Squamous Cell Carcinoma of Maxillary Gingival Buccal Sulcus: A Case Report
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Abstract
Squamous cell carcinomas of maxillary gingival buccal sulcus are relatively rare tumors and represent less than 10% of diagnosed intraoral carcinoma. In this case report we present a squamous cell carcinoma of maxillary gingival buccal sulcus. The diagnosis and the management are discussed. The clinical and histopathological photographs depict the findings.

Key Words: Squamous cell carcinoma, buccal sulcus.

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Introduction
Oral cancer is an important health issue. The WHO predicts a continuing worldwide increase in the number of patients with oral cancer, extending this trend well into the next several decades. Caners of the oral cavity account for 3-4% of all malignancies in the west. In contrast, the figure approaches 10.5% in India. The common sites are Buccal Mucosa, lip, tongue, floor of the mouth and gingival buccal complex(1). Squamous cell carcinoma (SCC) accounts 90% of all oral malignancies(2). SCC of gingival buccal sulcus represents less than 10% of diagnosed intraoral carcinoma(3). The mean age group involved is 40-60 years with males predominant. A case report of SCC of maxillary gingival buccal sulcus presented here.

Case Report
A 50 year old female patient reported to hospital with a complaint of pain and non-healing ulcer on the right upper jaw. Clinical examination reveals a 3 x 2 cm ulcerative lesion in the maxillary right gingival buccal sulcus. Neck nodes were not palpable. Personal history says tobacco chewing since 15 years. An incisional biopsy done which suggested well differentiated squamous cell carcinoma. (Figure 1).

The surgery planned was in wide excision of the lesion along with partial maxillectomy (Figure 2). The classic Weber Ferguson incision placed and wide excision done with sufficient safe margins along with partial maxillectomy. The obturator placed after resection. The lesion sent for post-operative histopathological report which suggested all margins are free and no involvement of maxillary bone. The follow up done for 2 years, there were no signs of recurrence.

Discussion
Squamous cell carcinoma of maxillary gingival buccal mucosa comprises about 10% of all malignancies about 70% of carcinomas arise from the mandibular gingival buccal sulcus and 30% from the maxillary gingival buccal sulcus (4). Extension the well to moderately differentiated carcinoma is frequent. From maxillary gingival buccal sulcus the spread is to hard palate, maxillary sinus, buccal mucosa, lip or skin. I Ogura et al. (5) conducted study on 21 patients suffering from SCC of maxillary gingiva and concluded that maxillary bone invasion by gingival buccal sulcus is an indicator of cervical metastasis.

Gingival buccal carcinomas can be mistaken for persistent gingivitis, periodontal disease or abscess. Yoon TY et. al(4) suggested gingival squamous cell carcinoma can mimic a multitude of oral lesions, especially those of inflammatory origin. In addition predisposing and presenting factors are different forms those of other oral squamous cell carcinomas. Careful examinations as well as routine biopsy are crucial for accurate diagnosis. Ichiro Ogura et.al (5, 6) conducted study to evaluate the consistency of gingiva in normal mucosa, leukoplakia and SCC of gingiva using an instrument capable of measuring consistency. The mean value of consistency in normal gingiva 67.9 ± 4.8g, 52.4 ± 7g in leukoplakia and 24.5 ± 3.3gm in gingival buccal SCC and concluded differences in consistency were significant.
Acantholytic SCC of gingival buccal carcinoma are different from common SCC in histological fetus and its aggressive nature, microscopically tumor shows cystic degeneration of neoplastic epithelium producing a prominent alveolar pattern and pseudo glandular structures with acantholytic cells. Earle et. al (7) reported a case of maxillary gingival carcinoma in six year old girl and suggested SCC behaves more aggressively in children and 30% of adult cases of gingival SCC have regional metastasis.

The modalities of the treatment of SCC of maxillary gingival buccal carcinoma vary according to histological differentiation and extension most importantly with the presence of local and distant metastasis early diagnosis with stages of 1 and 2 corresponds to good improvement compare to stage 3 and 4. Standard treatment is based on surgery, radiotherapy and chemotherapy. Surgical resection continues to be the mainstay of treatment other therapies radiotherapy and chemotherapy options that may be used adjunctively and palliative. Pathak et. al (7) conducted study on 110 patients suffering from SCC of maxillary gingival buccal sulcus carcinoma. 86 patients were undergone surgery alone, 24 patients treated with radiotherapy and chemotherapy. Disease free survival was 48.9% and 36% respectively.

Conclusion
The squamous cell carcinoma of maxillary gingival buccal sulcus is relatively rare. The diagnosis, tumor size, extent, histological differentiation, the neck node status and status of postoperative histopathological report for margins and involvement of underlying bone are important in surgical prognosis and survival rate.

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