



Oral Squamous Cell Carcinoma of Tongue - Case Report

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Abstract

Oral squamous cell carcinoma is the most common cancer of oral cavity. The risk factors associated with the neoplasm are consumption of tobacco and alcohol along with other secondary factors. Early diagnosis and prompt treatment decides the success of the intervention. The present report describes a case of oral squamous cell carcinoma involving lateral border of tongue in a male patient aged 48 years. The report highlights the risk factors involved with the case, the general and clinical findings with histopathological reports along with the role of health care provider in promptly diagnosing the condition.

Keywords: Oral Cancer; Oral Cavity; Tobacco; Oral Squamous Cell Carcinoma

Introduction

Oral cancer is a group of neoplasm occurring in oral cavity. It accounts to 2 to 4% of all the known cancer [1]. Amongst the oral cancers, oral squamous cell carcinoma is the most common neoplasm encountered by the dentists in their daily practice. Tobacco consumption especially in the smokeless form is proven to be the major cause of oral cancers and India being the second largest country in the world to produce and export tobacco (CTRI Rajahmundry, 2020) and also stands at the second position in consuming tobacco products with around 28.6% adults getting addicted to it is ought to report voluminous cases of squamous cell carcinoma every year [2].

OSCC is evident in 5th, 6th and further decades of life [3]. But due to the early adoption of habit of consuming tobacco at a young age, the lower limit to these decades is questionable [4]. Among the oral sites involved in the lesion, the buccal mucosa and tongue are the commonest to get affected followed by gingiva, palate and alveolar mucosa [5]. Various majors have been adopted by the In-

dian government towards the ban of various tobacco products with gutka being the first in the list followed by flavoured indigenous products consumed in different part of the country [6]. All the strategies have still not succeeded in bringing the oral cancer burden to a descent level. Moreover, the feature of OSCC wherein it initially appears like a small ulcer and in painless often gets neglected by the patients and misdiagnosed by the health care professionals [1]. The problem becomes severe especially in the rural parts of the country due to issues of accessibility and affordability of the health care facilities adding on to it with poor awareness about the overall effects of tobacco amongst people.

The concern arises because of the high mortality associated with this cancer. Though treatment modalities have advanced and so have the detection techniques but, the quality of life of the patients along with post surgery survival rate has not shown significant improvement. This case report discusses about a patient in his 4th decade of life diagnosed with OSCC and giving a history of tobacco consumption.

Case Report

A 48years old male patient reported to the Department of Oral Medicine and Radiology of Saraswati Dhanwantari Dental College and Hospital, Post-Graduate and Research Institute, Parbhani with a chief complain of difficulty in swallowing food. The patient was farmer by occupation and the habit history revealed that he had adverse habit of chewing gutka two to three packets a day from last 4 years. On asking in detail, patient informed that he was apparently asymptomatic five years back when he noticed an opaque lesion on the left lateral border of the tongue which progressively increased in size. Patient visited two to three doctors before coming to the present Hospital where he was prescribed with Capsule Zevit and Lycored along with Mucopain oral gel for external application.

General examination revealed that the patient was afebrile with normal BMI of 23.8 kg/m² and blood pressure of 110/70 mm of Hg. There was no history of previous hospitalization or cardiovascular and respiratory illness. On intra oral examination, there was presence of ulcero-proliferative growth associated with the lesion. The lesion appeared homogenous with keratotic non scrapable plaque intermixed with reddish plaque, extending from anterior 2/3rd of the tongue to its ventral aspect measuring 2.5 x 2 cm in size. The surface was rough with granules and margins were slightly everted. Erythematous lesion extended from the floor of the mouth to the left side of lingual frenum. It was noted that there was presence of sharp lingual cusps of 35, 36 and buccal cusps of 25 causing obvious trauma at the lesion site moreover, mouth opening was restricted.

On palpation, the base was non-indurated and there was no bleeding associated with the lesion. The submandibular lymph nodes were palpable but non-tender while the lesion was tender on palpation. Post thorough examination the patient was suspected of verrucous carcinoma and was advised to undergo incisional biopsy of anterior aspect of tongue at Indian Institute of Medical Science and Research Warudi, Jalna (Figure 1).



Figure 1: A non scrapable white plaque on the lateral body of anterior 2/3rd of tongue before treatment.

Histological reports revealed bits lined by keratinized stratified epithelium. Sheets of malignant cells were originating from the epithelium and infiltrating the underlying tissue. Polygonal cells were visible showing pleomorphic irregular nuclei, prominent nucleoli with abundant cytoplasm. Keratin pearls were well appreciated and abundant lymphocytes and few multinucleated giant cells were existent in the interstitial tissue. The lab reports confirmed the lesion to be well differentiated squamous cell carcinoma. The patient was then referred to another Aurangabad Dental College and Hospital for further treatment where he underwent partial glossectomy.

Post treatment the patient revisited Parbhani hospital for follow-up session. It was found that patient was satisfied with the surgery. There was an improvement in the quality of life of the patient. Due to the dissection of tongue, patient reported with speech problems. The healing was found to be adequate (Figure 2). At present the patient is under periodic control.



Figure 2: Healing of the lesion post hemi glossectomy procedure.

Discussion

Oral squamous cell carcinoma is one of the commonest oral neoplasms identified in varied presentations. The clinical variation becomes a challenging part in the initial early diagnosis of the cancer. The neoplasm is associated with high morbidity and mortality. Even after patient undergoes treatment the survival rate is not commendable. The study reported a survival rate of 59.9% in one year, 40.7% in two years and 27.8% in 5 years if the patient does not undergo any surgery while the survival rate tend to increase to 84.2% for two years and 59% for five years post surgical treatment [7].

