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GENERAL UNDERSTANDING OF HYPERTROPHIC AND POLYPOSIS RHINITIS, INFORMATION ON ITS INCIDENCE, PATHOGENESIS

Muydinov Ravshanjon Rakhimjonovich
Assistant, Department of Stomatology and Otorhinolaryngology, Fergana Public Health Medical Institute, Fergana, Uzbekistan

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Abstract:

This article presents literature data on the incidence, causes, pathogenesis and pathomorphological types of hypertrophic and polypous rhinitis. Chronic hypertrophic and polypous rhinitis is a process of neoplastic growth of tissues, in which both parenchyma and stromal structures proliferate simultaneously. Exogenous and endogenous factors that cause a vasomotor reaction in the mucous membrane are distinguished as causes. Exogenous influences include cold, factors that provoke reflexes, smoke, sharp and spicy foods, meteomils, and various drugs, which have a vasoconstricting and hypotensive effect. Among the endogenous factors, hormonal dysfunction, endocrine diseases and physical psychoemotional effects gain great importance. Morphologically, simple, allergic and fibromatous types of this disease are distinguished.

Keywords: nose, rhinitis, hypertrophy, polyp, inflammation, metaplasia, allergy.

INTRODUCTION

Hypertrophic rhinitis (HR) problems have been researched in various directions for many years, but several aspects of this large-scale issue have not yet been fully resolved. The incidence of hypertrophic rhinitis in young children is directly related to the influence of local climatic and geographical features of the region. Hypertrophic rhinitis is the most common disease among children and adults, and according to the World Health Organization, 40% of the population of developed countries have an allergic tendency, and now the incidence of allergic rhinitis is 10-20% of the general population [1,2,3].

LITERATURE REVIEW

According to the results of epidemiological studies, about 20% of all age groups of the population are sick with hypertrophic rhinitis. hypertrophic rhinitis is more common among urban residents than among rural residents, who account for 75% of urban residents. 25% of the rural population was recorded. The prevalence of hypertrophic rhinitis depends on age and gender. Among young people, boys are more likely to suffer from AR. The clinical course of hypertrophic rhinitis depends on the individual effects of the child's body, age, sex and ethnicity, as well as various influencing factors. Every year, research is conducted in our country to study various aspects of hypertrophic rhinitis.

In particular, in recent decades, in this field research was conducted by Hirsalieva V.Sh. Alieva (2012), F.B. Nurmuhamedova (2018), A.G. Daliev (2020), F. (2015) and other scientists.

O.A. According to Nazarov (2011), the prevalence of hypertrophic rhinitis in Uzbekistan doubled in the first decade of the 21st century. In many cases, patients are not diagnosed with hypertrophic rhinitis in time. However, in the few available literature sources, there are separate studies dedicated to the detailed study of the quality of life, taking into account the clinical forms and severity of hypertrophic rhinitis. It should be noted separately that the negative changes in sinusitis with allergic rhinitis, especially in the pathomorphology of the upper jaw cavity, have not been studied [4,5,6]. Also, there are no special questionnaires to assess the quality of life.

The article serves to solve the following problematic issues, i.e., the decision of the President of the Republic of Uzbekistan dated February 7, 2017 PQ-4947 "On the strategy of actions for the further development of the Republic of Uzbekistan" No. 3071 of June 20, 2017, i.e. "Measures to improve the health care system of the Republic of Uzbekistan" in Presidential Decree No. 5590 of December 7, 2018, "On measures to further develop specialized medical care during 2021" and other relevant legal documents will serve to better implement the measures.

MATERIALS AND METHODS

The above information on hypertrophic rhinitis and other unsolved aspects determines the goals and objectives of our research. Hypertrophic rhinitis is a process that continues with the growth of mucous

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membranes of the nasal concha due to chronic inflammation. Disturbance of breathing through the nose, rhinorrhea, i.e. bone coming from the nasal passages, foul-smelling mucus, and headache are characteristic symptoms of hypertrophic rhinitis. Recently, inflammation of the mucous membrane of the nasal cavity has been observed in chronic hypertrophic rhinitis. According to the statistics of the ENT field, the incidence of chronic hypertrophic rhinitis ranges from 4% to 20% [7,8].

As the etiological factors of chronic hypertrophic rhinitis, the violation of the architecture of the nasal cavity, that is, the deformation of the nasal septum, and the appearance of nodules and cysts in the mucous membrane are considered. Lately, the high role of intracellular bacterial infection among the causes of this disease has been confirmed. Mycoplasma pneumoniae is a gram-negative bacterium that causes damage to the tissue and cells of the mucous membrane and is an energetic and metabolic parasite. Exogenous and endogenous factors that cause a vasomotor reaction in the mucous membrane are distinguished as causes. Exogenous influences include cold, factors that provoke reflexes, smoke, sharp and spicy foods, meteomils, and various drugs, which have a vasoconstricting and hypotensive effect. Among the endogenous factors, hormonal dysfunction, endocrine diseases and physical psychoemotional effects gain great importance.

