ETHIOPIAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 01, Jan-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980

PASSING ADENOIDITIS IN CHILDREN

B.Yu Razakov

Assistant of the Department of Pathological Anatomy of Andijan State Medical Institute

ABSTRACT: Often this pathology occurs in pediatric practice due to the specific characteristics of nasopharyngeal microbes, virulence and invasiveness of microorganisms. One of the reasons for long-term, slow, recurring, difficult-to-treat chronic diseases is the decrease in the body's resistance. Such changes occur, first of all, against the background of frequent and unjustified use of systemic antibiotic therapy, including a decrease in the reactivity of the immune system in children who are often sick. Bacterial flora and herpes infections, as well as factors causing respiratory diseases of viral etiology play a special role in the occurrence and recurrence of nasopharyngeal inflammatory diseases.

KEYWORDS: Adenoid, tonsils, follicular, nasal cavity, paranasal sinuses, nasopharynx, larynx, middle ear, inflammation.

INTRODUCTION: Chronic inflammation of the lymphoid structures of the nasopharynx is often seen in the practice of outpatients and inpatients, prone to recurrence and complications from the middle ear. Many methods and tools are used in the treatment of chronic inflammation of adenoids, but their effectiveness is still insufficient. In most cases, recurrence of lymphoid tissue hypertrophy is associated with its incomplete removal, because surgery is still often performed without visual control; in children, it may be due to the anatomical features of the structure of the nasopharynx and the prolapse of lymphoid tissue into the nasal cavity. At the same time, the presence of an allergic diathesis and the replication of viruses in the lymphoid tissues of the brain also contribute to the development of the disease, the formation of a cicatricial adhesive process in the nasopharynx and tubal zone, and compensatory hypertrophy of the tubal tonsils.

LITERATURE ANALYSIS AND METHODOLOGY: adenoiditis is not divided into a separate nosological group in the MKB-10 international classification. Doctors use the following codes.

- 100.0 - acute nasopharyngitis
- 1 31.1- chronic nasopharyngitis
- 1 35.8 - chronic diseases of tonsils and adenoids
- 1 35.2 - hyperplasia of pharyngeal tonsil, hypertrophy of adenoids
- 1 35.9 - unspecified chronic diseases of adenoids and tonsils.

Acute nasopharyngitis is characterized by seasonality, mainly in the autumn-winter and spring periods, its etiological cause is various viruses that are tropic to the epithelium of the upper respiratory tract, and is often accompanied by an acute respiratory viral diagnosis. infection (ARVI). In Russia, influenza and ARVI account for 90% of all infections [62,79,171]. Often repeated SARS provokes a local inflammatory process in the nasopharyngeal tonsils, which can turn into a chronic course with frequent contact with respiratory viruses that cause SARS and influenza. Hyperplasia accompanying chronic inflammation of pharyngeal tonsils is believed to be associated with immaturity of local and systemic immunity in children [17,29,77]. The most common cause of reactive changes in pharyngeal tonsils is not only acute respiratory viral infections, which rank first among all diseases in children [105,109,110]. Comparative statistics show that in the Russian Federation, respiratory viral infections take the leading place in the total composition of all infectious diseases from 82% to 85% [153], with the trend of annual increase in the incidence rate remaining [136]. Frequent repeated viral infections disrupt reparative processes in pharyngeal tonsil mucosa

eISSN: 2349-5715 pISSN: 2349-5707
Volume: 11, Issue 01, Jan-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980