The neoplasm is multifactorial wherein tobacco and alcohol consumption top the list of risk factors. Other factors linked with the neoplasm are exposure to sunlight, nutritional alteration, genetic predisposition and a constant irritation to the tissue [8]. In the present case, the patient has a habit of chewing gutka from last 4 years. Moreover, when intraoral examination was done, the lesion was found in contact with the sharps cusps of dentition. Thus,

tobacco and constant irritation both might have contributed to the initiation of abnormal changes in the epithelial cells leading to neoplasm.

The OSSC is often predisposed by oral precancerous lesion like leukoplakia. The patient reported here had a white non-scrapable plaque like lesion on the tongue. Since the patient visited various dental clinics before coming to the Parbhani Dental Hospital, the line of treatment in those clinics was focused on diagnosis made as a precancerous lesion which is evident through the medications prescribed.

Site of oral squamous cell carcinoma in the present case was the lateral border of tongue. The literature reports that tongue is often involved as the initiation site for OSCC. The reason may be because of the rich lymphatic network of tongue which facilitates the spread of the neoplasm at a faster rate leading to an increased size primary tumor [9]. This also becomes the reason of involvement of lymph nodes causing metastatic spread accountable for poor prognosis. Patient reported here also presented with signs of submandibular lymph nodes involvement on general examination.

Soon after the patient was confirmed with well differentiated oral squamous cell carcinoma through biopsy he was sent to Tertiary Hospital for surgical procedure. The healing post surgery during follow-up was satisfactory. To date the patient has not reported with any complications of relapse of the surgical treatment and shows an improved quality of life. The literature reports few cases of OSCC of tongue wherein inspite of surgical intervention the patient showed relapse in the condition with deterioration of built and gait ultimately followed by death after 5 months [10]. Hirota SK, et al. in [11] too presented with the same condition in young non-tobacco user patient. The patient was kept under chemotherapy post treatment to prevent relapse. Algowaiily M and Alhadlaq RK [12] reported a case with similar clinical findings involving left lateral border of anterior 2/3rd of the tongue which was treated with surgery. No follow-up of the patient was done. It was found that though cases were reported in the literature regarding the treatment of OSSC but reporting of the follow-up of patient was lacking to gauge the survival rate and improvement in quality of life of these patients [13].

Visiting of the patient to various clinics without a rapid confirmed diagnosis highlights the fact that health care professionals need to be very alert and up to date with the practical knowledge. It is very essential to identify the lesion in its precancerous stage and motivate the patient to take necessary precautions along with quitting of tobacco through behavioral management and elimination of irritating factors at the lesion site. Early diagnosis with advanced equipment and prompt treatment should be the aim of health care over limiting the disability and rehabilitation.

Conclusion

A non-scrapable lesion with ulcerative granular base in the oral cavity should be suspected for possible malignant transformation. Oral squamous cell carcinoma displaying a feature of non painful lesion in the initial stages should be diagnosed with caution. A history of tobacco consumption should be revealed and strategic planning should be implemented for the identified cases after thorough intraoral examination. Over all this, the success of the treatment in the precancerous stage is greatly influenced by reinforcement of effects of tobacco on health and rewarding quitting attempts. The metastatic alterations should be surgically handled and followed for a longer period of time for knowing the actual outcome of the treatment.

Bibliography

1. Markopoulos AK. "Current aspects on oral squamous cell carcinoma". *Open Dental Journal* 6 (2012): 126-130.
2. GATS-2 survey.
3. Montero PH and Patel SG. "Cancer of the oral cavity". *Surgical Oncology Clinics of North America* 24 (2015): 491-508.
4. Sinha DN, et al. "Linking Global Youth Tobacco Survey (GYTS) data to the WHO framework convention on tobacco control: the case for India". *Indian Journal of Public Health* 50 (2006): 76-89.
5. Dhanuthai K, et al. "Oral cancer: A multicenter study". *Medicina Oral Patologia Oral y Cirugia Bucal* 23 (2018): e23-e29.
6. Piyusha K, et al. "Gutka--a malignant entity seeks benign exit in India". *Journal of Evolution of Medical and Dental Sciences* 2 (2013): 245-252.
7. Le Champion ACOV, et al. "Low Survival Rates of Oral and Oropharyngeal Squamous Cell Carcinoma". *International Journal of Dentistry* (2017): 5815493.
8. Santos HB, et al. "Clinical findings and risk factors to oral squamous cell carcinoma in young patients: A 12-year retrospective analysis". *Medicina Oral Patologia Oral y Cirugia Bucal* 21 (2016): e151-156.
9. Mildasuslu MD, et al. "Carcinoma of the oral tongue: a case series analysis of prognostic factors and surgical outcomes". *Journal of Oral Maxillofacial Surgery* 71 (2013): 1283-1290.
10. Kayal L, et al. "Squamous cell carcinoma of tongue-a case report and review of literature". *International Journal of Current Research and Review* 8 (2016): 64-67.

11. Hirota SK, *et al.* "Oral squamous cell carcinoma in a young patient-case report and literature review". *Anais Brasileiros de Dermatologia* 81 (2006): 251-254.
12. Algowaify MI and Alhadlaq RK. "Oral Squamous Cell Carcinoma on the Lateral Border of the Tongue: A Case Report". *Dentistry* 6 (2016): 381.
13. Tobacco in Indian economy.

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