Polyposis rhinitis and rhinosinusitis is a chronic diseases, manifested by the appearance of polyp-like cysts in the nose and nasal cavity. In this case, the mucous membrane of the nose and the mucous membrane of the spaces around the nose grows and nodules appear. Over time, polyp tumours fill and block the airways and cause clinical complaints. Macroscopically, these polyps are characterized by a smooth surface, light purple colour, soft, movable, and often the surface is covered with mucus or purulent substance. When a polyp appears, it becomes difficult to breathe through the nose, the nose becomes blocked, the sense of smell decreases, and headaches occur. Lack of oxygen and hypoxia of the brain are observed when breathing becomes difficult for a long time. Nasal polyps are rare in young children. It appears mainly in people over 30 years old, and it increases in 50-60 years. Chronic polyposis rhinosinusitis has a local form, a solitary form, an antrochoanal polyp, and a diffuse form. The local form of the polyp is often observed in anatomical anomalies of the nose, it becomes difficult for air to enter, and inflammation and swelling develop in the mucous membrane along its path. Chronic purulent inflammation, including autogenous purulent sinusitis, causes polypous tumours to appear on the mucous membranes of the nose and paranasal sinuses.

Antrochoanal polyp is a benign tumour that occurs in the maxillary sinus and grows into the nasal cavity. They sit on a thin and long leg, fill the larynx in terms of size and deform the nose. The origin of choanal polyps is the development of chronic inflammation in the upper jaw cavity, the beginning of proliferative inflammation in the mucous membrane, and the transformation into a polyposis-cystic process in the cavity. Examination of the polyp tissue under a light microscope shows that the gland and covering epithelium have increased, and chronic proliferative inflammation has developed in the private plate. The covering epithelium is single-layered, thinned and atrophied in some places. It is observed that the composition of proliferative inflammation consists of lymphocytes, plasma cells, eosinophils and polynuclear cells around the glandular structures. When polyps become chronic, it is determined that the single-layered cylindrical epithelium has metaplasia into multi-rowed or even multi-layered flat epithelium in some areas. In this case, it is found that acanthosis and keratosis processes have appeared on the surface of the multi-layered epithelium.

RESULTS AND DISCUSSION

Thus, antrochoanal polyp accounts for 41% of all nasal polyposis patients. In 16.4% of cases, an antrochoanal polyp is detected when it reaches the III degree and is defined as a giant tumour. Morphological examinations show that chronic proliferative inflammation has developed in the polyp in most cases. If mucoid degeneration has occurred, it is found that cysts have appeared in the polyp. Depending on the degree of the proliferative process developed in the polyp, it is determined whether it is in the inflammatory period or has turned into a tumorous process.

According to the distribution in the nasal mucosa, hypertrophic rhinitis occurs in a limited and diffuse form [9,10]. Depending on the developed pathomorphological changes:

1) cavernous or vascular rhinitis, this form develops depending on the violation of the tone of the vessels, and the nose swells when the head is turned to the right and left;
2) fibrotic rhinitis - due to long-term inflammation, the connective tissue grows, the nasal shells thicken;
3) polycystic rhinitis - growth of tissue is observed in the initial part of the nasal concha;
4) sinusitis - growth of raspberry-like tissue is observed in the back of the nose.

According to the morphological structure, the following types of chronic polyposis rhinitis are distinguished:

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1) simple tumour type - polyp stroma consists of strongly swollen connective tissue, contains a small number of fibroblasts, and the interstitium is myxomatous.
2) An inflammatory infiltrate consisting of eosinophils, monocytes and mast cells is found in the polyp stroma of allergic type. Single-layer cylindrical epithelium on the surface is found to be metaplastic to multi-row and multi-layered epithelium.
3) Fibrous type is histologically found in the form of fibrous-vascular, fibrous-cystic, and fibrous-glandular. In this type of polyposis rhinitis, there is always a mucous substance in the nasal cavity due to the appearance of a packing-like epithelium among the surface epithelium.

CONCLUSIONS

Chronic hypertrophic and polypous rhinitis is a process of neoplastic growth of tissues, in which both parenchyma and stromal structures proliferate simultaneously. Exogenous and endogenous factors that cause a vasomotor reaction in the mucous membrane are distinguished as causes. Exogenous influences include cold, factors that provoke reflexes, smoke, sharp and spicy foods, meteomils, and various drugs, which have a vasoconstricting and hypotensive effect. Among the endogenous factors, hormonal dysfunction, endocrine diseases and physical psychoemotional effects gain great importance. Morphologically, simple, allergic and fibromatous types of this disease are distinguished.

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