Squamous cell carcinoma of the tongue

Dil yerleşimli skuamöz hücreli kanser

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Abstract

Squamous cell carcinoma of the tongue is the most common cancer of the oral cavity. Approximately half of oral squamous cell carcinomas are located in the tongue. Early diagnosis and treatment of oral squamous cell carcinoma reduces micro metastatic spread, treatment-related morbidity, and mortality. Nowadays, oral squamous cell carcinomas are still diagnosed lately and many factors play a role in this delay.

Key words: *squamous cell carcinoma, mouth, tongue, diagnosis, delay*

Özet

Dildeki skuamöz hücreli kanser oral kavitenin en sık kanseridir. Oral SHK'lerin yaklaşık yarısı dil yerleşimlidir. Oral SHK'nin erken teşhis ve tedavisi mikro metastatik yayılımı, tedaviye bağlı morbiditeyi azaltırken, SHK'e bağlı mortaliteyi de azaltır. Günümüz şartlarında oral SHK tanısı hala büyük oranda gecikmektedir, bu gecikmede birçok faktör rol almaktadır.

Anahtar kelimeler: *skuamöz hücreli kanser, ağız, dil, tanı, gecikme*

Introduction

Squamous cell carcinoma (SCC) is more than 50% of all oral cavity cancers. It accounts for about 90% of all carcinomas of the head and neck when oropharynx added. Oral cancers constitute 2% of all cancers. Approximately half of them are mortal. Oral SCC is characterized with frequent relapse and synchronous onset of tumors from different locations.[1-6]

The male / female ratio of oral SCC is 1: 1.43 and the average age of occurrence is 60.8. It is seen in smokers 10 times more than non-smokers. Alcohol intake and HPV are blamed in the etiology. It is most commonly located on the tongue and the base of the mouth.[1-4]

Oral SCC progresses rapidly and its prognosis is closely related to tumor stage. More than 50% of patients diagnosed with oral SCC in the United States have been reported with regional or distant metastasis at the time of di-

agnosis. Tumor size of oral SCC doubled in 3 months. This rapid progress adversely affects the prognosis and 5-year survival is approximately 60%.[1-6]

The stage of tumor is very important in determining the treatment strategy and prognosis. If it is localized and has no metastasis, surgery and / or radiotherapy are the best options, and if there is metastasis chemotherapy is applied.[7,8]

While in early stage the survival is 84%, it decreases to 39% in the late stage. In early stage, prognosis is relatively good, unfortunately 40-60% of patients are diagnosed in advanced stage. Unfortunately, the diagnosis of patients at advanced stage is still a major problem.[8-12]

In this article, we present a patient who has SCC with a 6-month history of a wound in the tongue.

Case report

A 58-year-old female patient was admitted to our clinic with the complaint of a persistent wound on her tongue for 6 months. It was learned that she had no complaints before six months and she applied to a physician one month after the appearance of the wound but she did not benefit from the treatments, whereupon she applied to various physicians such as dentist, dermatologist and otorhinolaryngologist. It was learned that she had creams and antibiotics, antifungal and corticosteroids therapy, but she did not see any benefits and the wound grew gradually. She had no family history, and no history of smoking, alcohol use.

On physical examination, there was an ulcerated plaque with a diameter of 1 cm in the left lateral-dorsum and a diameter of 2 cm in the lateral-ventral region (Fig. 1). There was no sensitivity with palpation. 2 lymph nodes with a diameter of 1 cm were detected in the left submandibular region.

Complete blood count, blood biochemistry parameters, CRP, and sedimentation rate were revealed in laboratory examination .WBC: $6.42x10^3$ / ul (4-10), Hgb: 14.7 g / dl (11-16), PLT: $271x10^3$ / uL (100-400), glucose: 105 mg / dL (70-100) , urea: 30 mg / dL (15-43), creatinine 0.81 mg / dL (0.6-1.1), ALT: 14 U / L (0-55), AST: 16 U / L (5-34)), CRP: 0.37 mg / dL (0-0.5), sedimentation rate: 34 mm / h (0-20).

Incisional biopsy was performed.

In histopathology, atypical squamous cells that showed infiltration as solid islands and cords were diagnosed as SCC (Fig. 2). Upon this, left hemiglossectomy, tongue, neck dissection and submental lymphadenopathy excision were performed. In histopathology moderately differentiated squamous cell carcinoma, neck lymph node metastasis, diffuse reactive lymph nodes

Fig. 1. Tongue ulcer plate 1 cm in diameter in left lateral-dorsum and 2 cm in diameter in lateral-ventral
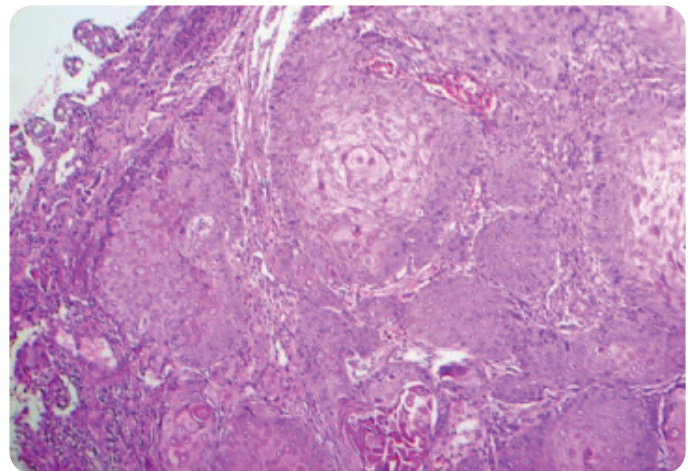

Fig. 2. Atypical squamous cells that showed infiltration as solid islands and cords (HEx400)

were reported. There was no tumor in the submandibular gland. Maximum tumor invasion depth was 2.1 cm, lymphovascular and perineural invasion was observed, p16 was negative in immunohistochemical study. No distant metastasis was detected in the other tests. Radiotherapy was planned.

