

## Rare Case of Healing Carcinomatous Ulcer without Therapy: A Case Report

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### ABSTRACT:

Squamous cell carcinoma is among the most common malignant neoplasm present in the Oral Cavity, which usually affects older individuals. Tongue ulcers might be misdiagnosed and inappropriately treated which may lead to delay in definitive treatment. Tongue lesions have a broad differential diagnosis. The commonest and distressing condition could be a long standing painful tongue ulcer. Oral tongue malignancies (located in the anterior two thirds) accounted for 53% of tongue cancers. This report describes a case of 77- years old male patient with a ulcerative lesion on the lateral border of tongue which was quite confusing either it was traumatic ulcer or squamous cell carcinoma. This article focus on the etiological factors, differential diagnosis of tongue ulcer and brief reviewing of squamous cell carcinoma.

**Keywords:** Root stump, Squamous cell carcinoma, Tongue, Traumatic ulcer.

### INTRODUCTION

Oral ulcer is a very common disorder of the oral mucosa. Patients with signs or symptoms of oral ulcer are sometimes referred to gastroenterology clinics, however in most instances the ulcer does not reflect gastrointestinal disease, and some with a chronic non healing ulcer are advised biopsy.<sup>1-4</sup> Indeed a spectrum of disorder can give rise to oral mucosal ulcer which may arise either from local trauma or systemic disease. Tongue lesions can have a various differential diagnosis for e.g. infiltrative disorders, benign idiopathic processes, infections, and cancer.<sup>[6]</sup> This article will focus on the etiological factors, differential diagnosis of tongue ulcer and brief reviewing of squamous cell carcinoma, with a case report with diagnosis of a long standing ulcer.<sup>5,6</sup>

Oral ulcers are separated into two groups:-<sup>7</sup>

#### SHORT TERM ULCER<sup>7</sup>

- Traumatic ulcer.
- Recurrent aphthous stomatitis.

- Herpetic ulcer.
- Ulcer secondary to non infectious systemic disease.

#### LONG STANDING ULCER<sup>7</sup>

- Traumatic ulcer
- Major aphthous ulcer
- Squamous cell carcinoma.
- Ulcer secondary to systemic disease.
- Ulcer in immunodeficiency virus disease.
- Metastatic tumor.
- Chancre.
- Gumma.

### CASE REPORT

A 77-year-old male patient visited in our institution with a chief complaint of ulcer on tongue in left lower back region for last one year. His past dental history and past medical history were insignificant. Vital signs were

evaluated and were found within normal limits. He denied any tobacco or alcohol related history. The extra oral examination didn't reveal any abnormality. On intraoral examination, an ulcerative growth present on lateral border of anterior 2/3<sup>rd</sup> of tongue, measuring about (2x2.5) cm in diameter having raised border with an area of hyperkeratinization, floor appears to be yellowish in color (Figure 1). The presence of remaining root stump i.r.t 35, 36, 37 and sharp lingual cusp was seen i.r.t 36 (Figure 2) was also noted in the region of the ulcer causing obvious trauma in the area. On palpation the ulcerative lesion was deep, non-tender & soft to slightly firm in consistency, base of ulcer was indurated. The regional lymph node were non palpable. The lesion was totally asymptomatic and was gradually increasing in size.



Figure 1: An ulcerative Lesion seen on left lateral border of tongue

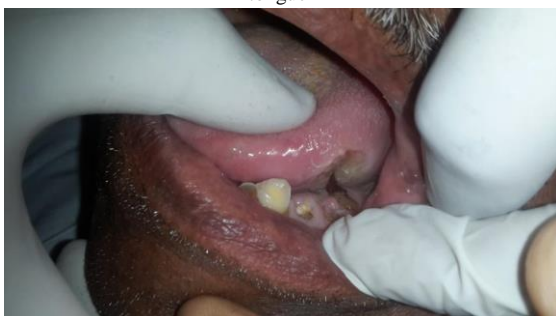


Figure 2: Root stump i.r.t 36 causing trauma on tongue

On the basis of clinical examination, a provisional diagnosis of CARCINOMA was made. Since the lesion was small and well localized, patient was advised for the surgical excision of lesion under general anesthesia (Figure 3). The excised tissue was sent for histopathological examination. Final diagnosis (histopathological report) suggestive of squamous cell carcinoma of tongue.



