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MORPHOLOGICAL CHANGES IN THE ORAL CAVITY DURING THE USE OF CHEWING TOBACCO

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Annotation. *The use of chewing tobacco has a long-term local irritant and toxic effect on the oral mucosa. The main morphological changes are hyperkeratosis, acanthosis, dystrophic changes in the epithelium, chronic inflammatory infiltration, vascular disorders and remodeling of connective tissue. With prolonged use, signs of epithelial atypia and dysplasia may form, which increases the importance of early detection and morphological control of pathological foci.*

Key words: *chewing tobacco, oral mucosa, hyperkeratosis, acanthosis, dysplasia, inflammation, morphological changes.*

RELEVANCE

The use of chewing tobacco is accompanied by prolonged contact of tobacco pulp with the oral mucosa and exposure to nicotine, tobacco-specific nitrosamines, oxidation products and other chemical components. Chronic local irritation contributes to the formation of structural changes in the epithelium and connective tissue of the mucous membrane, which can be considered as the morphological basis of inflammatory, dystrophic and potentially precancerous processes.

The purpose of the study: to summarize the morphological changes in the oral mucosa that occur with the systematic use of chewing tobacco.

Materials and methods. The analysis of modern scientific data on the clinical and morphological features of the oral mucosa in consumers of smokeless tobacco products is carried out. Changes in the multilayered squamous epithelium, the intrinsic lamina of the mucous membrane, the microcirculatory bed, and the inflammatory cell infiltrate were evaluated.

Results. The most pronounced changes are usually detected in the area of direct contact of the tobacco mass with the mucous membrane. Morphologically, hyperkeratosis and parakeratosis, thickening of the epithelial layer, acanthosis, uneven elongation of epithelial outgrowths, vacuolar and hydropic dystrophy of epitheliocytes are noted. With prolonged use, epithelial architectonics may be disrupted with the appearance of cellular and nuclear polymorphism, nuclear hyperchromia, changes in the nuclear-cytoplasmic ratio and increased mitotic activity. Edema, fullness and vasodilation of the microcirculatory bed, lymphocytic-histiocytic infiltration are detected in the own plate of the mucous membrane, and in the case of a chronic process, signs of sclerosis and remodeling of connective tissue are detected. Prolonged exposure to the components of chewing tobacco may be accompanied by a violation of the epithelial-stromal relationship and a decrease in the regenerative potential of the mucous membrane. The combination of these changes indicates



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the formation of chronic local damage, the severity of which depends on the duration and frequency of use of the product.

Conclusion. The systematic use of chewing tobacco is accompanied by a complex of morphological changes in the oral mucosa, including hyperkeratosis, acanthosis, epithelial dystrophy, chronic inflammation, vascular disorders and connective tissue remodeling. With prolonged exposure, signs of epithelial atypia may appear, which justifies the need for early dental examination, dynamic observation and morphological assessment of suspicious foci.

