCOPLASMIC PNEUMONIA

The mycoplasma form of pneumonia develops when a special bacterium, mycoplasma, enters the lungs. Often this disease affects children and adolescents.

The disease does not differ in distinctive symptoms, which makes the diagnosis difficult, although the treatment is effective, it lasts for a long time due to the characteristics of mycoplasma.

### CHLAMIDIAL INFECTION IN THE ETIOLOGY OF PNEUMONIA

The reason for the development of chlamydial pneumonia is the entry of chlamydia into the respiratory tract and lungs. Chlamydia usually causes bacterial chlamydiosis in the vagina. Pneumonia of this form is transmitted mainly from the infected mother during childbirth.

This type of pneumonia is more common among children, especially those of nursing age and adolescents, and has a clinical appearance similar to a cold in the initial period. The treatment of this form of the disease is selected individually, taking into account the age and characteristics of the patient.

Together with mycoplasma infections, these two forms belong to the category of atypical pneumonia, and also damage the alveoli and interstitial tissues. The nature of interstitial pneumonia is often prolonged with the transition to a chronic form.

### CONCLUSION

#### FUNGAL PNEUMONIA

Various fungal pathogens can also cause inflammation in the lungs. At the same time, it is necessary to carefully check the diagnosis, because if the clinical picture is not expressed, the symptoms can be "unclear" for a long time, they do not correspond to the classic symptoms of bacterial pneumonia. Treatment with the use of antimycotic (antifungal) drugs lasts a long time.

Any type and stage of pneumonia is a serious disease and has dangerous complications that negatively affect the whole body. A correctly selected course of treatment allows for highly effective treatment with diagnosis and selection of specialists.

### REFERENCES

- 1. Tohirova J., Shernazarov F. ATHEROSCLEROSIS: CAUSES, SYMPTOMS, DIAGNOSIS, TREATMENT AND PREVENTION //Science and innovation. 2022. T. 1. №. D5. C. 7-12.
- 2. Farhod o'g'li S. F. GASTRIT—SABABLARI, ALOMATLARI, TASHXISLASH, DAVOLASH, DORILAR, ASORATLARI, OLDINI OLISH //Лучший инноватор в области науки. 2022. Т. 1. №. 1. С. 103-107.
- Tohirova J., Shernazarov F. ATHEROSCLEROSIS: CAUSES, SYMPTOMS, DIAGNOSIS, TREATMENT AND PREVENTION //Science and innovation. – 2022. – T. 1. – №. D5. – C. 7-12.
- F. Shernazarov ATHEROSCLEROSIS: CAUSES, SYMPTOMS, DIAGNOSIS, TREATMENT AND PREVENTION // SAI. 2022. №D5. URL: https://cyberleninka.ru/article/n/atherosclerosis-causes-symptoms-diagnosis-treatmentand-prevention (дата обращения: 20.10.2022).