Figure 3: The Surgical excision of left side anterior 2/3<sup>rd</sup> of tongue

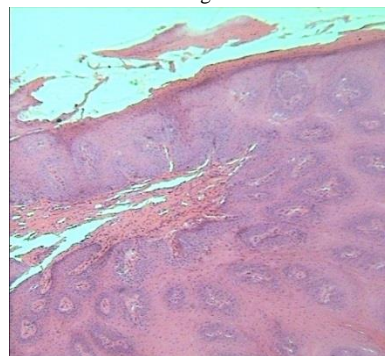


Figure 4: H & E stained section showing features of squamous cell carcinoma (10x)

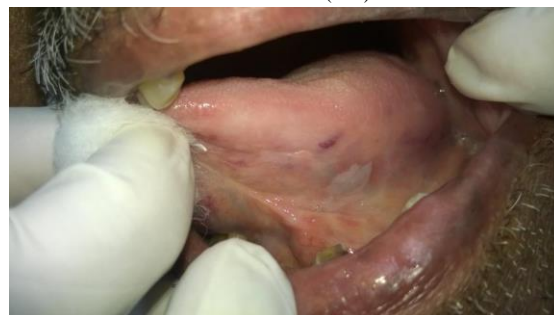


Figure 5: Follow up

## DISCUSSION

Carcinoma of tongue is one of the most commonly occurring neoplasm's among all intraoral malignant tumors, accounting for about 30% of all oral malignancies (Ogus *et al.*, 1978). SCC represents more than 90% of all head and neck cancers (Ramirez-Amador *et al.*, 1995). The majority of cancers of head and neck arise from the surface layers of the upper aerodigestive tract (UAT).

The mean age for the diagnosis of tongue cancer is usually above 60 years & only about 2% of individuals are diagnosed before they reach the age of 35 years.<sup>10</sup> SCC of tongue is associated with dose & duration of smoking, alcohol or chewing tobacco. Chronic carcinogen exposure creates a field effect and the entire mucosa of the upper aerodigestive tract is at risk for malignancy in smokers and

drinkers. Cessation of alcohol and tobacco exposure reduces the risk of second aerodigestive carcinoma. The other common cause can be dental trauma due to constant irritation by irregular margins of the teeth. In the present case the main etiological factor is the constant irritation by sharp edge of root stump.

Distributions of cases according to sites were tongue lesions occurring in 34.6%, with the lateral border being most frequently affected. In the present case also the ulcer was present on the lateral border of the tongue. Invasion is endophytic in nature where there is shifting of the center of growth from the surface epithelium into the sub epithelial tissues and extends at different anatomic depths/levels. All squamous cell carcinomas therefore show an endophytic component mirrored clinically by indurations, hardening and tethering of the tissues.

Among all the tongue cancers:<sup>3</sup>

- 51% involve lateral margin of the middle third of the tongue
- 25% involve the posterior 1/3<sup>rd</sup> of the tongue
- 20% involve the anterior 1/3<sup>rd</sup> of the tongue and
- Only 4% involves dorsal surface of the tongue.

They manifest either as an exophytic/ ulcerated lesion, an ulcer within a fissure or area of superficial ulceration where muscle infiltration has occurred.<sup>3</sup>

Metastatic spread of the cancer involving the tongue is by the lymphatic system and primarily by the deep cervical chain of lymph nodes. The sub maxillary and sub mental lymph nodes are the ones frequently involved. The rich lymphatic drainage and the extreme mobility of the tongue are probable factors in accelerating the dissemination of tumor cells. Lesion is often initially painless and usually has an ulcerated appearance with rolled borders around a necrotic center. It frequently resembles a traumatic ulcer. If a possible traumatic etiology is suspected i.e. sharp cusp or fractured restoration, this should be treated first. If the lesion does not heal within a period

of 7-10 days, a biopsy should be advised to the patient.<sup>10</sup>

Differential diagnoses of chronic persistent tongue ulcer are traumatic ulcer, ulcer in tuberculosis, recurrent aphthous ulcer, blastomycosis, mucormycosis, sporotrichosis, syphilis etc.

