

## Verrucous Carcinoma of Hard Palate

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### Abstract

Verrucous squamous cell carcinoma occurs mainly in oral cavity and larynx, buccal mucosa being most commonly involved. One case of verrucous carcinoma involving left hard palate (T<sub>4</sub> N<sub>0</sub> M<sub>0</sub>) in an adult male is being reported who underwent left total maxillectomy. The tumour behaviour and its management has been discussed.

### Key words

Carcinoma, Squamous carcinoma variant, Ackerman's tumour.

### Introduction

Verrucous squamous cell carcinoma also known as Ackerman's tumour (1) is a unique variant of squamous cell carcinoma, with different clinical, morphologic and cytokinetic features (2) involving mainly mucosal surfaces. Same neoplasm also involves cutaneous surfaces in genitalia (giant condyloma acuminatum) and limbs (carcinoma cuniculatum). In head and neck, the sites of predilection are oral cavity and larynx (2), buccal mucosa being most commonly involved. The term "Verrucous" is used because of its fine, finger like surface projections (3).

Microscopically, verrucous carcinoma are broadly based papillary frons with locally invasive margins which are invariably a blunt "pushing" one. The cells usually lack the usual cytologic criteria of malignancy. Verrucous hyperplasia is supposed to be the precursor

(2) but some believe it to be a distinct clinico-pathologic entity (4).

### Case Report

A sixty-five year old male, presented with a proliferative growth on left side of hard palate for a period of 6 months. The growth was extending from left canine tooth area to last molar, involving gingivo - buccal sulcus, approximately 4 cm × 6 cm in dimensions, not crossing the midline. There was history of loosening and subsequent falling of teeth along with mild pain in the growth. There was no history of trauma, epistaxis, trismus, diminished vision or diplopia. On palpation, the growth was non-friable, non-tender with well defined raised margins. Cervical lymph nodes were not palpable. CT scan revealed a mass in left maxillary antrum. X-ray

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chest and blood biochemistry was normal. Pre-operative biopsy revealed verrucous carcinoma. With the diagnosis of carcinoma left hard palate ( T<sub>4</sub> N<sub>0</sub> M<sub>0</sub>) patient underwent total maxillectomy by Weber-Fergusson incision. Orbital periosteum was preserved and the cheek flap was lined with split thickness skin graft taken from left thigh. Maxillectomy cavity was packed with iodoform pack which was removed on fifth post-operative day. Post operative period was uneventful. The histo-pathological examination confirmed verrucous carcinoma.



Fig. 1. Weber-Fergusson incision for surgical approach.

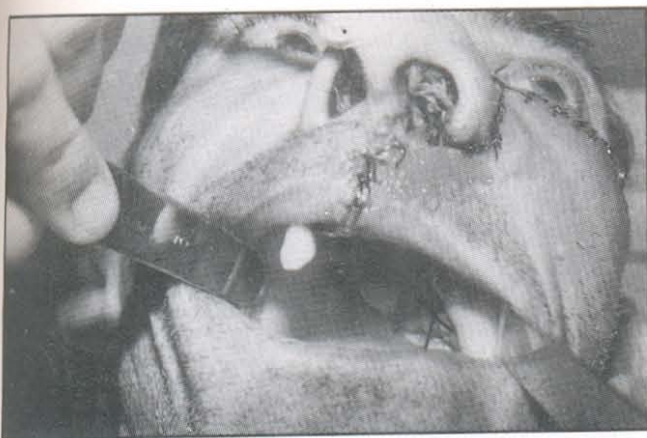


Fig. 2. Intra-oral view showing pack-in-situ filling the defect caused by left total maxillectomy. Same pack is also seen in left nostril.

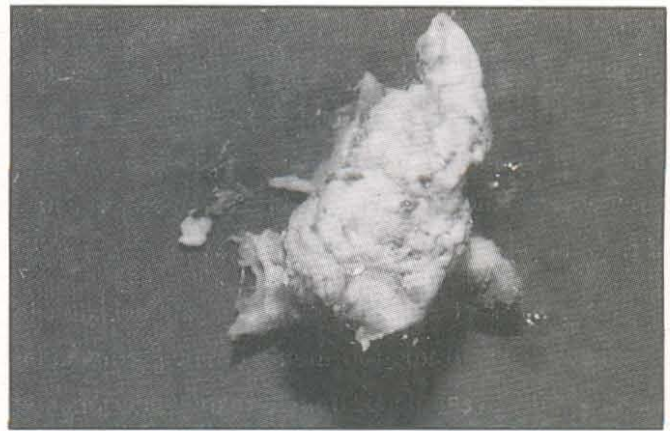


Fig. 3. Surgical specimen showing frond like proliferative growth (verrucous carcinoma) of hard palate.

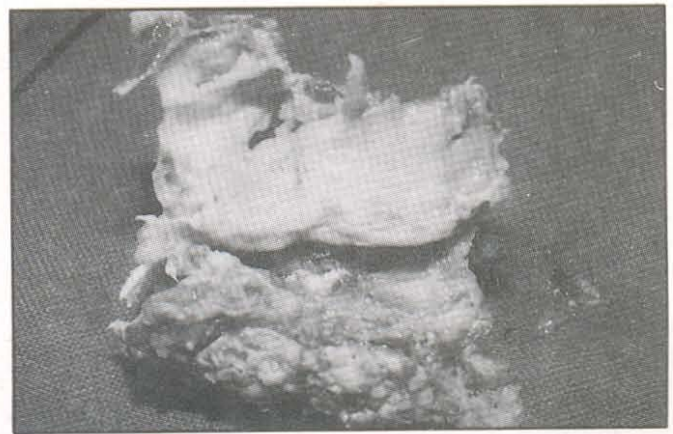


Fig. 4. Medial aspect of surgical specimen showing verrucous carcinoma of hard palate, involving bone and reaching to floor of nose. Resected margins were free of carcinoma on histopathological examination.

### Discussion

In the oral cavity, verrucous carcinoma constitutes 2 to 4.5% of all forms of squamous cell carcinoma (5), seen mainly in males above 50 years of age (2), and also associated with high incidence (37.7%) of second primary tumour (6), mainly in oral mucosa. It has an excellent prognosis because of its slow growth and the rarity with which it metastasizes to the regional lymph nodes (3). The management involves wide field surgical resection with good onco-clearance. Anaplastic transformation following irradiation of this tumour has



been reported in 10% of cases (7-11). However, other studies have disputed this finding on the basis of doubtful diagnosis of verrucous carcinoma, short interval between irradiation and the advent of more biologically aggressive carcinoma and the presence of hybrid carcinomas in 20% of cases in verrucous carcinoma (2,6,8).

On the basis of available evidence, the decision to use or not to use irradiation should not be predicted on the possibility of anaplastic transformation but rather on the ability to achieve local control, an event best achieved by surgical excision (2).

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