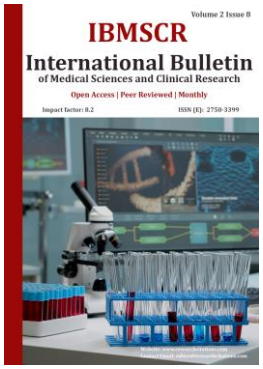

THE SIGNIFICANCE OF CONCOMITANT PATHOLOGIES OF THE ORGANISM FOR THE CLINICAL COURSE OF CHRONIC RHINOSINUSITIS IN CHILDREN

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Abstract: This article discusses current ideas about inflammation of the paranasal sinuses in children. Information about the etiopathogenetic factors of rhinosinusitis in children is given. Some clinical indicators of 82 patients.
Keywords: antibiotic therapy, children, rhinosinusitis.

Relevance. Until now, the problem of rhinosinusitis (RS) has not lost its relevance in pediatrics and otorhinolaryngology, which is associated with a continuing increase in the incidence. The clinical manifestations of MS are difficulty in nasal breathing, nasal discharge, postnasal drip, headache and facial pain, hyposmia, and cough. These symptoms are nonspecific and may be seen in other diseases of the nose and paranasal sinuses. According to different authors, about 5% of children suffer from rhinosinusitis in one form or another [4,7]. The European Guideline for the Treatment of MS and Nasal Polyps (EP3OS, 2012) defines MS in children as inflammation of the mucous membrane of the nose and paranasal sinuses (SNS) with two or more symptoms, one of which is nasal congestion/difficulty in breathing or nasal discharge. (Outward, into the nasopharynx), as well as facial pain or cough. In addition, MS is characterized by the presence of certain endoscopic signs (polyps in the nasal cavity, mucopurulent discharge mainly from the middle nasal passage, mucosal edema mainly in the middle nasal passage), as well as CT signs of changes in the mucous membrane of the osteomeatal complex or SNP [2,6,17]. In pediatric practice, chronic MS (CRS) is most often a multifactorial disease. Unlike acute MS (ARS) in the etiology of chronic inflammation of the nasal cavity and SNP in children, the leading role belongs to non-infectious agents, CRS is more often one of the manifestations of any systemic disease: primary and secondary immunodeficiency; diseases associated with changes in the viscosity of mucus (cystic fibrosis); diseases associated with impaired ciliary activity (Kartagener's syndrome, ciliary dyskinesia syndrome) [1, 8, 14,15].

The role of gastroesophageal reflux in the development of CRS is discussed. Depending on the etiological factors, CRS can be bacterial, fungal, or caused by bacterial-fungal associations. According to the nature of the course, mild, moderate and severe forms of the disease are distinguished. According to the morphological features, CRS can be catarrhal, purulent, polypous and polypous. The etiology and pathogenesis of nasal polyps, despite intensive research conducted both in our country and abroad, remain insufficiently studied [1,7,13,16].

According to the latest data, the main importance is attached to the allergic nature of the disease, impaired metabolism of arachidonic acid, persistence of bacterial and fungal superantigens on the mucous membrane of the nasal cavity, in children - to hereditary pathologies, in particular cystic fibrosis (cystic fibrosis). There are a few publications on the pediatric population of patients with cystic fibrosis, according to which the incidence of nasal

polyps is 39.1% [6,18]. At the same time, domestic studies give significantly higher figures - 84.6% of children with a mixed or respiratory form of the disease have nasal polyps [7]. Among all children with polyposis MS, patients with cystic fibrosis account for 15–20% [5, 7, 12]. A number of pathological conditions can be distinguished, which, by disrupting air exchange and SNP clearance mechanisms, can be factors predisposing to the development of CRS. These include many anatomical anomalies in the structure of the nasal cavity and SNPs, chronic rhinitis, atopy, intolerance to non-steroidal anti-inflammatory drugs, immunodeficiency states, diseases accompanied by disorders of mucociliary transport, gastroesophageal reflux disease, fistulas between the oral cavity and maxillary sinuses [3, 9].

The classical modern concept, which is actually a theoretical justification for functional intranasal surgery, is based on the position that chronic inflammation in the SNP is almost always the result of a violation of their aeration and partial or complete blockade of their excretory tracts [9]. Even a small mucosal edema in a banal inflammatory process is enough to make the mechanism of mucociliary transport in the narrow crevices and channels through which the secret is evacuated from the SNP become untenable. According to various studies, in biopsy samples of the mucous membrane of the SNP obtained during endoscopic operations for CRS, biofilms were detected in 80–100% of cases.

The emergence of antibiotic-resistant forms of microorganisms creates certain difficulties in choosing the right drug for systemic antibiotic therapy. The goal of MS antibiotic therapy is to suppress the symptoms and reduce the duration of the manifestations of the disease, the destruction of pathogens, which reduces the damage to the mucous membrane leading to the chronicity of the disease. Irrational and prolonged antibiotic therapy leads to an increase in antibiotic resistance [11,15]. The widespread use of systemic antibiotics, often without sufficient justification, especially with the use of inadequately low doses and insufficient duration, leads to the emergence of pathogen strains resistant to this antibiotic [2, 14].

Purpose of the study. Study of etiopathogenetic factors of rhinosinusitis in children.

Research methods and materials. Over the past 2 years, in the Bukhara Regional Multidisciplinary Children's Center with a diagnosis of "Acute rhinosinusitis" (ARS), 82 sick children aged 1 to 14 years were treated, of which 53 (64.6%) were boys, 39 (35) were girls. ,4%). For an objective assessment of the condition of sick children, an endoscopic examination of the nasal cavity, a study of the mucociliary clearance system, endonasal thermometry, anterior active rhinomanometry, a comparative analysis of cytograms of discharge from the nose, and bacterial culture of sinus lavage were used. On the basis of the results obtained, it can be concluded that the condition and faster recovery of clinical and functional indicators of the state of the mucous membrane in sick children.

Results. When analyzing the data, the diagnosis of ARS in all cases was established on the first day from the onset of the disease based on the characteristic complaints of patients and anamnesis. Children or parents of sick children complained of difficulty in nasal breathing, increased nasal discharge, cough, headache, child's anxiety, and often fluctuating body temperature. These sick children had a history of hypothermia, consumption of cold drinks and food, and sometimes previous colds of the upper respiratory tract. An objective examination revealed postnasal drip, sometimes changes in the nasopharyngeal region of an inflammatory nature. The most common comorbidities were anemia (38%), polyp (7%), anomaly in the development of the nasal sinus (7%), allergies and bronchial asthma (6%),

gastroesophageal reflux (4%), immunodeficiency (3%), mucociliary clearance disorder (2%) genetic (2%) endocrine (2%) and other violations.

All sick children underwent complex therapy, taking into account the underlying and concomitant pathology. At the same time, against the background of the use of traditional manipulations, local antibacterial drugs were used, which made it possible to avoid excessive and unjustified use of systemic antibiotics for the treatment of this pathology, as well as an increase in the resistance of bacterial strains to them.

Conclusion: Thus, based on the data presented to date, it can be concluded that the causes of the onset and development of chronic inflammation in the SNP are still not well understood, which means that further research and observations are required. In addition, despite the availability of data and recommendations for the treatment of MS, the importance of further research in order to improve the clinical effectiveness of the treatment of this disease is undeniable.

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