#### TRAUMATIC ULCER-

Ulcers due to trauma are easy to recognize if one is able to establish the cause for the injury. Lesion appears as a shallow or deep ulcers having yellow fibrino-purulent membrane with hyperkeratotic white borders surrounding the area of ulceration.<sup>4</sup>

If Traumatic ulcer occurs specially on tongue persist for several week after the traumatic factor has been eliminated, such ulcer cannot be differentiated from malignancy on a clinical basis alone and often requires complete excision of the lesion<sup>7</sup>

#### ULCER IN TUBERCULOSIS

Oral tubercular lesions are typically present with severe, unremitting and progressive pain. Tubercular ulcers are usually solitary crateriform ulcer with irregular, ragged, undermined edges having yellowish granular base with slightly elevated and indurated borders on the lateral margin, dorsal surface of tongue.<sup>3</sup>

#### RECURRENT APHTHOUS ULCER (RAS)

RAS, is a common condition in which reoccurring ovoid or round ulcers affect the oral mucosa.<sup>5</sup> Lesion occurs on the movable mucosa (non-keratinized). The initial lesion appear as a erythematous macule or papule , as the lesion matures shallow ulcer of 0.5-2cm in diameter with yellow necrotic center, smooth contour border and a constant red halo is seen . Lesion is more symmetric and circular. Lesion may be single or two or three and are widely distributed.<sup>7</sup>

#### BLASTOMYCOSIS

Ulcer on tongue are irregular, erythematous or have white intact surface. Appear as having

rolled borders with varying degree of pain. Clinically the lesion resemble SCC, so biopsy and histopathological examination are required.<sup>4</sup>

### MUCORMYCOSIS

In mucormycosis oral manifestation reveals ulcers with raised border, surface of ulcer appear to have black and necrotic with area of denudation on tongue.<sup>11</sup>

### SPOROTRICHOSIS

It is the second most common cause of opportunistic fungal infection of AIDS. Oral lesion manifest as nodular or granulomatous lesion which subsequently ulcerate. The ulcer typically reveals indurated border with rolled out edges.<sup>11</sup>

### SYPHILIS

The primary lesion (chancre) will manifest as painless ulcer with rolled borders. The lesion does not produce exudates. In secondary syphilis, ulcers will be covered by mucosal exudates and tertiary lesion will manifest with ulceration with a raised, firm border, frequently on tongue.<sup>8</sup>

### **MANAGEMENT**

The various modalities for the treatment of carcinoma of the tongue have been proposed in literature which includes surgical excision, use of radium and high voltage x-ray therapy. Irradiation is usually preferred for the large tumor and surgical management is advised in case of the smaller lesion. In early stage of carcinoma of the tongue, partial glossectomy is the treatment of choice. Stage I and II carcinomas of the oral cavity can be managed surgically. Radiotherapy is usually reserved for the patients who are medically compromised, or those who refuse for the surgery.<sup>11</sup>

### **CONCLUSION**

The various types of oral ulcers may appear clinically to be very similar. Constant irritation from the irregular margins of the teeth,

tobacco and alcohol usage has been considered a very likely initiating cause by numerous clinicians. However, in some cases laboratory procedures are required to make the diagnosis. Biopsy is necessary in the management of long standing ulcers.

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**How to cite this article:** Kumar A, Goel P, Singh AK, Malhotra S, Raina S, Oberai S. Rare Case of Healing Carcinomatous Ulcer without Therapy: A Case Report. Arch of Dent and Med Res 2016;2(4):42-46.