due to long-term exposure to antigens, which leads to increased infiltration of lymphocytes and macrophages into tissues. Viruses preserved in lymphoid tissues cause hypertrophy and chronicity of the inflammatory process in the pharyngeal tonsils, and also help to change the reactivity of bacterial agents that colonize the nasopharynx, except for SARS. Given the anatomical and physiological characteristics of the pharyngeal tonsil, its hypertrophy and inflammation are manifested in neighboring organs, causing complications in the paranasal sinuses and the middle ear [10,159,178,184]. In the presence of a viral, bacterial association, bacteria delay the release of viruses from the body, and viruses support bacterial infection, which is considered in modern immunology as the resistance of cellular antiviral and humoral antibacterial immunity [61,141]. German scientists have data showing various inflammatory changes in pharyngeal tonsil tissue obtained during adenotomy [1,100]. An immunohistochemical study found statistically significant differences in follicular and intraepithelial compartments of lymphoid tissue in children over 6 years of age and insignificant differences between interfollicular and subepithelial regions in patients with pharyngeal hypertrophy and chronic inflammation [161]. Viral infection causes an inflammatory reaction with cell infiltration and release of anti-inflammatory cytokines - TOT-α (tumor necrosis factor) and TG-ІІІ (interleukin - ІІІ). The information system of cytokines is one of the most important mechanisms of interaction at the intercellular level, which determines the nature of inflammation and triggers recovery processes [10,130]. In addition to respiratory influenza and non-influenza viruses, herpes viruses also play an important role in the development and maintenance of inflammation in pharyngeal tonsil tissue, in particular Epstein-Barr virus (EBV), cytomegalovirus (CMV) and herpes simplex viruses type I and II). Infection of neutrophils and monocytes by EBV alone or in combination with adenovirus contributes to changes in the functions of these cells, which leads to a decrease in circulating phagocytes and, as a result, to the formation of hypertrophy of the pharyngeal tonsils in the background persistent, recurrent inflammation [84, 174]. It is necessary to take into account the complexity of immune, nervous interaction, and endocrine systems at the level of cells, tissues, organs, acquired under the influence of both genetic and unfavorable environmental factors [53, 58]. Characteristics of the influence of unfavorable environmental factors on the change of children's immunity were determined. In studies, it was proved that the phagocytic activity of neutrophils is significantly inhibited in practically healthy children living in conditions of moderate environmental pollution, which is accompanied by a decrease in the level of CD8+ cells. and an increase in CD25+ cells. At a very high level of environmental pollution, immunity is characterized by the release of immunocompetent cells with signs of activation (CD25+) and apoptosis (CD95+) against the background of a lack of mature T-lymphocytes and a clear inhibition of interferon. the development of frequent respiratory diseases. A decrease in the synthesis of immunoglobulin A (IgA) in children helps to slow down the destruction of etiologically important pathogens, which is one of the bases of the etiopathogenesis of the formation of chronic infections of the upper respiratory tract [52, 53].

In recent decades, the increasing trend and frequency of patients with allergic diseases, including nose and paranasal sinuses, is associated with environmental pollution with pollutants, agricultural development, tobacco smoking, and chemicals proven industry, uncontrolled use of drugs by the population, especially those with antimicrobial activity (systemic and topical antibiotics, antiseptics) [68 , 134].

The growth of allergic pathology in the children's population and the impact of allergic rhinitis on other respiratory diseases, in particular, SARS, paranasal sinuses, middle ear infections.

A number of studies have been devoted to the effects of allergic rhinitis

eISSN: 2349-5715 pISSN: 2349-5707
Volume: 11, Issue 01, Jan-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980

pharyngeal tonsil status [44,156,183]. A number of authors consider allergic rhinitis/diathesis is hypertrophy of pharyngeal tonsils. Histomorphological examination of pharyngeal tonsil tissue reveals signs of allergic inflammation: increased permeability of vessel walls, vasculitis, accumulation of eosinophils, macrophages, plasma and mast cells [44,156,170,183]. In children, allergic rhinitis and chronic adenoiditis are often combined, and in this case it is very difficult to distinguish the symptoms of these two diseases. In such patients, a vicious circle appears: nasal breathing is disturbed with hypertrophy of adenoids, as a result of ventilation of the paranasal sinuses (ONP), the amount of mucus increases and becomes blocked. The lumen of the sinuses with a swollen mucous membrane; While maintaining the outflow from the SNP, the transported secret covers the surface of the pharyngeal tonsil, which contributes to the formation / maintenance of its inflammation and greater hypertrophy of the pharyngeal tonsil, which leads to a decrease in the regeneration of the tonsil [16, 26, 39, 72, 172, 181].

