

Carsinoma In-Situ: Case Report

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Abstract

The primary surface structure of the oral cavity mucous membrane is lined with squamous epithelium. 86-95% of malignant tumors of the head and neck region develop from this structure. In order to determine the risk of malignant transformation of the precancerous lesion, the degree of dysplasia observed in the epithelium as a result of histopathological evaluation should be evaluated. High-grade epithelial dysplasia and carcinoma in-situ undergo irreversible change if left untreated, and ultimately result in the development of invasive carcinoma through the accumulation of genetic abnormalities caused by persistent exposure. It is most common in male over the age of 40. Tobacco, alcohol use, poor oral hygiene and chronic irritation are the most important etiological factors. Clinically, the first sign is the presence of painless ulcers. The most affected areas are; although these include the tongue, lower lip, and floor of the mouth, these types of carcinomas can occur anywhere in the mouth. In this case report; the clinical, radiological and pathological findings of a 55-year-old female patient who was diagnosed with in-situ carcinoma that started as a painless swelling in the gingiva in the maxillary anterior and right premolar region and showed extensive involvement are presented.

Keywords: Oral cancer, Carcinoma In-Situ, Oral Cavity, Cone-Beam Computed Tomography.

Case Report (Int J Dent Oral Res 2021; 1(3): 62-64)

Introduction

The primary surface structure of the skin, lips, and oral cavity mucous membrane is lined with squamous epithelium. 86-95% of malignant tumors of the head and neck region develop from this structure. Oral cancer ranks sixth among malignancies in terms of prevalence worldwide, and squamous cell carcinomas (SCC) account for more than 90% (1-4). Oral SCC usually develops through multistage carcinogenesis. The most reliable data in determining the risk of malignant transformation of a precancerous lesion is the degree of dysplasia in the epithelium as a result of histopathological evaluation. Epithelial dysplasia in squamous epithelium; expressed as mild, moderate, severe, or carcinoma in situ. Mild epithelial dysplasia has a better prognosis than high-

grade epithelial dysplasia. High-grade epithelial dysplasia and carcinoma in-situ undergo irreversible change if left untreated, and finally is caused the development of invasive carcinoma through the accumulation of genetic anomalies caused by continued exposure (5-7).

Carcinoma in situ, characterized by cytological epithelial dysplastic changes, does not change in the base membrane (4, 8-10). It is considered carcinoma in situ of the oral cavity to be synonymous with severe dysplasia by The World Health Organization (WHO) (9). Carcinoma in situ and SCC show the same etiology and clinical features (4, 9, 11). It is most likely to be seen in male in their fifth and sixth decades, who predominantly use alcohol and tobacco (12-

15).Clinically; they can present in a variety of ways, including red, red, and white lesions, white plaques, ulcers with hardened edges, and exophytic, ulcero-proliferative, or verrucous growths(9, 11).Oral cancers can be grouped as hard palate, tongue, soft palate, gingiva, retro-molar region and floor of the mouth according to the regions where they occur(16). The most affected areas in the oral cavity are included the tongue, lower lip, and floor of the mouth, these types of carcinomas can occur anywhere in the mouth (17).The carcinoma may spread from these regions to regional lymph nodes and/or distant organs (17, 18).

Case Report

In the medical history of a 55-year-old female patient who applied to our clinic with complaints of swelling and pain in the maxilla anterior and right maxillary premolar regions, it was learned that she did not have any systemic disease. The patient's smoking, alcohol, etc. it was determined that he did not use it and did not have a parafunctional habit. The patient stated that this swelling had been present for about 2 months, but gradually increased in size.In the patient's dental history, it was learned that there was a fixed prosthetic restoration in the areas with existing complaints, and the existing teeth were extracted just before this swelling developed. In the patient's extraoral examination; there is significant swelling in the right upper lip area. No palpable lymph nodes and lymphadenopathy were detected in the examination of neck lymph nodes. In the intraoral examination of the patient, it was observed that the patient did not have adequate oral hygiene, and gingival hyperplasia with red and white, erythematous and ulcerated areas with irregular borders, expansion towards the labial sulcus, elastic consistency on palpation was detected, starting from the maxilla anterior region and extending in the bucco-palatal direction to the premolar region(Picture 1).In the panoramic radiography taken for the radiological diagnosis of the patient; bone loss was observed in the alveolar crest at the level of the right maxillary incisor and canine tooth (Picture 2).In order to examine the lesion in three dimensions and in multiplanar planes, a lesion area of approximately 22.8x15.2x13.2 mm, causing destruction in the buccal and palatal alveolar crest at the right maxillary incisors and canine tooth level, was observed in the cone-beam computed tomography result (Picture 3).The biopsy specimen of the lesion was examined pathologically and the diagnosis of "Carcinoma In-Situ" was made.



Figure 1. Gingival hyperplasia with red and white, locally erythematous and ulcerated, irregular borders, starting from the maxilla anterior region and extending to the premolar region in the bucco-palatal direction



Figure 2. Panoramic radiograph of the patient; bone loss in the alveolar crest at the level of the right maxillary incisors and canine teeth.

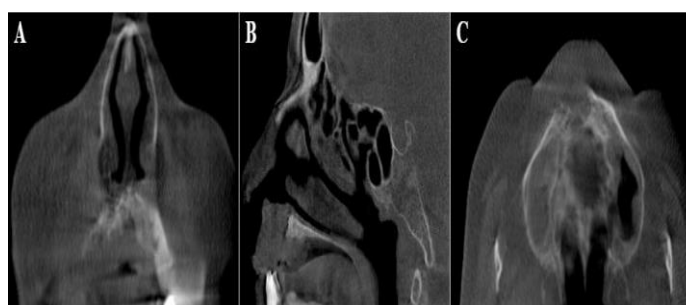


Figure 3. Bone destruction and lesion area in the buccal and palatal alveolar crest observed in CBCT sections

Discussion

In irreversible multistage carcinogenesis, most cases of invasive oral SCC with perforation of the basement membrane develop as the pathological stage after carcinoma in-situ, followed by severe epithelial dysplasia. Such precancerous lesions are observed clinically as leukoplakia, erythroplakia, or a combination thereof. Oral SCCs are often accompanied by such precancerous lesions that spread around them (3, 4, 19).

Intense tobacco and alcohol use, ultraviolet rays, human papilloma virus, syphilis, long-term working with chemical products, poor oral hygiene, malnutrition, immune suppressives and poorly performed prosthetic applications have been shown to be effective in the etiopathogenesis of oral SCC (18, 20, 21). Although SCC is more common in men after the age of 40 (16), our patient in our study was a woman. In our patient presented in our study, smoking and alcohol use, which were shown as important risk factors for oral cancer, were not present. It is thought that oral cancers have a multifactorial etiology, and etiological factors other than tobacco and alcohol are also effective (21).

Conclusion

Dentists have a great responsibility in the early detection of premalignant and malignant lesions in the oral region of patients. Ulcerated lesions and painless swellings whose cause cannot be understood and persist for a long time should be followed up. Infectious agents and irritation factors should be eliminated. However, oral lesions that do not go away for 2 weeks should be evaluated for malignancy. All patients should be thoroughly examined for oral cancer. Patients should be warned about risk factors. Cases that are not diagnosed early may cause loss of function, facial and mouth deformities that cannot be corrected after treatment, and even death.

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