

MODERN ANALYSIS AND CLINICAL CHARACTERISTICS OF COMMUNITY-ACQUIRED PNEUMONIA.

Fatima F. Xoltayeva - Candidate of Medical Sciences, Senior Lecturer at the Department of Childhood Diseases in Family Medicine at the Tashkent Medical Academy, Tashkent, Uzbekistan, xoltayevafotima@gmail.com.

Relevance:

In clinical practice, along with diseases of the cardiovascular system, a quite urgent and social problem is the pathology of the pulmonary system in the form of pneumonia. Pneumonia is a group of acute infectious (mainly bacterial) diseases, different in etiology, pathogenesis, and morphological characteristics, characterized by focal damage to the respiratory parts of the lungs with the obligatory presence of intra-alveolar exudation. According to the modern classification, the following types of pneumonia are distinguished:

- 1) community-acquired pneumonia
- 2) hospital-acquired (nosocomial) pneumonia
- 3) aspiration pneumonia
- 4) pneumonia developing against the background of immunodeficiencies (primary, secondary).

Among the above pneumonias, the most widespread in humans is community-acquired pneumonia. According to WHO, it ranks 4th on the list of deaths from infectious diseases. In Russia, the incidence of community-acquired pneumonia is 5-8 people per 1000 people per year among people over 18 years of age [2, p. 121]. This disease occurs in the community or later than four weeks after discharge, and is diagnosed within 48 hours of hospitalization. At the same time, in elderly people, the incidence of community-acquired pneumonia is 2 times higher than in young people, and the mortality rate among patients over 60 years of age is 10 times higher. One of the factors in the development of severe forms of community-acquired pneumonia in elderly people is the addition of endogenous intoxication.

From an etiological point of view, in 50% of cases the occurrence of the disease is associated with *Streptococcus pneumoniae*. The share of other microorganisms accounts for up to 30%. The most common clinical signs of the disease are cough with sputum, shortness of breath, fever, and characteristic changes on auscultation.

The purpose of our study: To study the features of the clinical course of community-acquired pneumonia, the frequency of complications that arise, and the principles of treatment of this pathology.

Materials and research methods:

A retrospective analysis of medical records of patients undergoing inpatient treatment at a clinical hospital with a diagnosis of community-acquired pneumonia in October-November 2019 was carried out. The scope of work included the study of clinical signs, complaints, treatment tactics, the dependence of the manifestation of the disease on age and gender, as well as the presence of concomitant chronic diseases and bad habits.

Statistical processing of the obtained data was carried out using the Excel program.

Research results and discussion

The study was conducted in 57 patients diagnosed with community-acquired pneumonia. The age of patients is from 18 to 70 years. By gender, the incidence of the disease in men was 54.4%, in women – 45.6%. Upon admission to the hospital, the main complaints were identified in patients, which reflected the clinical picture of the disease itself. The most common complaints were high fever (77.42% in men and 88.46% in women), headache (77.42% in men and 61.54% in women), chest pain, aches and pains. muscle pain. Less common in comparison with headache and development of fever were shortness of breath and cough with difficult to separate mucous sputum. In isolated cases, diarrhea and vomiting were detected.

An important factor in the development and characteristics of the manifestations of community-acquired pneumonia were concomitant chronic diseases. When analyzing medical histories, the most common diseases were diabetes mellitus, hypertension, bronchial asthma, atherosclerosis, and human papillomavirus. To a lesser extent, community-acquired pneumonia was accompanied by the presence of liver cirrhosis, lymphocytic leukemia, anemia, heart defects, and coronary artery disease in patients. The distribution of chronic diseases in the study group of patients is presented in the figure.

Considering the variety of clinical symptoms characteristic of community-acquired pneumonia and often occurring complications in the form of concomitant chronic diseases, adequate treatment is important.

When analyzing case histories of patients with community-acquired pneumonia, we analyzed the main treatment methods. Among the basic principles of treatment, pathogenetic antibacterial therapy is important.

Among the antibacterial drugs used in the hospital for the treatment of community-acquired pneumonia was a group of cephalosporins (cefazolin and ceftriaxone). These are broad-spectrum antibiotics. They have a positive effect against bacterial infections of the upper and lower respiratory tract, are active against gram-positive and gram-negative microorganisms, in particular *Streptococcus pneumoniae*, as evidenced by literature data.

