MORPHOLOGICAL CHANGES IN HYPERTROPHIC AND POLYPOUS RHINITIS

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Abstract

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.

Material and methods: 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 tumors fill and block the airways and cause clinical complaints. Macroscopically, these polyps are characterized by a smooth surface, light purple color, 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, 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, inflammation and swelling develop in the mucous membrane along its path. Chronic purulent inflammation, including autogenous purulent sinusitis, causes polypous tumors to appear on the mucous membranes of the nose and paranasal sinuses.

Antrochoanal polyp is a benign tumor 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.

Thus, antrochoanal polyp accounts for 41% of all nasal polyposis patients. In 16.4% of cases, antrochoanal polyp is detected when it reaches the III degree and is defined as a giant tumor. 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.

Result: According to the spread in the nasal mucosa, hypertrophic rhinitis is limited and diffuse (9,10). Depending on the developed pathomorphological changes: 1) cavernous or vascular rhinitis, this form develops due to a violation of the tone of the vessels, and the nose swells when the nose is turned to the right and left, 2) fibrous rhinitis - due to prolonged 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: 1) simple edematous type - it is determined that the polyp stroma consists of strongly swollen connective tissue, contains a small number of fibroblasts, and the interstitial substance 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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