

GINGIVAL SQUAMOUS CELL CARCINOMA – A CASE OF RARE CLINICAL PRESENTATION

Senthil Kumar S,¹ Narayane R,² Krishnan V,³ Rahasekar S,⁴ Jacob S⁵

1. Professor & Head, Department of Periodontics, Rajah Muthiah Dental College & Hospital, Annamalai University, Tamil Nadu.
2. Post Graduate Student, Department of Periodontics, Rajah Muthiah Dental College & Hospital, Annamalai University, Tamil Nadu.
3. Dean, Department of Periodontics, Rajah Muthiah Dental College & Hospital, Annamalai University, Tamil Nadu.
4. Professor, Department of Periodontics, Rajah Muthiah Dental College & Hospital, Annamalai University, Tamil Nadu.
5. Professor, Department of Periodontics, Rajah Muthiah Dental College & Hospital, Annamalai University, Tamil Nadu.

Abstract

Background: Squamous cell carcinoma is a malignant epithelial neoplasm characterized by variable clinical manifestations. When located in the gingiva, this neoplasm may mimic common inflammatory lesions. This case report is to highlight a case who reported to our dental opd with a swelling which was diagnosed as squamous cell carcinoma.

Methods: A 37 year old male patient reported to the Department of Periodontics, Rajah Muthiah Dental College, Annamalai Nagar with a sessile gingival overgrowth in the gingiva adjacent to 47, 48 duration of 10 days. Clinical examination revealed a proliferative lesion involving the marginal gingiva and vestibule of 47, 48. 47 was found to be non-vital with a periodontal probing depth of 10mm with loss of crestal bone as viewed radiographically. Correlating clinical signs and symptoms, excisional biopsy of the lesion was planned.

Results: Excisional biopsy revealed the lesion to be squamous cell carcinoma. The patient was referred for treatment consisting of surgical excision of the tumour

Conclusions: The gingiva is most often the seat of soft tissue metastasis in the mouth. Prognosis of Squamous cell carcinoma is better when diagnosed and treated earlier. It is the responsibility of the dentists to promptly diagnose the lesion among other common lesions.

Keywords: Oral cancer; squamous cell carcinoma; gingival neoplasms; early detection of cancer

Introduction

Distinction between gingival cancer and cancer developed in the alveolar ridge is difficult. Cancer on the gums (Gingiva) is common in older people with prevalence in males. It is common in mandible posterior to premolars.^{1,2,3} This article describes a case report of a gingival swelling of unusual nature.

Case report

A 37 year old male patient reported to the Department of Periodontics, Rajah Muthiah Dental College, Annamalai Nagar with the chief complaint of asymptomatic swelling and pain in the right lower back tooth region for the past 10 days. The patient otherwise systemically healthy with history of burning sensation in his mouth and history of betel leaf and tobacco chewing for past 6 years.



Figure 1: - Pre-operative photograph.

The patient otherwise systemically healthy on extra oral examination revealed solitary palpable non tender, fixed, hard right submandibular lymph node of size 2 x 2 mm. On intra oral examination oral hygiene status was found to be

fair with a white non scrap able patch evident on the right buccal mucosa in relation to 47, 48. [Figure 1]

An exophytic sessile fibrotic growth of size 10 x 8 mm with ulcero proliferative surface in relation to 47, 48 involving marginal gingiva, attached gingiva and interdental papilla and extending to the depth of vestibule of 47, 48. Mesio-distally it extended from mesial aspect of 47 to mid buccal region of 48. Tenderness on percussion was present in relation to 47 with grade II mobility. Bleeding on probing was present.

On periodontal examination overall periodontal status was found to be satisfactory. [Figure 2]



Figure 2 – Probing Depth

Periodontal probing depth of 10mm was present on the buccal aspect of 47. Intra-oral periapical radiograph revealed crestal bone loss in relation to 47 and PDL widening in relation to 47, 48 and revealed 47 to be non vital. [Figure 3]



Figure 3 – Intra-oral Periapical Radiograph of region 46, 47, 48.

Excisional biopsy was performed using electro-cautery and scalpel and the tissue was subjected for histopathological examination. [Figure 4]



Figure 4 – Excisional Biopsy

The excised site was sutured and reviewed post operatively. [Figure 5 A-C]



Figure 5: - A) Post Operative Suturing done; B) Post Operative photograph after 3 days; C) Post Operative photograph after 1 week.

On histopathological examination the section revealed strands and sheets of highly dysplastic epithelium in the loosely fibrous connective tissue, numerous keratin pearls were also seen with a mild inflammatory cell infiltration and numerous blood vessels. [Figure 6 A-D]

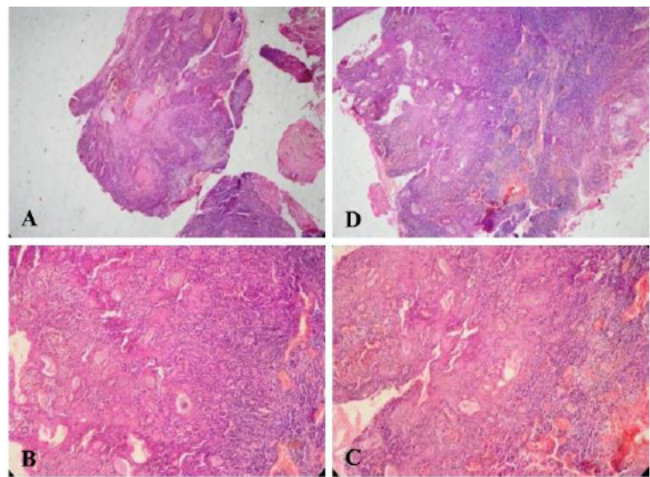


Figure 6 – Histopathological views

Based on histopathological examination and clinical findings a diagnosis of well differentiated squamous cell carcinoma was made.

Discussion

Squamous Cell Carcinoma of the gingiva doesn't differ histologically from SCC of the oral cavity. Islands and cords of malignant epithelial cells are seen infiltrating underlying tissue with horn pearls.^{4,5}

SCC may appear in endophytic, exophytic (verrucous or papillary), leukoplasic, ulcerated, erythroleukoplasic or erythroplastic forms.

Oral SCC affects the tongue in 20% - 40% of cases and the floor of the mouth in 15% - 20% of the cases, and together these sites account for about 50% of all cases of oral SCC. The gingivae, palate, retro molar area and the buccal and labial mucosa are oral sites less frequently affected. Importantly, when located in the gingiva this type of malignant tumour may resemble inflammatory lesions frequently observed in this region.^{6,7,8}

Surgery is the preferred first line treatment of small, accessible oral SCCs. However, advanced-stage oral SCC is usually treated by a combined treatment program of surgery, chemotherapy, and radiotherapy.^{8,9}

Conclusion

Though gingival swellings are common in many clinical situations gingival swellings are excised without being subjected to histopathological examination. About 20% of metastasis manifest before diagnosis of primary tumour. The gingiva is most often the seat of soft tissue metastasis in the mouth. Soft tissue metastasis from lung cancer in males and breast cancer in females are common. 90% of cases of oral cancer clinically manifest as hypoplastic or reactive lesions projecting an illusion of common lesions to the clinician. The 5 year survival rate is poor at about 50%, mainly because two-thirds of persons with SCC already have large lesions at the time of diagnosis.

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Corresponding Author

Dr. Senthil Kumar S.
Professor & Head,
Department of Periodontics,
Rajah Muthiah Dental College & Hospital,
Annamalai University, Annamalai Nagar
Chidambaram, Tamil Nadu, INDIA
Email Id: - shreya21sharma@gmail.com