



### Oral Precancer and Cancer

#### Oral Prekanser ve Kanser

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#### ABSTRACT

Oral cancer is a well known disorder causing mortality. Even though many etiological factors have been proposed, but it is mainly due to tobacco (smoking and smokeless form). This tobacco has several carcinogenic substances which results in the formation of cancer. We represent a male patient 60 years of age with Oral cancer in the left vestibule induced due to smokeless tobacco. It was associated with leukoplakia in the left buccal mucosa.

**Key Words:** Oral cancer, Precancer, Squamous cell carcinoma, Diagnosis

#### ÖZET

Oral kanserler önemli bir mortalite nedenidir. Birçok farklı etyolojik faktörler öne sürülmüşse de, bu tablo daha çok sigaraya bağlı olarak ortaya çıkar. Sigara kanser oluşuma yol açan çok sayıda karisnojenik madde içerir. Burada dumansız sigaraya bağlı olarak sol vestibülünde oral kanser gelişen 60 yaşındaki bir erkek hasta sunulmuştur. Bu durum sol bukkal mukozadaki lökoplaki ile ilişkiliydi.

**Anahtar Kelimeler:** Oral kanser, Prekanser, Skuamoz hücreli kanser, Tanı

#### INTRODUCTION

Oral squamous cell carcinoma, the most common oral malignancy, often presents a clinical diagnostic challenge to the dental practitioner, particularly in its early stages of development. While most of the cases usually have long history of smoking and alcohol, there is an increasing awareness of oral cancers developing in those who do not engage in either of risk behaviours. Therefore, the dentist must consider all patients at risk and act accordingly in the history taking and examination phases of dental visits<sup>1</sup>.

#### CASE PRESENTATION

A male patient 60 years of age with chief complaint of burning sensation in the oral cavity past one month. Patient had a habit of chewing

tobacco past 10 years and places quid in the affected site for 10 minutes with a frequency of 10 times a day. Patient was diabetic and on medication past 2 years. On intraoral examination there was a soft tissue growth in the left vestibule at the third quadrant premolar and molar region (Figure 1). On the surface of growth there was a white keratotic area which was tender, non scrapable and bleeds on palpation. Borders of the lesion were raised and everted. On examination of buccal mucosa there was a slightly raised white keratotic area of size 3x3 mm surface was fissured and on palpation it was nontender and nonscrapable. Lymph node examination revealed enlarged, tender, fixed and stony hard left submandibular lymph nodes. Radiological investigation detailed resorption of bone in the affected site with ragged borders. Hematological

investigation revealed anemia, increased sugar level and increased erythrocyte sedimentation rate. Biopsy was performed to confirm diagnosis which revealed squamous cell carcinoma. Patient was

treated with combined surgery and radiotherapy and on follow up.



## DISCUSSION

Cancer is one of the most common causes of morbidity and mortality today, with more than 10 million new cases and more than 6 million deaths each year worldwide. More than 20 million persons around the world live with a diagnosis of cancer, and more than half all cancer cases occur in the developing countries<sup>2</sup>.

Predisposing factors for oral cancer are heavy use of tobacco, excess alcohol consumption, diet deficient in fruit and vegetables, paan and betel nut chewing and poor oral hygiene<sup>3</sup>.

Warning features of oral carcinoma are red lesion (erythroplasia), mixed red/white lesion;

irregular white lesion, Lump, ulcer with fissuring or raised exophytic margins, pain or numbness, abnormal blood vessels supplying a lump, loose tooth, extraction socket not healing, induration beneath a lesion, *i.e.*, a firm infiltration beneath the mucosa, fixation of lesion to deeper tissues or to overlying skin or mucosa, lymph node enlargement, dysphagia, weight loss<sup>4</sup>.

The American Cancer Society recommends that primary care clinicians and dentists examine the mouth and throat as part of a routine cancer-related check-up. Dentists and primary care clinicians have the opportunity, during regular check-ups, to see abnormal tissue changes and detect cancer at an early stage. Many clinicians

and dentists also recommend that people, especially those at higher risk, take an active role in the early detection of these cancers by doing monthly self-examinations<sup>5</sup>.

Areas of leukoplakia or erythroplakia in the mouth sometimes progress to cancer. But removing areas of leukoplakia or erythroplakia does not prevent oral cancer. Studies have found that even when these areas are completely removed, certain types of erythroplakia and leukoplakia still have a higher chance of developing a cancer. This may be because the whole lining of the mouth has probably been exposed to the same carcinogenic agents that led to these pre-cancers. This means that the entire area may already have early changes that can lead to cancer. This concept is called field cancerization<sup>6</sup>.

Treatment options are variable and depend on the size and location of the primary tumor, lymph node status, presence or absence of distant metastases, the patient's ability to tolerate treatment, and the patient's desires. Surgery and/or radiation therapy remain the gold standards for treatment of cancers of the lip and oral cavity. It is important to take into account disease status and prevalence of occult disease in the neck when evaluating primary cancers of the lip, oral cavity, and oropharynx<sup>7</sup>.

## CONCLUSION

Early diagnosis, management and counseling are the triad rule for the prevention of oral cancer. Several diagnostic invasive and noninvasive tools are available for diagnosis of this dreadly disorder. Eventhough several management techniques are made accessible, still the prevalence rate is high. So, several community camps and cancer education should be conducted by Dentists for early diagnosis and prevention of this disorder.

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