

SURGICAL MANAGEMENT OF SQUAMOUS CELL CARCINOMA ON LATERAL BORDER OF TONGUE : A CASE REPORT.

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Introduction

Squamous Cell Carcinoma (SCC) is the most common oral malignancy and represents approximately 90% to 95% of all malignant tumors that occurs in the mouth. The cancer of the tongue comprises between 25% to 50% of all intra oral cancer. The classic ulcerative SCC is described as a crater like lesion having a velvety red base rolled indurated border. Large and more invasive lesions may require aggressive surgical management, radiation / chemotherapy, or both. High risk SCC carries a significant risk of metastasis and as such requires a careful evaluation & treatment.

General risk factors associated with development of SCC are as follows :

- Age older than 50 yrs
- Male sex
- Fair skin
- Geography
- Exposure to UV light
- Exposure to chemical carcinogens
- Exposure to ionizing radiations
- Chronic immunosuppression
- Chronic scarring condition
- Genodermatosis
- Human Papilloma Virus infection

Neck metastasis of early (T1_T2) SCC of tongue was co-related with tumor thickness, muscle invasion, poorly differentiated tumors, infiltrating type invasion front, presence of perineural invasion & presence of angiolymphatic invasion.

Key words : Squamous cell carcinoma, tongue, partial glossectomy, supraomohyoid neck Dissection

Pathophysiology

Considerable histological variation is presented in intra-oral SCC, although in general that tends to be moderately well-differentiated neoplasm with some evidence of keratinization.

Damage to tumor suppressor genes may also involve damage to other genes involved in growth control, mainly those involved in cell signaling.

The molecular changes found in oral SCC from western countries particularly p53 mutations, are infrequent in eastern countries, where the involvement of ras oncogenes is more common, suggesting genetic differences that might be involved in explaining

susceptibility of certain groups to oral cancer.

Case report

A 55 yrs old male patient reported to the Dept. of Dental & Maxillo-Facial Surgery, TMC & Dr. B.R.A. M. Teaching Hospital with a long standing ulcerative lesion on rt. lateral border of tongue with induration. He was a chronic betel nut & pan chewer.

After clinical examination, an ulcerative endophytic lesion of about 2.5 cm involving rt lateral border of ant. & middle 1/3rd of tongue was found.

Mobility of the tongue was not restricted and the lesion did not extend to involve the adjacent floor of the mouth.

The lesion did not extend across the mid-line to involve the opposite side of the tongue.

Neck was N0.

Provisional diagnosis was SCC clinically followed by confirmatory diagnosis after incisional biopsy & its HPC.

Partial Glossectomy

Under G.A. a wide excision was made involving 1 cm healthy tissue away from the lesion was carried out followed by Supra Omohyoid Neck Dissection (SOND) & the tissue specimen along with sub-mandibular gland, lymph node of level I, II & III were sent for Histopathological Examination (HPE).

The HPE again confirmed the diagnosis of SCC with clearance of the border margin with negative lymph nodes.

As the tongue specimen has been cleared from any invasion, and the neck nodes found to be negative the patient was not advised for any other palliative treatment post-operatively.

Patient was checked & evaluated after regular interval for the last two years for any other complications or recurrences. Result was found to be quite satisfactory till now.

Discussion

Cancer of the tongue comprises between 25% and 50% of all intra-oral cancer. The typical lesion develops on the lateral border of the tongue or ventral surfaces. In a series of 1,554 cases of CA tongue reported by Frazell & Lucas, only 4% occurred on the dorsum. The lesions on the lateral border are equally distributed between the base of the tongue, the anterior 3rd and mid portion, along 45% of cases occurred on mid 3rd. Metastasis occur with great

frequency in cases of tongue cancer, though in this operated case neck metastasis was negative.

Partial Glossectomy is suitable for all T1 and most T2 lesions of tongue i.e. anterior 2/3rd; where it can be performed safely through open mouth. Surgical excision is performed with diathermy knife with a generous portion of mucosa adjacent to tumor with full thickness of musculature of tongue surrounding palpable tumors. Post-operatively though there is some degree of speech impairment, it improves as healing progresses along with improvement in mobility of tongue.

Supra Omohyoid Neck Dissection is a type of selective neck dissection which is performed for the surgical control of early metastatic neck disease in a selected group of patients with SCC of oral cavity.

The general opinion is that selective neck dissection is a good alternative for N0 neck in persons with SCC of oral cavity. Some authors do not advocate a Supra Omohyoid Neck Dissection for N+ neck; others agree with a SOND for N0 neck, thus it remains a topic of controversy. Management is based on personal experiences and many retrospective studies.

Conclusion

It can be concluded that prognosis of tongue carcinoma is often excellent if an early diagnosis is made & prompt and meticulous treatment could be given to the patient.

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Fig. 1. The lesion on right lateral border of the tongue.



Fig. 2. Incision given with adequate margin.



Fig. 3. Excision of the primary lesion completed.



Fig. 4. Sutures placed on tongue.



Fig. 5. Supra Omohyoid neck dissection completed.



Fig. 6. One month post operative view of tongue.



Fig. 7. One month post operative view of neck.

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