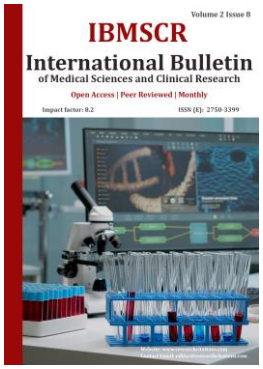

COMPLEX TREATMENT OF ACUTE BACTERIAL DESTRUCTIVE PNEUMONIA IN CHILDREN

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https://doi.org/10.5281/zenodo.7990205

Summary. The paper presents the data of examination and treatment of 176 patients with acute bacterial destructive pneumonia. A new approach to the treatment of inflammatory infiltrates of the lung was applied, based on the optimal choice of an antibiotic administered percutaneously-intrapulmonary to the lesion, which made it possible to prevent the transition of the disease to a purulent-destructive stage. A differentiated method of drainage treatment of severe pleural complications of acute destructive pneumonia in children was tested, which makes it possible to obtain a more pronounced clinical effect compared to traditional treatment.

Keywords: *acute bacterial destructive pneumonia, intrapulmonary administration of antibiotics, differentiated drainage treatment, empirical therapy, thoracocentesis, microflora.*

Relevance. Despite significant progress in the diagnosis and treatment of acute bacterial destructive pneumonia (ABDP), it remains a formidable disease in young children (2,7). Over the past decade, there has been a gradual displacement of staphylococcus from etiological agents due to a wide range of gram-negative flora, as well as its association. (1,3,4). Achievements in surgical and medical treatment of OBDP have had some success, but they need to be further improved. There is a need to develop and put into practice more gentle and effective methods of drainage treatment of OBDP in childhood (5,6,7).

Material and methods. The present work is based on the data of examination and treatment of 176 patients with OBDP. When studying the clinical and radiological picture of the disease, in each case we identified several clinical groups. Most of the patients were children with exudative pleurisy - 31.3% and pyopneumothorax - 31.8%. The frequency of pleural complications was significantly higher in children under 3 years of age - 78.4%. The main contingent of patients were children of the first three years of life, including: 30.7% - under the age of one year, from one to three years old made up the majority (47.7%) of the observed patients. Among the examined patients, there were slightly more boys (54.3%) than girls (45.7%). It should be noted that in 83.7% of patients, acute bacterial destructive pneumonia occurred against the background of various concomitant diseases and complications, which were predominantly observed in children of the first three years of life. In infancy, frequent concomitant diseases were anemia (90.3%), rickets (47.3%), malnutrition (30.2%), exudative diathesis (8.9%), etc. It is important to emphasize that 94% of children history of acute viral infection and pneumonia. To solve the tasks set by us, clinical, radiological and laboratory research methods were applied.

Results. When studying the etiological structure of OBDP obtained during bacteriological examination, we used two indicators: the frequency of detection of the pathogen from among all examined and from among the positive results of the tank. sowing.

Staphylococcus aureus was sown most often - in 49 cases out of 152 studies, which amounted to 32.2%. This figure rises to 62% of positive samples (79). Pseudomonas aeruginosa is in second place - 9.8% and 18%, respectively. Associations of bacteria, more often staphylococcus with Pseudomonas aeruginosa and Escherichia coli, were noted.

Thus, the traditional methods of bacteriological study of the focus of destruction, due to the low frequency of registration of pathogens and the duration of the study, do not allow the initiation of targeted, timely antibiotic therapy. In addition, it is often impossible to obtain material for a tank. sowing from the focus of the pathological process (inflammatory infiltrate, pneumothorax, bullae, fibrinous pleurisy). Considering that antibiotic therapy is urgent, it would be rational to prescribe antibiotics targeted, taking into account the pathogen and its sensitivity to antibiotics. However, the fulfillment of this requirement at the initial stages of the disease is not realistic, therefore, at the initial stages, we prescribed antibiotics based on staphylococcal etiology, either gram-negative, less often mixed. For treatmentOBDPused antibiotics that have an antistaphylococcal effect and broad-spectrum antibiotics - 3-4 generation cephalosporins (ceftriaxone, rocefin, cefepime, etc.), which clinically gave a positive result from the first days of treatment. As the results of bacteriological studies were obtained, antibiotics were prescribed taking into account the sensitivity of the isolated pathogens of the pathological process. Decrease in intoxication, normalization of temperature, appetite, decrease in the amount of contents from the drainage tube and during puncture, improvement in breathing, negative results of bacteriological studies indicated the beginning of remission.A quick identification of the causative agent of the disease OBDP allows you to choose an antibiotic that is sensitive to this type of bacteria and immediately begin antibacterial treatment of patients with OBDP.