- 5. F. Shernazarov, J. Tohirova, D. Jalalova TYPES OF HEMORRHAGIC DISEASES, CHANGES IN NEWBOENS, THEIR EARLY DIAGNOSIS // SAI. 2022. №D5. URL: https://cyberleninka.ru/article/n/types-of-hemorrhagic-diseases-changes-in-newboenstheir-early-diagnosis (дата обращения: 20.10.2022).
- 6. Qizi T. J. I., Farrukh S. TREATMENT OF MYOCARDIAL INFARCTION AND FIRST AID //Science and innovation. 2022. T. 1. №. D3. C. 317-320.
- Shernazarov F., Azimov A. INCREASED BRAIN PRESSURE-CAUSES, SYMPTOMS, COMPLICATIONS, TREATMENT //Современная медицина: новые подходы и актуальные исследования. – 2021. – С. 73-77.
- qizi Tohirova J. I., ogʻli Ibragimov B. I., ogʻli Shernazarov F. F. CONGENITAL HEART DISEASE-CAUSES, CLASSIFICATION, DIAGNOSIS, TREATMENT, COMPLICATIONS, CONSEQUENCES //Eurasian Journal of Medical and Natural Sciences. – 2022. – T. 2. – №. 3. – C. 84-89.
- 9. Mratbaevna W. N., Farrux S. The Structure of the Heart and its Physiology in Regular Athletes //Eurasian Scientific Herald. 2022. T. 8. C. 102-105.
- 10. Farhod o'g'li S. F. GASTRIT—SABABLARI, ALOMATLARI, TASHXISLASH, DAVOLASH, DORILAR, ASORATLARI, OLDINI OLISH //Лучший инноватор в области науки. 2022. Т. 1. №. 1. С. 103-107.
- 11. Фаррух Ш. и др. ПУТИ УСТРАНЕНИЯ САХАРНОГО ДИАБЕТА //Science and innovation. 2022. Т. 1. №. D3. С. 313-316.
- 12. ПУТИ УСТРАНЕНИЯ САХАРНОГО ДИАБЕТА. Тохирова Жайрона Иззатилло Кизи, Шерназаров Фаррух «Science and innovation» 2022 yil 3-sonida 313-316 bet https://doi.org/10.5281/zenodo.6803520
- Shernazarov Farrukh. (2022). TREATMENT OF MYOCARDIAL INFARCTION AND FIRST AID. "science and Innovation" International Scientific Journal. ISSN: 2181-3337, 1(3), 317–320. https://doi.org/10.5281/zenodo.6803550
- 14. Shernazarov Farrux. Eurasian Scientific Herald P E N A C C E S S , P E E R R E V I E W E D J O U R N A L HTTPS://GENIUSJOURNALS.ORG/INDEX.PHP/ESH V O L U M E 8 | M A Y 2 0 2 2 I S S N ( E ) : 2 7 9 5 7 3 6 5
- 15. The Structure of the Heart and its Physiology in Regular Athletes 102-105 https://geniusjournals.org/index.php/esh/article/view/1427
- 16. Shernazarov Farrukh Farkhod ogʻli. (2022). CONGENITAL HEART DISEASE -CAUSES, CLASSIFICATION, DIAGNOSIS, TREATMENT, COMPLICATIONS, CONSEQUENCES. EURASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES, 2(3), 84–89. https://doi.org/10.5281/zenodo.6408056
- Shernazarov Farrux Farhod o'g'li. (2022). GASTRIT SABABLARI, ALOMATLARI, TASHXISLASH, DAVOLASH, DORILAR, ASORATLARI, OLDINI OLISH. The Best Innovator in Science, 1(1), 103–107. https://doi.org/10.5281/zenodo.6023027
- 18. ПУТИ УСТРАНЕНИЯ САХАРНОГО ДИАБЕТА. Тохирова Жайрона Иззатилло Кизи, Шерназаров Фаррух «Science and innovation» https://cyberleninka.ru/article/n/puti-ustraneniya-saharnogo-diabeta
- 19. Shernazarov Farrukh. (2022). TREATMENT OF MYOCARDIAL INFARCTION AND FIRST AID. "science and Innovation" International Scientific Journal. ISSN: 2181-3337,

1(3), 317–320. https://cyberleninka.ru/article/n/treatment-of-myocardial-infarction-and-first-aid

- 20. F. Shernazarov, J. Tohirova, D. Jalalova TYPES OF HEMORRHAGIC DISEASES, CHANGES IN NEWBOENS, THEIR EARLY DIAGNOSIS // SAI. 2022. №D5. URL: https://cyberleninka.ru/article/n/types-of-hemorrhagic-diseases-changes-in-newboenstheir-early-diagnosis (дата обращения: 29.10.2022).
- 21. qizi Tohirova J. I., ogʻli Ibragimov B. I., ogʻli Shernazarov F. F. CONGENITAL HEART DISEASE-CAUSES, CLASSIFICATION, DIAGNOSIS, TREATMENT, COMPLICATIONS, CONSEQUENCES //Eurasian Journal of Medical and Natural Sciences. – 2022. – T. 2. – №. 3. – C. 84-89.
- 22. qizi Tohirova J. I., ogʻli Ibragimov B. I., ogʻli Shernazarov F. F. CONGENITAL HEART DISEASE-CAUSES, CLASSIFICATION, DIAGNOSIS, TREATMENT, COMPLICATIONS, CONSEQUENCES //Eurasian Journal of Medical and Natural Sciences. – 2022. – T. 2. – №. 3. – C. 84-89.
- 23. Mymedic uz