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METHODS OF MORPHOLOGICAL EXAMINATION OF POLYP TISSUE AFTER SURGERY FOR CHRONIC POLYPOID RHINOSINUSITIS

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Annotation. In this study, 70 people were examined (50 patients in the study group and 20 patients in the control group). The material removed during the operation was processed according to standard methods for obtaining histological preparations. In this work, changes in polyp tissues were identified in three types of nasal polyps. I. Edematous - histological signs: edematous stroma of the polyp, containing a small number of fibroblasts and connective tissue fibers, as a result of which the intercellular space acquires a spongy, loose appearance. In the depth of polypoid tissues, there are areas with the presence of single glands and cysts. II. Allergic (eosinophilic) - histological signs: the presence of infiltrates with a large number of eosinophils along with monocytes and mast cells. III. Fibrous (fibrovascular, fibrocyst, fibroglandular) - histological features: the stroma has a dense compact structure, consisting of a large number of fibroblasts and surrounding connective tissue fibers

Keywords: polypoid rhinosinusitis, basement membrane, glands, cysts.

Relevance of the problem. In the structure of the overall morbidity of ENT organs, damage to the nasal and paranasal sinuses occupied the first place both in the analysis of visits to the clinic and in the group of hospitalized patients, with rhinosinusitis accounting for 44-46%.

Login. Chronic polypoid rhinosinusitis (CPRS) is characterized by chronic effective inflammation of the mucous membrane of the nasal cavity and paranasal sinuses, accompanied by the formation and growth of polyps, with their recurrence after surgical treatment[1]. SPRS is a simultaneous proliferation of parenchymal elements and stroma, which can also arise from neoplastic tumours and the mucous membrane of the maxillary sinuses, usually originating from the middle meat, anterior and posterior ethmoid cells.

Research objective. Detailed description of the morphological picture of various nasal polyps for correct clinical and differential diagnosis (CDD). Frontal, maxillary, and sphenoidal sinusitis often begin with a pathological process in the cells of the ethmoid labyrinth and allowed us to change the approach to assessing its features [5]. Further development of this direction required a correct and accurate anatomical description of the paranasal sinuses.

Materials and research methods. The object of the study was human material, polyp sites of the nasal cavity and mucous membrane of the lower nasal turbinates. The material was taken from male and female patients aged 35 to 70 years, a total of 70 people (50 patients in the study group and 20 patients in the control group). The study group consisted of patients with a clinically confirmed diagnosis of chronic polypy rhinosinusitis without simultaneous inflammatory (purulent maxillary rhinosinusitis) and allergic (allergic rhinitis, bronchial asthma, aspirin triad) pathology. The control group consisted of patients without polyposis and

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without inflammatory and allergic pathology of the mucous membrane, operated on for rhinoseptoplasty. Areas of nasal mucosa removed during surgery were used for a comparative description of morphological changes.

Results and discussion. The morphological picture of CPRS allows us to distinguish several variants: I. Edematous. II. Allergic (eosinophilic). III. Fibrous (fibrovascular, fibrocyst, fibroglandular) [2-4].

A combination of different types of polyps within a single polyp is also possible, and in patients with multiple nasal polyps, they are characterized as a mixed phenotype. (Golovin D.I., Dvorakovskaya I.V., 1972; Malekzadeh Sonya, McGuire John F., 2003) [2-4]. In our study, changes in all three types of polypoid tissues were revealed.

I. The edematous (simple) type of polyp is the most common, accounting for 45% of the studied polyps. Histological features: swollen stroma of the polyp, containing a small number of fibroblasts and connective tissue fibers, as a result of which the intercellular space has a spongy, loose appearance. In the depth of polypoid tissues, there are areas with single glands and cysts. In the stroma, areas of inflammatory infiltration are localized in foci concentrated around the vessels and in the subepithelial layer. The cellular composition of infiltrates is mainly represented by lymphocytes, monocytes, and polymorphonuclear cells. Eosinophils are present in small quantities. The surface of polypoid tissues is smooth, with shallow depressions in places, the epithelium retains the characteristics of the respiratory type, but the number of goblet cells in its composition increases significantly. The swollen type of polyp is often bilateral (Fig. 1).

II. Allergic (eosinophilic) polyps constitute 45% of the studied polyps. A histological feature distinguishing this type of polyp is the presence in the infiltrates of a significant number of eosinophils along with monocytes and mast cells. Transformation of stratified ciliated epithelium into stratified squamous epithelium is often observed. The stroma consists of loose fibrous tissue with a small number of blood vessels (Fig. 2).

III. Fibrous (fibrovascular, fibrocyst, fibroglandular) types of polyps are the most polymorphic.

The study and inclusion of patients in the control groups were carried out with the patient's documented consent and referral to the ENT department of the 2nd Clinical Hospital of the Tashkent Medical Academy. All patients underwent a full preoperative clinical examination, including endoscopic examination of the nasal cavity, radiography of the paranasal sinuses to assess the severity and degree of the disease.

After placing the obtained material in kerosene, histological preparations were prepared according to standard methods, followed by staining. In a detailed analysis of the prevalence of etmoiditis and the degree of involvement of other paranasal sinuses in the process, the following data were obtained, presented in Tables 1 and 2. examined patients, not the quantitative content of patients in single groups, and the number of cases of damage to each paranasal sinus separately.

Conclusion. Analysis of the structure of the ethmoid labyrinth in ethmoiditis of various localizations revealed the following results: with anterior and posterior ethmoiditis, first-degree septa predominate in the structure of the ethmoid bone, thereby forming larger and more regular cells - 77.5% and 76.5% (Fig. 3). In the "mosaic" form of ethmoiditis, the process is more localized in small cells, and in the structure of the ethmoid labyrinth, subdivisions of the 2nd and 3rd order prevail, forming 77.8% of cells of irregular shape. No pattern was found in the structure of the ethmoid bone with complete damage to the cells of the ethmoid labyrinth and isolated damage to the cells.

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