



CASE REPORT

CASE OF SQUAMOUS CELL CARCINOMA INVOLVING LEFT MAXILLA

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ABSTRACT

Squamous cell carcinoma is the commonest Carcinoma in mucosa. Squamous cell carcinoma is a malignant epithelial neoplasm characterized by variable clinical manifestations metastasis. It most common site in the oral cavity is the lip followed by lateral border of the tongue. Squamous cell carcinoma is radiosensitive and chemo sensitive, but surgery remains the main Modality of treatment. Here we report a successfully treated case of squamous cell carcinoma of left maxilla. Patient was a 52 year male who had a swelling in the left palatal region for 6 months. Clinical examination revealed an ulceroproliferative lesion involving left palate, alveolus region. Left level 1b (submandibular) lymph node was palpable and hard in consistency with no tenderness. The diagnosis of squamous cell carcinoma was made after incisional biopsy. Treatment of wide excision of tumor, associated cervical lymph node dissection by radiotherapy. The prognosis of squamous cell carcinoma maxilla is high when carcinomatous lesion are diagnosed and treated early. In this instance routine dental examination play an important role in early detection of squamous cell carcinoma.

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INTRODUCTION

Squamous cell carcinoma (SCC) is the most frequent malignant neoplasm affecting of oral mucosa, which accounts for more than 90% of all malignant lesions in the mouth (Wallace *et al.*, 1996). This neoplasm is generally more common in male than in female. In general, Squamous Cell Carcinoma affects subjects after their fifth decade of life (Barasch *et al.*, 1995). The most common site of oral Squamous Cell Carcinoma are the lower lip, tongue, floor of the mouth, soft palate and buccal mucosa. The etiology of Squamous Cell Carcinoma remains unknown, but predisposing factors are smoking, alcohol and betel nut chewing. The clinical characteristics of Squamous Cell Carcinomas vary from case to case and include the exophytic (verrucous or papillary), endophytic, ulcerated, leukoplasic, erythroblastic or erythroleukoplasic forms. Squamous Cell Carcinoma in the hard palate and alveolus region is usually ulcerative and invades the underlying bone in the early stage of the disease (Helldén, 1987).

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High rates of occult metastasis to the lymph nodes are found in patients with early stage of oral cavity cancer. It is therefore recommended to perform an elective neck dissection in patient with early stage in order to reduce the risk of loco regional lymph node disease. Primary treatment of oral squamous cell carcinoma is wide excision, radical neck dissection or its modification. Radiotherapy is usually used as adjuvant therapy. Chemotherapy is usually used as adjuvant or palliative treatment.

Case Report

A 52 year old male patient came to maxillofacial department of Sree Mookambika Institute of Dental Sciences with the complaints of swelling in the left side of upper jaw for past 6 months. Mild pain was present and bleeding from the swelling while on chewing. Medical history was non-contributory. Patient had history of smoking for past 20years, history of alcohol consumption for past 15years. On intra oral examination, 5x4 cm ulcer proliferative lesion was present in relation to palate, (Figure1) alveolar region and gingiva from 22 region to 27 region. It was not warm, nontender, firm in consistency and bleeding tendency on surface.



Figure 1 - intra oral image showing ulcero proliferating lesion of left maxilla alveolus

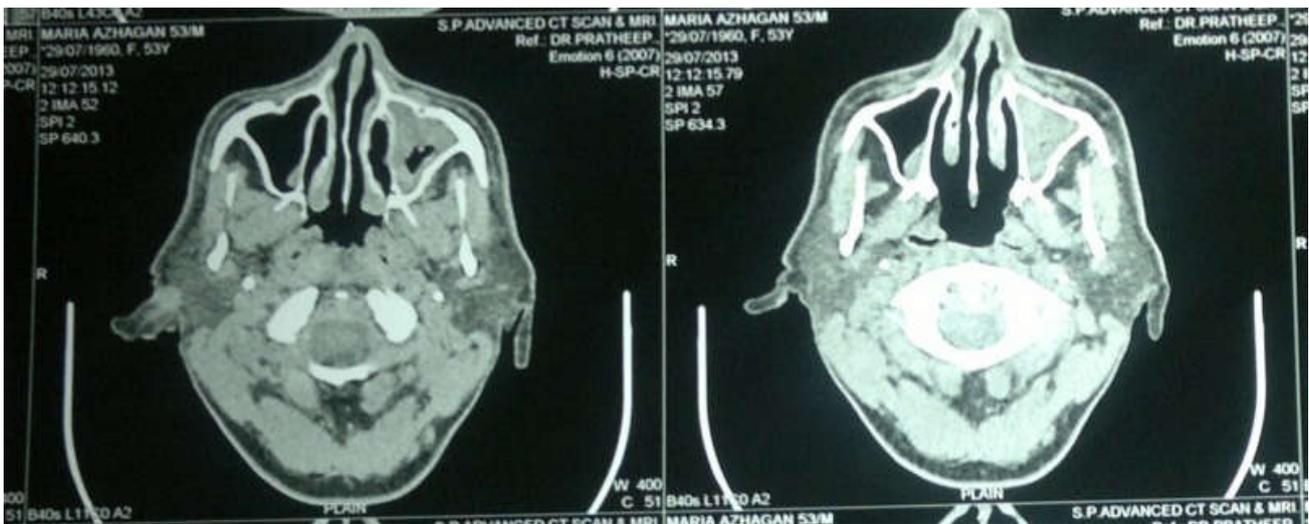


Figure 2. Axial CT showing extend of lesion in to the left maxillary sinus



Figure 3 - coronal CT showing involvement of left maxillary sinus without involving infra orbital floor

