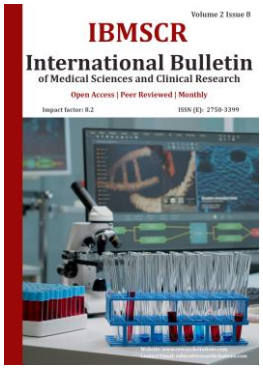

STUDY OF FUNGAL INFECTIONS CHRONIC TONSILLITIS

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Annotation: Statistical data indicate a high prevalence of chronic tonsillitis among the population, especially in young people . In some cases, with chronic diseases of the tonsils, superinfection with fungi takes place , which changes the course of chronic tonsillitis and complicates conservative treatment. The need for this study is dictated by the increasing role of fungal flora in the pathology of the tonsils.

Introduction: Comparison of data from mycological studies of patients with chronic tonsillitis with morphological and bacteriological studies of palatine tonsils after tonsillectomy.

Materials and research methods. Parallel mycological and morphological examination was carried out in 25 patients with chronic tonsillitis, including 11 men and 14 women aged 10 to 46 years. Mycological examination was carried out by sowing pathological material from tonsil lacunae in selective media.

Results of the study: 40 tonsils were examined, each of which was inoculated on Sabouraud's liquid medium before tonsillectomy , followed by re-seeding a day later on Sabouraud's solid medium . Solid growth of Candida in culture was obtained in 13 patients. In 12 patients, when sowing the pathological discharge from the palatine tonsils, the growth of fungal flora was not detected. The removed tonsils were fixed in neutral formalin. Morphological study was carried out on total paraffin sections made along the length of the tonsils. On microscopic examination of histological preparations of the tonsils in all patients in whom the growth of the fungal flora was obtained in the sowing of the tonsils, fungal elements were found, both when using the PAS reaction and when staining according to Gram-Weigart, fungal elements were detected in the excretion of individual yeast cells, budding yeast - like elements , are located groups of unsepted hyphae of pseudomycelium occurring as individual fragments. At the same time, yeast elements were found not only in crypts, but also on the pharyngeal surface of the tonsils at the level of the integumentary epithelium, as well as subepithelial connective tissue.

Yeast-like accumulations were found at the level of lymphoid tissue, lymph follicles, connective tissue capsule, and occasionally in paratonsillar tissue.

Pseudomycellar structures were determined in the composition of the tissue detritus of the crypts, on the pharyngeal surface of the tonsils, at the level of the integumentary epithelium and in the subepithelial connective tissue directly under the epithelial lining, while the pseudomycelium threads seemed to penetrate from the connective tissue into the integumentary epithelium. In one observation, a thread of pseudomycelium was found in a lymphatic follicle. In the crypts and on the surface of the tonsils , pseudomycelial filaments , as a rule, were determined in association with the microbial coccal flora, but if they were present in the tonsil tissue, they did not have a microbial component.

The morphological picture of chronic tonsillitis in patients of this group did not have any specific features that distinguish it from the usual picture of chronic tonsillitis.

However, it was distinguished by a greater degree of severity of the inflammatory reaction, giving reason to speak of an exacerbation of the inflammatory process. So, in many areas of the pharyngeal surface of the tonsils, infiltration of the integumentary epithelium with neutrophilic leukocytes was observed with desquamation of the integumentary epithelium up to the formation of an erosive surface.

The underlying connective tissue was densely infiltrated with lymphocytes, plasma cells, segmented leukocytes, especially in the areas of erosions. The vessels of the subepithelial zone were plethoric, with a thickened homogeneous wall and swollen juicy endothelium, with a large number of neutrophilic leukocytes in the lumen.

The state of the lymphoid tissue of the tonsil was characterized by a sharp hyperplasia of the lymphatic follicles with the identification of reactive centers and a parafollicular zone rich in cells - a type of plasmablasts with basophilic cytoplasm. In the reactive centers of the follicles, macrophages were often found with pigment inclusions in the cytoplasm, giving a weak CHIC - positive staining. In the presence of sclerotic changes in the lymphoid tissue, a large number of mast cells were noted in areas of sclerosis, often with degranulation phenomena . The crypts were filled with detritus and leukocytes. In many areas of the epithelial cover, patterns of lymphoepithelial symbiosis were observed, that is, mutual penetration of lymphoid and epithelial tissue, which made the border between the integumentary epithelium and the underlying lymphoid tissue indistinguishable. In the group of patients with negative results of mycological examination microscopically, yeast elements were detected in 5 patients.

Histologically, in 3 patients in the tonsils, in which micellar structures were detected, the picture of chronic tonsillitis corresponded to changes in the tonsils of the I-group of patients, that is, there was an exacerbation of the inflammatory process with the formation of erosion on the pharyngeal surface of the tonsils.

The results of histological examination of the tonsils in patients with chronic tonsillitis once again confirm that fungal infection is more common than one should think, and cannot always be detected only by microscopy and culture.

Conclusions:

1. Histological changes in the tonsils not only confirmed the data of mycological examination, but also made it possible to detect fungal elements in a much larger number of cases.
2. In the presence of infection of the tonsils with fungi of the genus Candida , inflammatory changes are more pronounced, which allows us to speak in favor of the etiological role of yeast fungi in the development of exacerbations of chronic tonsillitis.

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