**Morphological changes in major salivary glands tissue, surrounding the pleomorphic adenomas**

**Key words:** pleomorphic adenomas, morphology, surrounding the tumor major salivary glands.

**Objectives.** To determine the morphological peculiarities of major salivary glands tissue, surrounding the pleomorphic adenomas (PA).

**Materials and Methods.** The autopsy, surgical and biopsy material, which was divided into two groups, was applied in the study. Group 1 (G 1) included the autopsy material (n=6) represented by tissue fragments of major salivary glands without macroscopic and microscopic changes. Group 2 (G 2) included the surgical and biopsy material (n=30) represented by PA with the salivary gland tissue, which was adjacent to them at a distance of 0.5 cm and 1 cm. The histological method of the study was used.

**Results.** The morphological peculiarities of the major salivary glands in G 1 corresponded to normal physiological limits. Marked morphological changes were detected in tissue of the major salivary glands adjacent to PA at a distance of 0.5 cm in G 2. The latter were characterized by the atrophy of the terminal segments and ducts with cystic extension some of them, atrophic and alterative changes of the epithelium of the terminal segments and ducts, sclerosis and lipomatosis of stroma, presence the areas with hyalinosis and dystrophic calcification in stroma, hemodynamic changes with reduced number of vessels, presence of immune cells infiltration in stroma. The morphological peculiarities of the salivary gland tissue, located at a distance of 1 cm from the tumor, corresponded to G 1.

**Conclusion.** The conducted complex morphological examination of the major salivary glands tissue, surrounding the PA, evidences the necessity of surgical removal of both the tumor itself and the surrounding tissue at a distance of 1 cm. The determined by authors morphological substantiation of the approach to surgical treatment of such patients will allow to reduce the incidence frequency of the mentioned tumor relapses.

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