



AGE FEATURES OF COMBINED INFLAMMATORY PATHOLOGY OF THE RHINO-ORBITAL ZONE IN CHILDREN

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ANNOTATION

Age-related features of the course of combined inflammatory pathology of the rhino-orbital zone in 154 children were analyzed depending on the location and nature of the inflammatory process. The patients were observed by otorhinolaryngologists on an outpatient and inpatient basis. The study involved 154 (100%) children aged 0 to 17 years. Divided into 4 groups. In all children, depending on age, combinations of acute otitis with rhinitis, conjunctivitis and dacryocystitis, stenosis of the nasolacrimal duct, various forms of sinusitis were identified, with a tendency to increase depending on the age of the child.

KEY WORDS: rhinitis, otitis, epidemiological study, children.

INTRODUCTION

Nowadays, a significant problem in pediatric otorhinolaryngology is acute inflammatory diseases of the nasal cavity and paranasal sinuses, combined with pathological processes in the lacrimal ducts and orbit, auditory tube and middle ear.

Inflammatory diseases of the paranasal sinuses are one of the most pressing problems of otorhinolaryngology. In the structure of diseases of the upper respiratory tract, the proportion of inflammatory diseases of the nose and paranasal sinuses in childhood, according to a number of authors, ranges from 18-30 to 38-42% [1,3]. At the same time, diseases of the paranasal sinuses occupy second place in the structure of otorhinolaryngological morbidity [1,5].

Research shows that acute sinusitis has become twice as common over the past 8 years, and the proportion of hospitalizations for diseases of the nose and paranasal sinuses is increasing annually by 1.5-2% [2, 3]. Numerous observations suggest that a significant role in this belongs to acute viral infection of the upper respiratory tract, which is found in more than 85% of patients [1, 3, 6, 7].

The causes of viral sinusitis are most often respiratory syncytial virus, parainfluenza virus, adenovirus, rhinovirus, coronavirus, etc. Viruses are very variable. Therefore, the concentration of specific antibodies in the mucous membrane is low, the virus penetrates into the cell, infecting epithelial cells, and begins to multiply. This leads to the launch of an antiviral immune response, the synthesis of anti-inflammatory cytokines, and the recruitment of new inflammatory cells. In the future, the addition of microbial flora with the development of bacterial rhinosinusitis is possible. The most common pathogens of acute bacterial sinusitis are *Streptococcus pneumoniae*, *Moraxella catarrhalis*, *Haemophilus influenzae*, less often *Streptococcus pyogenes*, *Streptococcus aureus* (in younger children), anaerobes (6%) [2, 3, 7, 8]. Therefore, when starting etiotropic treatment before receiving the results of a microbiological study and without having any additional information from the anamnesis indicating a different etiological nature of sinusitis, it makes sense to focus on the antibiotic sensitivity of these particular microorganisms [7, 8], i.e., apply the principle empirical step therapy. At the same time, with the general principles of therapy, clinical differences in the course of sinusitis determine the difference in treatment tactics in general and in the choice of specific drugs in particular. Treatment of acute sinusitis includes several stages, the leading role of each of which is determined by the severity and course of the disease according to accepted medical standards of treatment [10].

To carry out a full diagnosis and rational treatment of 24 diseases affecting the rhino-orbital area in children, it is necessary to take into account the age criterion.

The main complaint of patients with inflammatory diseases of the pharynx is sore throat; Rhino-orbital pathology, in turn, is manifested by symptoms associated with impaired nasal breathing, tear drainage and other ophthalmological disorders. With pathology of the larynx, dysphonia is often present. As a rule, such patients initially fall into the hands of general practitioners,



therapists and pediatricians, less often otolaryngologists, but periodically the clinical situation requires the involvement of other specialists and additional laboratory and instrumental studies [9].

PURPOSE OF THE STUDY

To determine age-related features of the course of combined inflammatory pathology of the rhino-orbital zone in children.

MATERIALS AND METHODS

The study involved 154 (100%) children aged 0 to 17 years who consulted an otorhinolaryngologist with complaints about those who initially consulted an otorhinolaryngologist with complaints of pain or discomfort in the throat, impaired nasal breathing, lacrimation, itching in the area eyes, dysphonia. The patients were divided into four groups: 52 (33.8%) children under the age of 2 years inclusive, 44 (28.6%) - from 3 to 6 years, 38 (24.7%) - from 7 to 11 years -ty years old, 20 (12.9%) - from 12 to 17 years old. Patients were observed by otorhinolaryngologists on an outpatient and inpatient basis for combined rhino-orbital pathology (acute rhinosinusitis, nasolacrimal duct stenosis, acute conjunctivitis, reactive edema of the orbital and eyelid tissue, subperiosteal abscess of the abdomen); concomitant acute otitis media was also noted. All children underwent endoscopic, radiographic, dacryological examination, as well as conservative and surgical treatment. The obtained data were statistically processed.

Table
Distribution of patients by gender and age

Patients	Age, years				Total
	0-2 years	3-6 years	7-11 years	12-17 years	
Boys	22	25	20	11	78
Girls	30	19	18	9	76
Total	52 (33.8%)	44 (28.6%)	38 (24.7%)	20 (12.9%)	154(100%)

RESULTS

All children aged 0 to 2 years (52 children - 100%) had combinations of acute otitis with rhinitis, conjunctivitis and dacryocystitis, and stenosis of the nasolacrimal duct. No sinusitis was detected. Ear pathology in 39 (75%) children was represented by acute catarrhal otitis media. In patients over 3 years of age, various forms of sinusitis were observed, with a tendency to increase depending on the age of the child. The combination of rhino-orbital pathology with acute purulent otitis media prevailed in patients aged 3 to 6 years. Orbital complications of sinusitis were most often identified in children from 7 to 11 years of age: out of 38 (100%) patients, reactive edema of the orbital and eyelid tissue was detected in 4 children (10.52%), subperiosteal abscess was present in 2 (5.26%)

CONCLUSIONS

In pediatric practice, there are certain age-related features of the course of pathology of the rhino-orbital zone. In children under 2 years of age, the most common combination of acute catarrhal otitis media and rhinitis, with concomitant conjunctivitis, stenosis of the nasolacrimal duct and dacryocystitis. Acute sinusitis in combination with acute purulent otitis media, pathology of the lacrimal drainage system, mainly occurred in children 3 years of age and older. Orbital complications of sinusitis predominated in the group of children aged 7 to 11 years. The presented observations indicate that, despite the reason for treatment, patients with combined pathology of the pharynx, larynx and naso-orbital zone need help not only from otolaryngologists, but also from other specialists, primarily infectious disease specialists. In order to improve the quality of diagnosis, routing and treatment of patients with combined pathology of the pharynx and naso-orbital zone, it is necessary to develop interdisciplinary interaction and create conditions for expanding the professional erudition of doctors dealing with problems of pharyngeal pathology. the same anatomical regions.

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