In the nasal cavity and paranasal sinuses, nasopharynx, larynx, and middle ear [34, 83, 91, 102,127]. With GER, acidic chyme is thrown into various parts of the pharynx and causes reflux to the upper respiratory tract (nasal cavity, paranasal sinuses, pharynx and various parts of the middle ear) [3, 51, 64, 78, 102, 140, 143]. It was believed that hydrochloric acid causes protein denaturation and necrosis of the esophageal mucosa, but recent studies show that hydrochloric acid reflux in combination with bile acids has the most harmful effect. A number of authors have suggested that the cell suggested the possibility that the cells within penetration of bile acids with cytotoxic and mutagenic effects [78]. At the same time, the frequency of endoscopically confirmed reflux esophagitis ranges from 5% to 12% [56].

It follows from the above that there are different mechanisms of inflammation of the pharyngeal tonsil, and currently there is no consensus on the causes of the beginning and development of the chronic process and hypertrophy of the pharyngeal tonsil [105,160].

CLINICAL - INSTRUMENTAL EXAMINATION RESULTS

And parents according to survey results .

The complaints of all 192 patients are summarized and presented in Table 4.

Table 4.

Complaints	i group (n= 11 , 2)	Group II (n=80)
Difficulty breathing through the nose	69 (61.6 %)	50 (62.5 %)
Cough / cough	70 (64%)	61(76.25 %)*
Obstructive sleep apnea	7(6.3 %)*	-

eISSN: 2349-5715 pISSN: 2349-5707
Volume: 11, Issue 01, Jan-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980

Hearing loss	40 (35.7 %)	28(35 %)
Ear pain	14 (12.5 %)	14 (17.5 %)

* - p< 0.05

When analyzing the patients' complaints, it was found that the main complaint was difficulty in breathing through the nose (61.6 %), decrease 62.5%).

Complaints of hearing loss were approximately the same in both groups of patients (35.7 %) with a decrease of 35%, while complaints of coughing or wheezing were more common in group II patients (76.25%). Dec 64 %, p<0.05).

Talking to the parents, we learned how the mother's pregnancy went, the presence of smoking during pregnancy, the presence of severe allergic history in the family, and the connection of adenoiditis with ARVI.

Table 5 shows predisposing factors according to history.

Table number 5.

Anamnesis data analysis

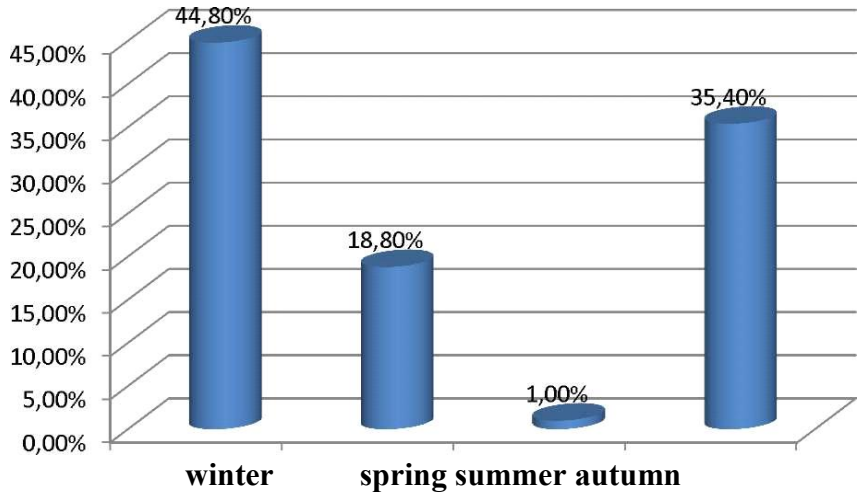
Factors	Group I N= 112	Group II N= 80
During pregnancy: smoking mothers	32 (16.6 %)	30 (15.6 %)
SARS during pregnancy	47 (24.4 %)	49 (25.5 %)
Frequency of ARVI diseases (more than 6 times a year)	58 (30.1 %)	70 (36.4 %)
The relationship of the current disease to SARS	29 (15%)	51(26.6 %)*
weighed family history of allergies	55(28.6 %)*	33 (17.2 %)

eISSN: 2349-5715 pISSN: 2349-5707
Volume: 11, Issue 01, Jan-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980