CT scan of facial bones shows (Figure 2,3) erosion of left anterior alveolar process of maxilla extending to floor of left maxillary antrum seen with soft tissue density mass lesion with in the left maxillary sinus. Focal soft tissue density mass lesion anterior to the left maxillary sinus in the left side of face approximately measuring 4.8x1.5cm seen. Possibility of Carcinoma in left maxillary antrum polypoidal mass lesion extending into maxillary sinus and the roof of the left side of oral cavity, deviation of nasal septum to left side. Microscopic examination shows squamous epithelium with acanthosis and a growth arising from it and infiltrating into deeper areas the growth is composed of sheets of polygonal cells with hyperchromatic nuclei, esinophyllic cytoplasm and loss cell cohesion. Diagnosis was well differentiated squamous cell carcinoma. This case was treated with subtotal maxillectomy with extended supra omohyoid neck dissection (Figure 3,4,5,6,7,8).



Figure 4. Operative image of mobilising maxilla after osteotomy

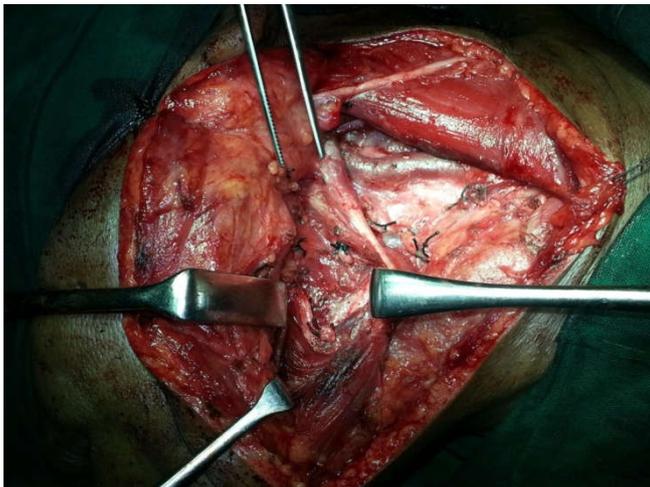


Figure 4. Operative image showing post neck dissection nodal clearance in level I,III,IV



Figure 7. Operative image of mobilising maxilla after osteotomy



Figure 5. Operative image showing post neck dissection nodal clearance in level II, V



Figure 8. Excised specimen of left maxilla

The subtotal maxillectomy was done by intra oral vestibular approach. Palatal pedicle flap was used as a local flap. Then the patient was referred for radiotherapy, fractionated in 7 weeks each session of 50gy. One year after residual defect closed with obturator.



Figure 5. Six months post operative image showing a small fistula in site of palatal pedicled flap

At present two years after the end of treatment, the patient continues to be followed up and it does not show any sign of recurrence.

DISCUSSION

Squamous cell carcinoma is the most frequent malignant neoplasm of the mouth, corresponding to 96% of all malignant tumors in this region. In general, squamous cell carcinoma mainly affects male older than 40 years and is extremely rare in young patients. The most affected sites in the mouth are, in decreasing order, the lower lip, lateral border of tongue, retromolar region, buccal mucosa, floor of the mouth and gingiva. The degree of differentiation and the invasiveness or the exophytic characteristics of most lesions are noticed in the ulcerative stage (Meleti *et al.*, 2007). Squamous cell carcinoma of the gingiva more frequently involves the mandible than the maxilla. The classical risk factors are tobacco use either smoked or chewed and alcohol consumption (Souza *et al.*, 2003).

A maxillectomy is a procedure of surgical removal or resection of the maxilla. According to the Spiro classification of maxillary defects:

Limited maxillectomy: In which one wall of the maxillary antrum was removed

Subtotal maxillectomy: In which at least two walls were removed

Total maxillectomy

Complete resection of the maxilla (Spiro *et al.*, 1997). In the present case, who belongs to the risk group of squamous cell carcinoma.

A proliferative lesion was detected in the palate, maxillary alveolar region and gingiva of the patient, characteristic of verruciform surface and ulcerations. Squamous cell carcinoma should be diagnosed early for a better prognosis. According to Heller, Klein and Barocas, the chance for cure is favorable when the size of the lesion is <1cm (Heller *et al.*, 1991).

Conclusion

Squamous cell carcinoma is a condition in which the chance of cure is higher when carcinomatous lesions are diagnosed and treated early. In this instance, dentists play an important role in the early detection of squamous cell carcinoma.

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