Discussion

SCC of the tongue is the most common cancer of the oral cavity. 30-46% of oral SCC are located in the tongue. This frequency is then followed by gingiva, mucosa of the palate, cheek and lip. The lateral aspect of the tongue is the most common site of involvement (61%). The dorsum of the tongue is rare.[2,13-16]

In recent years, the term "oral potential malignant diseases" has been used. This group was defined as "malignant risk diseases". In 2005, the World Health Organization added leukoplakia, erythroplakia, lichen planus, lupus erythematosus, and oral submucous fibrosis into this group. Oral SCC is most commonly caused by leukoplakia, erythroplakia, or proliferative verrucous leukoplakia. In oral premalignant lesions, SCC develops mostly in the elderly and 56% of the tongue tip and lateral tongue.[2,13-16]

Leukoplakia is the most common oral premalignant disease.The most common subtype of leukoplakia is homogeneous leukoplakia. Heterogeneous leukoplakia has a higher risk of malignancy. Among the premalignant lesions, erythroplakia has the highest risk of malignancy. Mechanical trauma to tongue epithelium, accumulation of microbial biofilm, and the habit of consecutive smoking increases the risk of malignancy in the tongue.[2,15,16]

Our patient did not have any etiological factors such as premalignant lesion, smoking, or alcohol. In addition, the patient's complaint had started on the dorso-lateral tongue.

If SCC is located in the dorsum of the tongue, it becomes difficult to distinguish with median rhomboid glossitis, granular cell myoblastoma, amyloidosis, and oral lichen planus. Premalignant transformation of lichen planus in the tongue is higher than the risk of premalignant transformation in lichen planus located anywhere in the mouth.[2,13-16]

The most common lesion is the ulcer or ulcerated exophytic mass. In all these cases, you should not hesitate to take a biopsy and the sample should be taken in sufficient quantity. When biopsy is taken, biopsy should be taken from irregular edge, puffy, indure, painful or sensitive areas.[2,15]

Early diagnosis and treatment of oral SCC reduce micro-metastatic spread and treatment-related morbidity. Currently, oral SCC is still diagnosed lately and many factors play a role in this delay. Causes of delayed diagnosis include late admission of the patient to the physician, late referral of the patient to the relevant physician, late diagnosis by the physician.[17,18]

The patients play a major role in the delayed diagnosis of oral SCC. Yu and et al.[19] in the Canada, the mean delay in the diagnosis of oral SCC was 4.5-22.5 weeks. Peacock and et al.[20] reported that the delay in the diagnosis of oral SCC in the USA was 3.5 months and the total delay was 6.8 months. In a study conducted in the UK, it was reported that the duration of the patient-related delayed diagnosis was 22.5 weeks and that 29% of the patients presented to the physician on average 3 months after the onset of symptoms.[19-21]

The average time to consult a physician after the onset of complaints is 2-5 months.[19-21] Our patient applied to the physician one month after the complaints started. The retrospective data on the duration of admission to the physician after the onset of patients' complaints is the limitation of the studies. We also believe that this period depends on the health policies of the countries.

In a case-controlled study examining 2010 patients with oral cancers under the age of forty-five, it was reported that the majority of patients have heard informations about oral cancers, but did not hurry to go to any health facility because they thought their complaints would not be related to cancer. In addition, another study reported that 40% of patients in Canada preferred non-prescription products without professional treatment. As a result of these data, the researchers concluded that the delayed diagnosis in

oral SCC was not related to tumor factors, sociodemographic factors and patient-health understanding.[19,22]

However, Scott and et al.[23] and Panzarella and et al.[24] reported that the delayed diagnosis was not independent of age, sex, ethnicity, smoking, alcohol and education level.

It has been reported that dentists also play an important role in the early diagnosis of oral SCC and they are critical in the recognition of oral and oropharyngeal cancers at an early stage before they become symptomatic.[25] It was reported that the diagnosis of oral SCC was lately diagnosed in women who did not have annual dental check[19] and that 90% of the patients with oral SCC were diagnosed incidentally in the symptomatic stage, and approximately 5% in the asymptomatic stage.[26]

Delayed diagnosis due to healthcare system is the late diagnosis between the first professional healthcare provider to whom the patient applies with this complaint and the professional healthcare provider who diagnoses the disease. This delay is 20-40 weeks on average. This delay is not patient-related.[23] In our case, this period was about 5 months.

In order to avoid late diagnosis due to health professionals, "The United Kingdom Cancer Reform Strategy" reported that a patient suspected of having cancer should wait for a maximum 2 weeks, that the patient should be referred to a specialist after 2 weeks and that the decision to start treatment should not exceed 31 days.[27]

Oral SCC is the most common of oral cavity cancers. It is more than half of the cancers seen only in the oral cavity. The tongue involvement of the SCC is almost half of them. Early diagnosis and treatment are very important in morbidity and mortality. Today, however, the diagnosis of oral SCC is delayed depending on both the patient and the health care providers.

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