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THE IMPORTANCE OF VEGETATIVE REACTIVITY IN INTOXICATION OF THE BODY IN YOUNG CHILDREN WITH ACUTE PNEUMONIA.

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Abstract:

One of the most significant problems of modern medicine is the steady increase in the prevalence of respiratory pathology. This pathology in childhood is represented mainly by inflammatory diseases. In turn, it remains important to study autonomic reactivity during intoxication of the body in young children with acute pneumonia.

Keywords: Autonomic reactivity, intoxication, pneumonia in children**.**

INTRODUCTION:

Acute pneumonia in children is an acute inflammatory disease of the lungs with a reaction of the vascular system in the interstitial tissue and disturbances in the microvasculature, with local physical symptoms, with focal or infiltrative changes on the radiograph, having a bacterial etiology, characterized by infiltration and filling of the alveoli with exudate containing predominantly multinuclear neutrophils , and is manifested by a general response to infection. The incidence of pneumonia is about 15-20 per 1000 children of the first year of life and about 5-6 per 1000 children over 3 years of age per year.

Pneumonia can occur as a primary disease or secondary, complicating other diseases.

According to the accepted classification (1995), according to morphological forms, focal, segmental, focal, drainage, croup and interstitial pneumonia are distinguished. Interstitial pneumonia is a rare form of pneumocystis, sepsis and some other diseases. The identification of morphological forms has a certain prognostic significance and can influence the choice of initial therapy. The nature of the pathogen and its drug sensitivity largely depend on the conditions in which the infection occurred. This makes it advisable to distinguish the following main groups of pneumonia. The most likely pathogens are indicated in each group:

Community-acquired pneumonia: pneumococcus, Haemophilus influenzae, staphylococcus, streptococcus, mycoplasma, chlamydia, legionella, viruses;

Nosocomial pneumonia: staphylococcus, Escherichia coli, Klebsiella, Proteus, Pseudomonas aeruginosa, viruses; for perinatal infection: chlamydia, ureaplasma, cytomegalovirus, viruses; in patients with immunodeficiency: various bacteria, pneumocystis, fungi, cytomegalovirus, mycobacteria, viruses.

Typical bacterial pathogens of community-acquired pneumonia in children are Streptococcus pneumoniae, Haemophilus influenzae, and less commonly Staphylococcus aureus; A certain role is played by the so-called atypical pathogens - Mycoplasma pneumoniae, Legionella pneumophila. In children in the first months of life, pneumonia is most often caused by Haemophilus influenzae, Staphylococcus, Proteus and less commonly by Streptococcus pneumoniae. Viral pneumonias are much less common; respiratory syncytial viruses, influenza and adenoviruses may play a role in the etiology. The respiratory virus causes destruction of cilia and ciliated epithelium, impaired mucociliary clearance, swelling of the interstitium and interalveolar septa, expansion of the alveoli, hemodynamic and lymphocirculation disorders, impaired vascular permeability, that is, it has a "ligating" effect on the mucosa. lower respiratory tract. The immunosuppressive effect of viruses is also known.

RISK FACTORS FOR PNEUMONIA:

Intrauterine infections and IUGR, perinatal pathology, congenital malformations of the lungs and heart, prematurity, immunodeficiency, rickets and dystrophy, polyhypovitaminosis, the presence of chronic foci of infection, allergic and lymphatic-hypoplastic diathesis, unfavorable social conditions, contacts when visiting maternity hospitals. School institutions, especially for children under 3 years of age. Symptoms of acute pneumonia in children

The main route of infection into the lungs is bronchogenic with the spread of infection along the respiratory tract into the respiratory tract. The hematogenous route is possible in septic (metastatic) and intrauterine pneumonia. The lymphatic route is rare, but through the lymphatic routes the process passes from the pulmonary focus to the pleura.

SARS play an important role in the pathogenesis of bacterial pneumonia. Viral infection increases mucus production in the upper respiratory tract and reduces

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its bactericidal activity; disrupts the functioning of the mucociliary apparatus, destroys epithelial cells, reduces local immunological defense, facilitates the penetration of bacterial flora into the lower respiratory tract and promotes the development of inflammatory changes in the lungs.

Symptoms of pneumonia depend on the age, morphological form, pathogen and premorbid background of the child.

Focal community-acquired pneumonia caused by Streptococcus pneumoniae or Haemophilus influenzae is more common in young children. Pneumonia in young children often develops during acute respiratory viral infections and in most cases in the first week of a viral illness.

