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Research Article

EMPIRICAL ANTIBACTERIAL THERAPY FOR ACUTE BACTERIAL DESTRUCTIVE PNEUMONIA IN CHILDREN

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ABSTRACT

The successes of modern medicine in the field of pediatric surgery are beyond doubt. Despite this, the incidence of destructive pneumonia in children does not tend to decrease and remains one of the causes of child mortality. All this necessitates a more thorough study of the etiopathogenesis and clinic of this pathology.

KEYWORDS

Acute bacterial destructive pneumonia, empirical therapy, thoracocentesis.

INTRODUCTION

Acute bacterial destructive pneumonia (ABDP) in children has been and remains one of the most severe diseases of childhood, causing serious damage to the health of the child [2,11,19]. ABDP are severe pathological conditions characterized by inflammatory infiltration and subsequent purulent or putrefactive decay (destruction) of the lung tissue [1,3,12,18,19,20,21]. Depending on the state of the patient's body's defenses, the pathogenicity of the microflora, the ratio of damaging and regenerative processes in the lungs, either the delimitation of necrotic areas occurs, or the progressive spread of purulent-putrefactive fusion of the lung tissue [4,7,13,16,22,24,26].

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In the etiology of ABDP, the main role is played by gram positive and gram negative flora, in addition, in most cases a viral infection is identified, which, according to some authors, is a factor against which the respiratory tract is damaged with the development of severe damage to the lung tissue [5,8,14 ,15,25]. Behindthe last decade there has been a gradual displacement of staphylococcus from etiological agents due to a wide range of gram-negative flora (1,5,14,23).To date, the issue of early detection of ABDP pathogens has not been resolved, which does not allow the initiation of targeted and immediate antibiotic therapy. Treatment of patients with ADBP is carried out in a complex manner using surgical and medical methods aimed at reorganizing the focus, stopping the intoxication syndrome and activating the body's anti-infective resistance (8,10,13). To date, the issue of early detection of ODBP pathogens in the first hours of the patient's admission to the hospital has not been resolved, which does not allow for immediate and targeted effective antibiotic therapy (4,6,7,15). Despite all of the above ongoing treatment, morbidity and mortality from this pathology does not tend to decrease.All this indicates the presence of unresolved and controversial issues in relation to the diagnosis and treatment of ABDP in children, which indicate the need for further study of this pathology and improvement of the treatment method [6,12,17].

Target.Analysis of the results of empirical, initial therapy for acute bacterial destructive pneumonia in children.

MATERIAL AND METHODS

We analyzed the results of the treatment of ABDP in 74 children aged from 1 month to 14 years, who were treated at the pediatric surgery clinic of the Bukhara State Medical Institute, for the period 2020-2022. When analyzing patients admitted to the hospital, the pulmonary form was found in 25 (34%) cases, the pulmonary-pleural form was found in 49 (66%) patients. Of these, 42 (57%) patients underwent surgical intervention in the form of thoracentesis and the imposition of passive drainage according to the Bulau method, thoracotomy was performed in 3 (4%) patients, the remaining 29 (39%) patients were treated with a puncture method.When studying the etiological structure of ABDP obtained with a tank. sowing, we used two indicators: the frequency of detection of the pathogen from among all examined and from among the positive results of the tank of sowing.Analysis of the results of bacteriological studies of purulent contents in 39 patients showed that more than half of the cases - 21 (54%) the causative agent of the purulent process was St.aureus, in other cases the following results were obtained: E. coli - 6 (15%), Ps.aeroginoza - 4 (10%), St.epidermidis - 2 (5%),Marked associationmicroorganisms, more often staphylococcus with Pseudomonas aeruginosa and

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Escherichia coli– (8%) and the result of "no growth" was registered in 3 (8%) cases.

Considering that antibiotic therapy is urgent, it would be rational to prescribe antibiotics targeted, taking into account the pathogen and its sensitivity to antibiotics.Due to the low frequency of registration of pathogens and the duration of the study, traditional methods of bacteriological study of the focus of destruction 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).However, the determination of the causative agent of the disease at the initial stages of the disease is not realistic, therefore, at the initial stages, we prescribed antibiotics based on the staphylococcal etiology of the disease, or gram-negative, less often mixed. Antistaphylococcal antibiotics and broad-spectrum antibiotics, 3rd or 4th generation cephalosporins (ceftriaxone, rocephin, etc.) in combination with amnoglycosides, were used to treat OBDL, which clinically in most cases 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. Reducing intoxication, normalizing temperature, appetite, reducing the amount of content from the drainage tube and during puncture, improving breathing,

CONCLUSION

1. The etiology of ABDP is most often bacterial in nature and is caused by a wide range of pathogens, among which staphylococcus aureus is the leader.

2. The outcome of ABDP largely depends on early diagnosis and initial, empirical antibiotic therapy and the subsequent prescription of antibiotics, taking into account the sensitivity of the isolated pathogens of the pathological process.

3. There is a needto the search for alternative approaches to determining the etiology of the ABDP pathogen that are not related to obtaining material from the lesion and traditional cultivation of bacteria.

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