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SQUAMOS CELL CARCINOMA IN THE FORNIX OF THE ORAL VESTIBULE

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Abstract

The article describes a case of a long-term squamous cell carcinoma in the fornix of oral cavity. Diagnostic methods for this medical condition are also described.

Key words: Oral cavity; squamous cell carcinoma; oral cavity tumor

Squamous cell carcinoma belongs to the most common malignant tumors developing in the oral cavity. It usually locates in various areas, but most often in the root or body of the tongue, fundus of the oral cavity, retromolar triangle and buccae, whereas palatinal malignant tumors derive mainly from small salivary glands. Among the causes there are irritant factors, which damage the mucosa, such as smoking and tobacco chewing or alcohol consumption (1, 2). Partial prosthetic appliances or flippers, especially those used for many years without GDP's control, may play similar role. Tumors may also derive from the precancerous states, such as leukoplakia, erythroplakia or lichen planus. Ethiopathogenesis also includes genetic and environmental factors. The factors that encourage development of squamous cell carcinoma are also HPV infections. It is also gender and age-related, with prevalence in men and elderly people in the 6^{th} and 7^{th} decade of life (3).

Aim of the study.

The aim of the study was to present a case report of a patient, in which a malignant tumor in the vestibule of oral cavity was observed.

Case report.

A 63-year-old patient was referred to the Department of Oral Surgery under the urgency procedure, by the GP, due to an oral cavity tumor. The interview revealed that the lesion appeared 4 years ago, but the patient did not report to the specialist. The tumor was painless with slow growth. After 2 years first pain symptoms appeared, but the patient still did not start the treatment, but referred to a dental technician, who performed new dentures without consulting a GDP. Around 2 months before the technician ordered the patient to massage the lesion, after which the pain intensified and became constant. Such change encouraged the patient to visit a GP.

Extra-oral examination showed no changes (no face asymmetry in the region of the tumor, no enlargement of the lymph nodes). Intra oral examination revealed edentulous maxilla, complete acrylic denture, which was poorly fitted. The tumor was located in the fornix of oral cavity vestibule, in the region of teeth 24 to 28, and extended to buccal mucosa. The lesion was pedunculated, the size of 35x25 mm, of oval shape and uneven surface (fig. 1a, 1b), and the tissue surrounding the lesion was reddened, inflammated and painful by palpation.

The treatment was undertaken immediately the same day of the patient's admittance. OPG was performed (fig. 2), which revealed maxillary bone loss on the left side, matching the tumor location. Due to the size of the lesion and it invading the bone, the decision was made to perform a biopsy for further histopathological examination. After presenting the treatment plan to the patient and obtaining the written consent, the surgery was performed. In local anesthesia, the specimen was cut in the border between the healthy and affected tissue area. The wound was sutured (fig. 3a, 3b). The result of histopathological examination was: carcinoma planoeptheliale G-1, which confirmed the initial method of treatment. The Diagnostics and Oncological Treatment Card was created for the patient, after which the patient was referred for hospital treatment.

Discussion.

The oral cavity carcinoma, which includes the squamous cell carcinoma of the lip, oral cavity and pharynx, is the sixth most common malignant tumor in the world (4). That is why the appropriate diagnostics of neoplasms and all tumors suspected of metaplasia should be swift and effective. Each pathological lesion of oral cavity mucosa, which remains above 1 week and does not subside spontaneously, nor is giving in to treatment, should be diagnosed for excluding the malignancy.

The observation is equally important, as is the periodical follow-up of even the pathologically unchanged oral cavity mucosa, which is exposed to chronic irritants. To achieve this goal, apart from clinical examination, minimally invasive screening methods should be used, such as Vizilite, which uses the different fluorescence of healthy and atypical cells to uv light. Such research was performed in Department of Oral Surgery, Medical University of Lodz, until the system was commonly available (5). Another optic method available in diagnostics of pathological lesions is the VELscope. Also the use of toluidine blue, for staining the pathological lesions of mucosa, is popular in various branches of medicine, not only dentistry. The above-mentioned methods are only used as complementary for conventional dental examination, whereas they do not allow for unequivocal diagnosis (4). Other diagnostic methods, basing on genetic examination, include detailed analysis of protein markers. Increasing knowledge of molecular mechanisms and biomarkers, is important in diagnosis and selection of squamous cell carcinoma treatment (6).

At this point the most relevant and significant method is the histopathological examination of tumor fragment. Basing on the result of such examination, the final diagnosis is being stated, and treatment planned. Such procedure was performed in our patient.

Malignant tumors treatment is complex and includes surgical treatment, radiotherapy and chemotherapy or combination of the above-mentioned methods. The choice of therapy should be done by interdisciplinary team, which should be assembled individually for each patient. Many factors should be taken into consideration, such as the location of the tumor, its size, infiltration of adjacent tissues, presence of cancerous cells in adjacent and distant lymph nodes, and also metastases. In case of a squamous cell carcinoma, the differentiation stage of its cells, from G1 to G4, is very important. In our patient the tumor was in the stage of high differentiation (G1), which means a low-grade tumor and relatively promising prognosis.

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FIGURES:

Fig. 1a. Tumor located in the fornix of oral cavity vestibule.