Symptoms of pneumonia are characterized by the appearance and increase of intoxication: lethargy, adynamia, tachycardia not consistent with fever, pale skin, restless sleep, anorexia, and possibly vomiting. A febrile temperature appears for more than 3-4 days (after 1-2 days it decreases against the background of ARVI), cyanosis in the nasolabial triangle (an early symptom), the cough becomes deep and wet. An important diagnostic sign of pneumonia in young children is a change in the ratio of respiratory rate to pulse (from 1:2.5 to 1:1.5 with a norm of 1:3), while in the act of breathing the auxiliary muscles are inflated. wings of the nose, intercostal spaces of the jugular fossa in the absence of broncho-obstructive syndrome. In a severe condition, breathing becomes moaning and groaning.

Autonomic disorders in children can be generalized or systemic, while severe disorders can be local. Since vegetative dystonia is a syndromic diagnosis, along with the leading syndrome it is necessary to indicate (if possible) the nosological affiliation (neurosis, residual organic encephalopathy, hereditary constitutional form, etc.). When autonomic dysfunction predominates in any visceral system (cardiovascular, gastrointestinal, etc.), general changes are almost always observed, reflecting a decrease in the adaptation of the child's body. In fact, with a sufficiently detailed examination of children with vegetative dystonia, it is not possible to find a system or organ that is not involved in general pathophysiological changes. Thus, the thesis about "generalization – systemicity – locality" of changes in childhood has a very relative significance, and the identification of individual forms of vegetative dystonia according to the leading syndrome is a forced measure that involves choosing a doctor (pediatrician, cardiologist, neurologist) whose specialty " closer". Violations are detected. An indisputable fact is the participation of at least two systems: the nervous and one of the somato-visceral (for example, cardiovascular). The clinical severity of symptoms of vegetative dystonia can be different, and often the attention of the doctor and the patient is attracted by the predominance of one symptom, but detailed questioning and examination allow identify other numerous vegetative manifestations. Today, clinical analysis occupies a leading place in the diagnosis of vegetative dystonia, despite the importance of instrumental methods. In the clinical course in children, as in adults, there are permanent and paroxysmal types of autonomic dystonia. Unlike adults, panic disorders in children have their own specifics, depending on the age of the child. In young children, the structure of an attack is characterized by a predominance of vegetative-somatic manifestations over panic and emotional experiences. In older age groups, the vagal direction of reactions decreases, the sympathetic component in paroxysms increases, which reflects a general strengthening of the humoral regulatory link. Naturally, like any disease, vegetative dystonia in childhood has a phase course. This is important to take into account, since with a paroxysmal type of course the presence of crises clearly indicates an exacerbation phase, and with a permanent course only dynamic observation and examination allow such a conclusion. It is important to determine and reflect in the diagnosis the general characteristics of the autonomic nervous system: sympathicotonic, vagotonic (parasympathetic) or mixed type. Establishing these characteristics, which is quite simple, allows the pediatrician and neurologist to immediately choose a general line in the diagnostic process, link various clinical signs into a general pathophysiological concept, and navigate the choice of therapy. It is important, in addition to the clinical examination, to pay great attention to a thorough interview with the parents, especially the mother. This will allow us to identify the characteristics of the child's personality and behavior, rather than immediately obvious pathocharacterological deviations. During a clinical examination of the child, first of all, attention is paid to the condition of the skin. This is an important system of the body, a kind of representative organ of the autonomic nervous system, especially in younger and puberty, during periods of maximum participation of this system in autonomic reactions. In this case, vascular reactions of the skin and sweat glands can be expressed, especially in the distal parts of the hands. With vagotonia, there is a general tendency to reddening of the skin, cyanotic hands (acrocyanosis), wet and cold to the touch. The skin on the body is marbled ("vascular necklace"), sweating is increased (general hyperhidrosis), there is a tendency to acne (acne vulgaris is more common during puberty); There are frequent manifestations of neurodermatitis and various allergic reactions (for example, urticaria, Quincke's edema, etc.). This category of children with

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vegetative dystonia has a tendency to fluid retention and transient swelling on the face (under the eyes).

CONCLUSIONS.

With a predominance of the sympathetic department of the autonomic nervous system, the skin in children is pale, dry, and the vascular pattern is not pronounced. The skin on the hands is dry, cold, sometimes eczematous manifestations and itching occur. Constitutional features are of great importance in childhood vegetarianism. For different variants of vegetative dystonia, there are their own preferential constitutional types. Children with sympathicotonia are more often thin than overweight, although their appetite is increased. In the presence of vagotonia, children are prone to obesity, polylymphadenopathy, and have enlarged tonsils and often adenoids.

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