Case Report

Squamous Cell Carcinoma of Tongue- A Case Report

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Abstract

Squamous cell carcinoma is the most common malignant neoplasm of the oral cavity, usually affecting individuals over 50 years of age. It rarely occurs in patients who are less than 40 years old (1 to 6%). This report describes a case of squamous cell carcinoma involving the dorsal surface of the tongue of a 30-year-old male patient, with smoking and drinking habits. Initial tumor presentation was of deep ulceration and intense pain. This report focuses on the etiological factors related to the case. Additionally, a brief literature review regarding squamous cell carcinoma in young patients is also included.

Keywords: Carcinoma, Squamous cell, Ulceration, Tumor.


Introduction

Squamous cell carcinoma (SCC) of the tongue is the most frequent intra oral head and neck cancer. European statistics indicate an incidence of around 10–20 per 100 000 of the population. In Western Europe a decrease has been seen in males, contrary to the increase in female subjects that has been evident over the last decade. Many other world regions are finding a general increase of the incidence of oral cancer. The median age at the diagnosis of the tongue’s cancer is 61 years. Only approximately 2% of patients are diagnosed before the age of 35 and another 7% before the age of 45, this despite the fact that there is an increasing trend in the prevalence of tongue SCC. These cancers often present in the later stages of the disease where the treatment is more complicated and survival less likely. We present the case of a 30-year-old male patient with squamous cell carcinoma on the tongue.

Case report

Thirty -year-old male patient by occupation farmer reported in May 2012 with the complaint of intense pain associated to a tongue lesion, with duration of five months. Where, after detection of the lesion, a biopsy was performed in clinic, with the result of a
chronic unspecific inflammatory process then he referred to our dental institute. According to his own report, there had been a reddish-white spot for six years in the location where afterwards the current lesion developed. Upon physical examination, an extensive ulceration was observed, with largest diameter of 4 cm, irregular borders, necrotic background surrounded by an erythematous atrophic area, located at dorsum of tongue. Whitish areas could be observed in the periphery of the ulceration. There was hardening of borders and surrounding areas, indicating large infiltration. A cervical lymph node was detected on the left, fix and not painful. Medical history of the patients was not significant. Patient gave history of smoking, tobacco chewing and alcohol consumption since 15 years. His family history registered a diabetic Father. In the period the patient was in the hospital, complete blood examinations were performed with the performance of another biopsy, Patient was referred to the oral surgery Department at Hospital for treatment, which consisted of surgery, namely total glossectomy with bilateral cervical node dissection.

**Figure 1:** Islands of malignant squamous epithelium and keratin pearls invading the underlying connective tissue

After surgery, treatment was completed with simultaneous radiation therapy and chemotherapy, for a two-month period. Patient is currently under periodic control, including a follow-up by a speech therapist and a nutritionist.

**Discussion**
Cancer of the tongue is most commonly of epithelial origin and may result from chronic irritation. Squamous cell carcinoma is the most common malignant neoplasm of the oral cavity, usually affecting individuals over 50 years of age with male predominance. Depending on distribution of cases according to sites tongue lesions constitutes 34.6%, with the lateral border being most frequently affected. Well differentiated tumor has better prognostic value than poorly differentiated with a lower probability of lymph node metastasis. Invasion is by definition endophytic, involves shifting the center of growth from the surface epithelium in sub epithelial tissues and extends at different depths anatomic levels. SCC of the oral tongue is rare in young adults. Literature shows an increase in the incidence of SCC of tongue in young adults. Atula et al in Finland found that percentage of SCC of tongue cases occurring in young adults increased from 3% per year for the decade 1953 to 1962 to 7% per year for the decade 1983 to 1992. Similarly in another study by Myers et al incidence of SCC of tongue in young adults was found to be gradually increasing during the past 25 years. Characterization of young patients with head and neck SCC is arbitrary. Most authors consider young patients with SCC as those less than 40 years of age. Even though others use a reference ages of 20 or 30 years. Age average in cases registered in literature as young bearers of SCC ranges from 30.8 to 34.2. There is a wide debate on SCC in young patients regarding the etiological factors associated to the development of the disease. This is based on the fact that risk factors (smoking and drinking) that are
usually observed in elderly patients are not verified in young ones. Kurikose et al in their study comparing the tongue cancer in young and older SCC patients in India concluded that in younger patients, SCC of tongue was associated with fewer etiologic factors, and in older patients, it was always seen in association with smoking, alcohol or chewing. In an earlier review of 197 consecutive patients treated for oral tongue cancer in Kerala, 82% of patients under the age of 30 years did not have tobacco-related habits as compared with 10% of patients older than 30 years of age. In the present report, the patient was 30-years-old and given history of tobacco chewing and alcohol habits.

**Conclusion**

Oral cancers are not common despite their increasing prevalence but should be made more publically aware a part of a prevention program. Since most cases of oral cancer result from the combined effect of smoking and drinking, tobacco and alcohol abuse cessation programs should be aggressively promoted.

**References**