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DESTRUCTIVE PNEUMONIA WITH PURULENT COMPLICATIONS IN CHILDHOOD

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Abstract:

Acute purulent-destructive pneumonia and its complications in children remain an urgent medical and social problem. Severe course of the disease, abundance of complications and high lethality make this pathology one of the most urgent problems of pediatrics.

Keywords: Acute purulent-destructive pneumonia, early diagnosis, concomitant therapy

RELEVENCE: One of the current problems of neurology and Rheumatology today is the development of tserebrovascular disorders in primary systemic diseases. The relevance of this problem is due not only to the prevalence of the disease, but also to the fact that it occurs among young patients, leads to disability and a significant decrease in the quality of life.

According to modern research, central nervous system damage occurs in 30-75% of cases in systemic diseases and is one of the severe complications of the disease. Tserebrovascular disorders often develop in the early stages of the disease and determine the course of the disease, prognosis and effectiveness of treatment.

As a result of research in recent years, new information has been obtained about the mechanisms of development of tserebrovascular disorders in systemic diseases. But the correlation between clinical-neurological changes and pathomorphological processes has not been sufficiently studied. This prevents the effectiveness of diagnosis and treatment[1,2,4].

Despite the expansion of the possibilities of modern neurovisualization methods and pathomorphological examinations, the issues of early diagnosis of tserebrovascular disorders, assessment and Prevention of their risk of development in systemic diseases have not been resolved. In particular, the study of the correlation of clinical-neurological and morphological changes is important for predicting the course and consequences of the disease. The above data indicate the need for an in-depth study of the clinical-neurological and pathomorphological properties of tserebrovascular disorders, their relationship, in primary systemic diseases. This in turn allows you to increase the effectiveness of diagnosis and treatment, improve the prognosis of the disease.

Despite the decrease in the total number of children suffering from the complication of pneumonia and the development of modern diagnostic and treatment technologies, the problem of tactics for treating destructive processes in the lungs is not losing its relevance. Against the background of modern drugs that, on the one hand, eliminate the etiological factor of inflammation, and on the other hand, enhance the morphological manifestations of the disease, there is a tendency to excessive conservatism in late diagnosis and treatment. The lack of clear algorithms for treating various forms of pulmonary destructions and their complications deprives the furnace of the opportunity to intervene correctly and in a timely manner.

Today, the diagnosis of bronchopulmonary diseases is based on radiography, computed tomography (CT), magnetic resonance imaging and ultrasound examination (UTT).

There are many different treatments for destructive pneumonia in children. The choice of adequate, complex, pathogenetically based therapy often determines the prognosis of the disease [5,6].

Currently, most pediatric surgeons have revised their attitude to radical lung surgery in children with acute purulent-destructive processes. In addition to the improvement of conservative intensive and antibacterial therapy, in recent years a number of modified surgical methods have been proposed aimed at dating a purulent-destructive furnace. Surgeons pay special attention to the development and implementation of limb-preserving methods of endoscopic surgery, non-traumatic and minimal traumatic surgical interventions [3,7].

THE PURPOSE OF THE STUDY: to provide a modern approach to the treatment of purulent-destructive processes in the lungs of children.

RESEARCH MATERIAL AND METHODS: over the past 3 years, 124 children have been treated with destructive pneumonia in the Andijan city Pediatric Surgery Department. The age of patients ranged from 1 month to 18 years. Most of the children (124 patients) were admitted from various hospitals, and 24 children were admitted after outpatient treatment. At the time of admission to the department, the duration of the disease was 5-11 days.

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Of the 124 children, 40 patients were diagnosed with lobular abscess, 10 children with macroabscesses, and 1 child with giant cortical abscess. Pleural complications were found in 70 patients. Against the background of pleurisy and fibrin sediments, hydrothorax was observed in 21 cases, piopnevmotorax in 32 cases, piothorax in 9 children.

With Mediastinal complications, 2 patients were examined: purulent mediastinitis was detected in 2 patients, purulent pericarditis in 1 patient. 1 patient had pulmonary hemorrhage, including in 1 case a blood transfusion into the pleural space. 6 children reported sepsis.

In addition to physical and laboratory data, the leading examination method in the diagnosis of destructive processes in the lungs is traditionally radiography. A much more accurate diagnosis can be made according to a number of characteristic radiological signs.