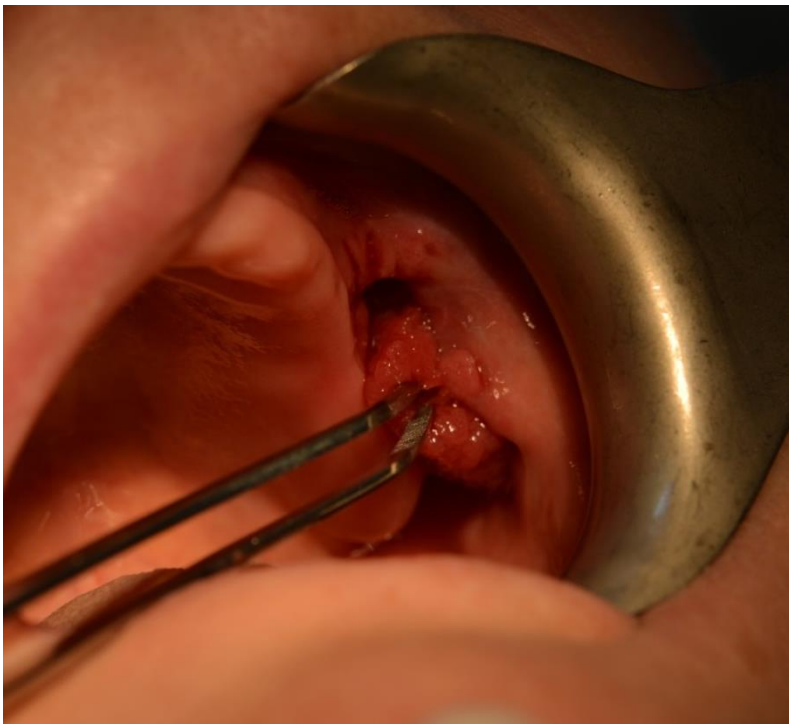

Fig. 1b. Tumor located in the fornix of oral cavity vestibule.

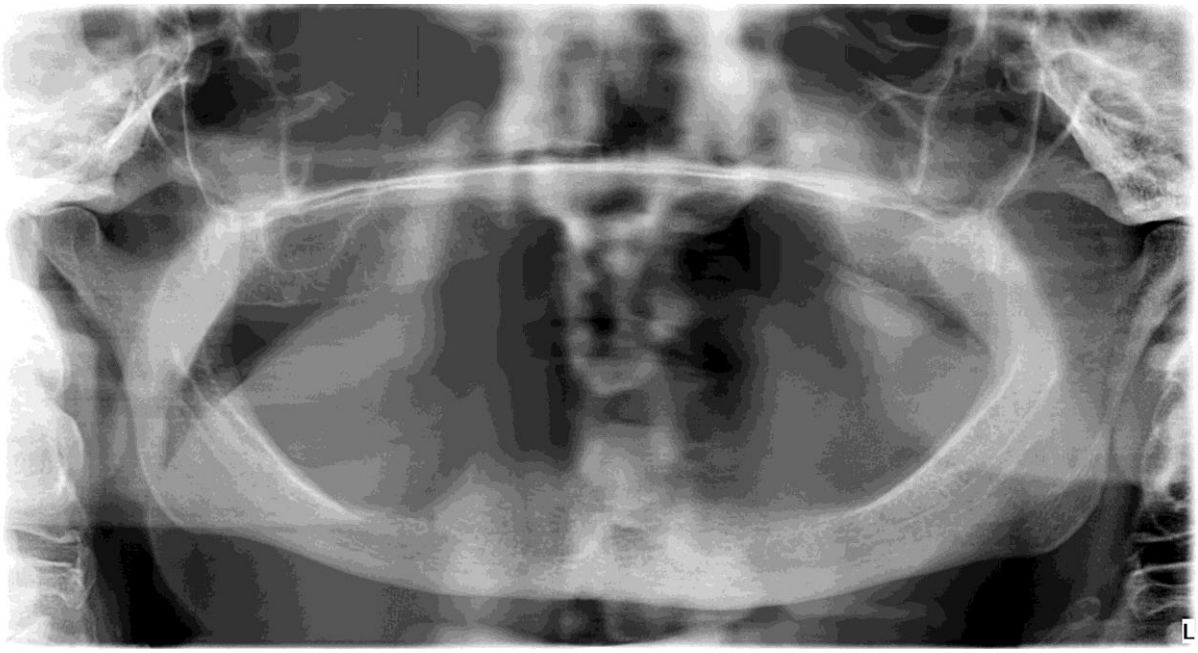

Fig. 2. OPG showing visible loss of maxillary bone in the region of the tumor.

Fig. 3a. Status post harvesting a sample from the border of healthy and infiltrated tissues.

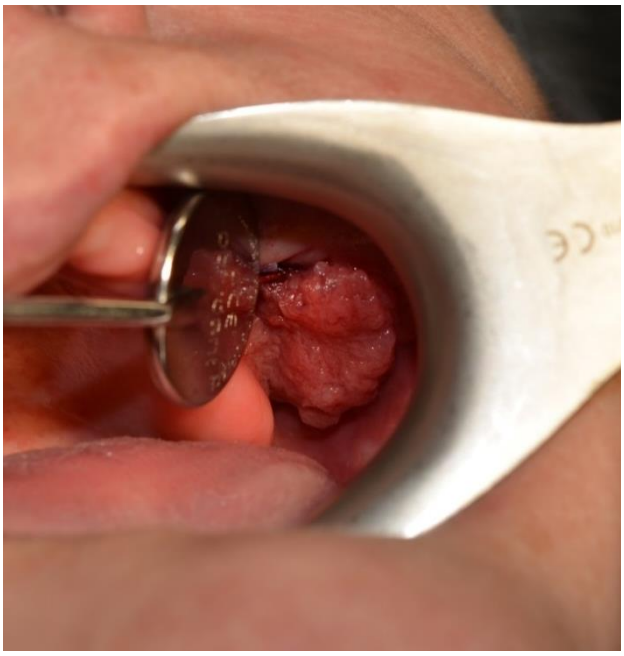

Fig. 3b. Status post harvesting a sample from the border of healthy and infiltrated tissues.