When analyzing the anamnestic data, it was found that the frequency of maternal smoking during pregnancy in both groups of patients was approximately the same (16.6 %) a decrease of 15.6%, slightly more frequent acute respiratory viral infections per year in group II patients (36.4% December 30.1%).

Often family allergic history (28.6 %) was found in 17.2% of group I patients. Association of adenoiditis with ARVI prevailed (26.6 %) and 15% in patients of group II.

There is seasonality in patient referrals (Fig. 2). It is the most in autumn-winter (35.4 % - 44.8%), slightly less in spring (18.8%) and minimum in summer (1%).



2. The frequency of occurrence of adenoiditis depending on the time of year.

CONCLUSION: Adenoiditis accounts for 20-70 % of respiratory diseases in children. The spread of this pathology is a serious medical and social problem associated with the increase in the economic costs of health care.

Today the most common diseases of the nasopharynx are: adenoiditis (acute and chronic), hypertrophy of the nasopharyngeal tonsils. Chronic adenoiditis (ChrA) is one of the first J OP is located in the pathology of organs and is observed in 20-50% of children. population and in the group of frequently sick children, this indicator reaches 70%. To date, the concept of adenoiditis is considered a polyetiological disease of the mucous membrane of the nasopharynx, which is based on a violation of the immune processes of the pharyngeal tonsil, which is often accompanied by its hyperplasia. Among those referred for surgical treatment, it was 1.4 times more. Thus, the treatment of children with adenoiditis should be complex, in addition to local antiseptic, as well as physiotherapeutic procedures, if adenoiditis of viral, viral-bacterial or bacterial etiology is clinically identified, it should be prescribed antiviral drugs and or antibacterial agents, should include.

LIST OF REFERENCES:

1. Bogomilsky M.R., Chistyakova V.R. Children's otorhinolaryngology. Management for doctors. M.: "Medicine" 2005. S302-307.
2. Bogomilsky M.R., Chistyakova V.R. Children's otorhinolaryngology. Management for doctors. M.: "Medicine" 2005. S 517-528.
3. Borzov E. V. Cytokine profile detection of hypertrophied adenoids and chronic adenoids and local cytokinotherapy / E. V. Borzov, N. Yu. Sotnikova, E. V. Tolkacheva // Vestnik new medical technology. - 2008. - T. 15, No. 1. - S. 83-85.

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 01, Jan-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980

4. Budyakov CB Complex treatment of exudative moderate otitis media in the pathology of the nose, sinuses and nasoglotki. // Ros .r inology. -2003.- No. 1.-S. 33-35.
5. Burmistrova T.V. Etiopatogeneticheskie aspects of exudative otitis media: Autoref. dis. sugar Med . n auk. M 2006; 22.
6. Bykova V.P. Strukturnye osnovy mucosalnogo immunitya verkhnix dyxatelnyx putey // Ros.r inol . 1999. #1.S.5-9.
7. Bykova V.P. Adenoid and adenoidity and physiology and pathology in children's age / V. P Bykova, O.A. Bruevich, O.V Payushina// Archiv patologii.-2007.-T 69, vyp 4.- S 50-55.
8. Volodin A.V. Izuchenie localization i formy nosoglotochnoy mandaliny po rezultatam endoscopy polosti nasa i nosoglotki u detey 3 5 let. Ros otrinolar 2009;2:50-51.
9. Gadzhimirzaev G.A., Gamzatova A.A., Gadzhimirzaeva R.G. Osobennosti kliniki i lecheniya kombinirovannyx allergozov verkhnix dyxatelnyx putey i ukha // Rossiyskaya rinologiya - 2004.- №1.- S.55-57.