But in some cases, especially in massive pleural sinks, it will be difficult to reliably assess the presence and character of fluid in the pleural space, making further treatment tactics difficult to determine. In such situations, ultrasound of the chest cavity is of particular importance. Scanning is carried out both under the ribs and through the interspaces of the ribs. The inorganic fluid component in the pleural spaces is manifested in the form of anexogenic composition. In the purulent nature of the liquid, a small suspension is often observed. Thin, sometimes motile structures usually correspond to fibrin fibers and appear when the fluid is organized. Polyposision scanning along the rib spacing allows reliable assessment of fluid accumulation.

In controversial cases, a CT scan may be performed, especially in the presence of focal changes in the lung and pleural space.

RESEARCH RESULTS. Limited within one lung compartment, inflammation at the infiltrative stage of its development did not enter the destruction and required intensive treatment, sanation drainage measures, with the aim of achieving an abortive course of the process. At the next stage of the development of the disease, the Infiltrate switched to the next stage of inflammation - abscess.

The abscess of the lobite developed in two directions - with drainage into the bronchi and without drainage. The first, most favorable option indicated a course of bronchoscopic sanation and continued conservative treatment, while the second option required perebronchial catheterization of abscess and, when successful, bronchoscopic dating. This manipulation was performed in 17 patients. The use of ultrasound monitoring made it possible to control the effectiveness of the procedure in Real time without harming patients and employees. In 2 unsuccessful cases of perebronchial washing, we performed thoracocentesis with transthoracic drainage of a purulent foci of inflammation. After the last manipulation, the child's condition improved, and later recovery was observed, but in 1 child a bronchopleural discharge was formed, which required the blockade of the leading bronchi for up to 14 days and the continuation of intensive postsyndromic therapy.

Early signs of the development of the destructive process - subpleural microabssesses were identified in 16 children, who were treated conservatively. In 2 cases, macroabssesses were formed from microabssesses against the background of a progressive destructive process.

The macroabssesses observed in 9 patients, as well as the giant cortical abscess found in only one observation, were treated like an abscessed lobite.

Treatment of pleural complications included ultrasound of the lungs and pleural space during diagnostic steps. This necessity was primarily caused by difficulties in the differential diagnosis of hydro - and fibrinothorax, which in a number of cases made it possible to abandon diagnostic pleural punctures.

In the presence of hydrothorax, 10 patients had a pleural puncture. This procedure is also supplemented with ultrasound monitoring.

Purulent exudate can be drained, rolled or Total. In piothorax, 4 patients underwent Thoracoscopy with ultrasound dating and drainage of the pleural space. 1 child was taken with bronchopleural leaks, collapsed lungs, formed at a late stage of the disease, which was an indication against Thoracoscopy.

Pneumothorax and piopnevmothorax required drainage of the pleural space with aspiration on Bullau in 33 patients. Conservative treatment is continued when the lungs expand and there is no active air release. If the lungs do not collapse and air continues to escape through the drain, the issue of bronchoblocada performed in 4 patients has been resolved.

In fibrinothorax, in cases where the duration of the disease does not exceed 10 days, 16 patients underwent a Thoracoscopy with a closed decortication of the lungs in an antibiotic solution and an ultrasound date of the pleural space. Fibrinothorax with a duration of more than 10 days was an indication against Thoracoscopy due to dense fibrinous adhesions between the parietal and visceral pleura, the separation of which can lead to complications.

Other complications of the course of destructive pneumonias include septic processes in 5 children - purulent mediastinitis during drainage of the anterior

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mediastinum in 3 patients using a leaky-wash drainage system, and purulent pericarditis in 2 patients requiring toracoscopically phenestration and drainage of the pericardium. In 1 child, destructive pneumonia was complicated by pulmonary hemorrhage, which was stopped conservatively. As a result of chronic forms of destructive pneumonia, we observed fibrothorax in 1 child, the treatment of which took about 7 months, but did not require surgery and ended with recovery.
In 2 children, secondary pulmonary cysts were formed, in one of which the cyst was located on the right side at S6 and disappeared within 3 months of observation, in another case the cyst was located in a subpleural in the projection of the lingular segments, and after 4 months of observation the patient was removed by a thoracoscopic method.

CONCLUSIONS

1. The use of ultrasound monitoring of the lungs and pleural cavities in children with destructive pneumonia allows to control the effectiveness of treatment manipulations and significantly reduce the load of light that falls on the patient.
2. A one-port Thoracoscopy with ultrasound dating of the pleural space in an antibiotic solution allows you to free the lungs from fibrin plates, deliver an antibacterial drug to the foci of inflammation, remove inflammatory exudate.
3. The use of miniinvasive interventions in the treatment of purulent-destructive processes in the lungs of children makes it possible to abandon traumatic methods of surgical treatment and significantly reduce the risk of further complications.

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