When treating inflammatory processes of the respiratory tract in the form of inhalations using nebulizers, mucolytic agents were used: ambroxol and lazolvan. They helped remove

mucus from the lungs and relieved cough. Additionally, codelac broncho tablets were used to facilitate the removal of sputum.

If these patients had bronchial asthma, aminophylline, which has good antispasmodic activity, was prescribed.

If effusion was detected in the pleural cavity during an x-ray examination, a puncture of the chest wall and pleura was performed to evacuate the fluid. This manipulation was prescribed if the patient had no contraindications.

Treatment of the disease will be successful with constant monitoring of the dynamics of the disease, with patients observing strict bed rest and giving up bad habits (smoking) during the acute phase of inflammation.

Along with active treatment of community-acquired pneumonia, pathogenetically based disease prevention plays an important role. Prevention methods should be aimed at preventing the development of respiratory diseases (bronchitis, ARVI and influenza), since pneumonia is the main complication of these diseases. To prevent the development of community-acquired pneumonia, vaccination of the population against influenza and other related diseases is provided. It is recommended for groups of people with a high risk of developing respiratory disease, these include:

- Persons over 50 years of age;
- Patients with chronic diseases;
- Patients with weakened immune systems;
- Patients with bad habits (tobacco smoking).

People who abuse tobacco smoking are more often susceptible to damage to the body by infectious and inflammatory diseases. It has been shown that intensive tobacco smoking contributes to more extensive damage to lung tissue, slower reverse dynamics of the pathological process, a higher incidence of complications, and a decrease in the positive effect of treatment. Among the patients, it was found that 48% are exposed to constant smoking from an early or mature age, which adversely affects the further course and outcome of the disease.

As an example, we present the medical history of patient M., 46 years old, diagnosed with community-acquired pneumonia. Upon admission, the main complaints were: general weakness, increased body temperature to 38.60, cough with sputum difficult to separate, shortness of breath on exertion, and a decrease in body weight by 2 kg. According to the patient, he has been sick for 16 days. At home he self-medicated, using cough suppressants and drugs to lower his temperature, but there was no improvement. The patient was hospitalized for 10 days and prescribed strict bed rest, antibacterial drugs (ceftriaxone), and

mucolytic agents (ambroxol in the form of inhalations). On the 5th day of hospital stay, the patient's general condition improved, the temperature dropped to normal levels, the frequency of coughing attacks during the day decreased, and sputum began to pass freely. On the 15th day the patient was discharged without complications.

Conclusions:

The results of the study showed that properly selected treatment contributes to a favorable outcome. The statistical prognosis of the disease depends on the age of the patients, chronic diseases and bad habits. Community-acquired pneumonia is a disease that requires constant attention from medical personnel. Recently, there has been a rapid increase in the resistance of microorganisms to antibacterial drugs, which complicates the course of the infection itself and reduces the effectiveness of therapy. Compliance with preventive measures and timely detection of community-acquired pneumonia will significantly reduce mortality in this pathology.

Reference:

1. Protocols for the provision of medical assistance to children for the specialty "Pediatric Pulmonology".
2. Working classification of the main clinical forms of bronchopulmonary diseases in children / N.A. Geppe, N.N. Rozinova, I.K. Volkov, Yu.L. Mizernitsky / Russian Respiratory Society. - M., 2009. - 18 p.
3. Tatochenko V.K. Community-acquired pneumonia // Antibiotic and chemotherapy of infections in children. - M.: IPK "ContinentPress", 2008. - P. 41-44.
4. Chuchalin A.G., Sinopalnikov A.I., Kozlov R.S. Community-acquired pneumonia in adults. Practical recommendations for diagnosis, treatment and prevention: A manual for doctors. - Smolensk: MAKMAX, 2010. - 80 p. Bartlett J.G., Mundy L.M. Community-acquired pneumonia // New England Journal of Medicine. — 1995. — Vol. 333. — P. 1618-1624.
5. Gilbert D.N. The Sanford Guide to Antimicrobial Therapy, 2004 / David N. Gilbert, Robert C. Moellering, George M. Eliopoulos, Merle A. Sande.
6. Scott L.J. et al. Cefuroxime Axetil an Updated Review of its Use in the Management of Bacterial Infections // Goa Drugs. — 2001.— 61 (10). — 1455-1500.
7. The Management of Community-Acquired Pneumonia in Infants and Children Older than 3 month of Age // Clin. Infect. Dis. — 2011, 30 august.