The choice of antibiotics allows immediate initiation of antibiotic therapy by injection into the lesion. We used intrapulmonary administration of antibiotics in the infiltrate zone in 31 children. We chose the antibiotic after determining the causative agent of the disease and carried out targeted antibiotic therapy. With lobar infiltrate, the use of intrapulmonary antibiotics in the complex of therapeutic measures made it possible to achieve recovery in 93.5% of patients (29 patients). 2 patients (5%) had pneumothorax. Intrapulmonary administration of antibiotics makes it possible to create a high concentration of antibiotics in the area of inflammation, prevent the development of severe pleural complications, and in some cases contribute to the abortive course of the pathological process. In general, the method of intrapulmonary administration of antibiotics, used according to indications,

In pulmonary-pleural forms of OBDP, the main goal of drainage treatment is to remove air and fluid from the pleural cavity and straighten the lung to prevent its re-collapse. Thoracocentesis with drainage of the pleural cavity was performed in 72 patients. In the present study, according to the method of drainage treatment, patients were divided into two groups in order to determine the comparative effectiveness of the new and traditional approaches to drainage treatment.

Traditional drainage, including trocar-drainage, is usually introduced urgently, without taking into account the localization of the lesion; as a rule, along the VI-VII intercostal space, mid-axillary line, and the differentiation approach involved the introduction of a trocar-drainage at the level of the lesion, taking into account its localization. Patients who underwent thoracocentesis with drainage of the pleural cavity using a trocar-drainage according to the traditional method comprised group I (17 children). Pyopneumothorax and pneumothorax

were observed in 15 patients (88%). Pyothorax in 2 patients (12%). When treated with trocar drainage, the condition of patients improved faster and the lung expanded, which was observed in 6 patients (35%). However, in 9 children (53%), a favorable clinical course was not accompanied by lung expansion. They noted a gradual, slow expansion of it. In 7 patients, the lung expanded slowly, after 2-3 weeks. In general, the use of trocar drainage made it possible to achieve recovery in 16 patients (94%). 1 patient (5%) from this group died. The length of stay of patients in the hospital was 34.1±0.8 bed-days. The thoracocentesis opening on the chest wall healed 27.2±1.1 days after removal of the drain.

Patients of group II - 55 children, we used the method of differentiated drainage of the pleural cavity. Pyopneumothorax was noted in 48 children (87%), pyothorax in 7 children (13%). When treated in a differentiated way, a rapid improvement in the condition with the expansion of the lung in the first hours and days was observed in 47 patients (87%), in 6 patients (11%) after a few days, only in 1 child (2%) the lung expanded in the late stages of treatment. , after the imposition of the second drainage 1-2 intercostal space above the injection site in the first drainage. The length of stay of patients in the hospital was 25.2±0.5 bed-days. The thoracocentesis wound on the chest wall healed in 18.2±6 days. Died 2 children (3.6%) of 55 patients in this group. The cause of adverse events here cannot be associated with the use of this method (in all the deceased, the lung remained straightened until the onset of death. In all cases there was a progressive septicopyemia).

Conclusions: 1. A method has been developed for conducting targeted antibiotic therapy for various forms of acute destructive pneumonia.

2. A new approach to the treatment of inflammatory infiltrates of the lung was applied, based on the optimal choice of an antibiotic administered percutaneously-intrapulmonary to the lesion, which prevented the transition of the disease to a purulent-destructive stage in 93% of patients.

3. A new differentiated method of drainage treatment of severe pleural complications of acute destructive pneumonia in children was tested and introduced into clinical practice, which allows to obtain a more pronounced clinical effect compared to traditional treatment.

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