Verrucous carcinoma

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Verrucous carcinoma, a clearly defined variant of epidermoid carcinoma was described as an entity by Ackerman (1948). He mentioned its predilection for buccal mucosa and lower-gingiva. Majority of patients are elderly having poor orodental hygiene and more than half are tobacco chewers. It is more common in males than in females.

It is a peculiarly slow evolving, but relentlessly expanding variant of epidermoid carcinoma that rarely metastasize (Kraus and Perez-Mesa, 1966). The lesions are almost invariably described as warty, fungating ulcerated masses measuring between 2–10 cm. When confronted with bony structures the tumour tends to destroy the bony tissue on a broad front eroding with sharp margins, rather than infiltrate into the marrow spaces.

Surgical excision is the common approach for its treatment. Kraus and Perez-Mesa (1966) treated surgically 88 of their 104 patients, and used radiotherapy in only 17 patients. In four patients who received radiotherapy, anaplastic changes had occurred. Response to surgical excision is excellent.

Because of the rarity of the case and its similarity to the other common lesions in the region, this case is being reported.

K.N., 45-year-old male (Fig. 1) was admitted on 14 November 1969, with history of :

Swelling upper gingiva	1 year
Mass in the nose	9 months
Swelling right side of the face ..	6 months
Swelling left side of the face ..	1 month

One year back he noticed gradually increasing, painless masses in the nasal cavities and swelling in the upper gingiva. The teeth fell out painlessly as the swelling kept increasing in size. No history of epistaxis. Gradually the masses started encroaching on the nasolabial folds and the cheeks.

The patient has been chewing tobacco for many years. Examination of the right cheek, revealed a black fungating mass measuring about 6 cm. by 6 cm., having ragged and irregular appearance, fixed and continuous with the masses in the nostrils, upper gingiva and the left nasolabial fold. The mass had involved anterior two-thirds of the hard palate (Fig. 2).

Provisional diagnosis of malignancy or a fungal granuloma was made.

Following investigations were asked for aiding the diagnosis:

Blood examination

Hb—12 g. per cent; T.L.C.—8000/cm.; Poly—59 per cent; Eos—8 per cent; Lymph–32 per cent; Baso—1 per cent; S.T.S.—ve; E.S.R.—67 mm. first hour; Fungus culture—negative, 1st; 2nd and 3rd biopsies were inconclusive.

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FIG. 2.
Mass has involved the hard palate and the anterior nares.



FIG. 1.
K.N., 45 year male, showing the fungating mass involving the face.

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Excision biopsy

Verrucous carcinoma; section shows marked papillomatosis and hyperkeratosis of the epidermis. There is not much altered polarity or atypism, abnormal mitotic figures are seen in deeper layers. There are few squamous epithelium islands in the subepidermal tissue which have no connection with the surface epithelium. There is heavy infiltration of lymphocytes and plasma cells in the dermis, along with increased vascularity (Figs. 3, 4).



FIG. 3.
Low power view of the histological section through the mass.

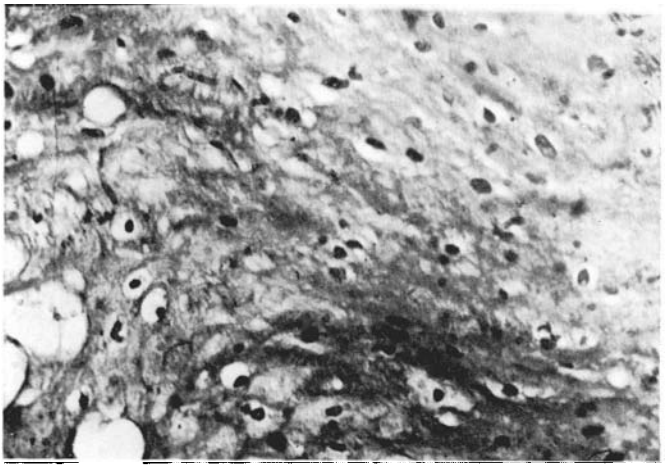


FIG. 4.
High power view of the tumour.

A complete surgical excision of the tumour was done, patient is so far doing well.

A review of 140 cases of squamous cell carcinoma from various countries which are submitted to the W.H.O. international reference centre for oropha-

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ryngeal tissues, revealed three cases of verrucous carcinoma. Two were tongue tumours from India; in males aged 40 and 55 years. The third was a female, aged 72 years, from London who had the involvment of the floor of her mouth as well. Twenty-nine cases of verrucous carcinoma of oral mucosa, twenty-five males and four females, were reported by Cooke, R. A. (1969).

Etiology is not known: possible influence of beetlenuts and tobacco may be there, to produce a lesion (Cooke, 1969). W.H.O. report mentions that the two patients from India reported to have verrucous carcinoma, also had submucous fibrosis in their oral cavity. It seems probably that oral leucoplakia develops into verrucous carcinoma, Pindborg *et al.* (1968).

Though the aetiology is not very definite, it seems definite that it is a variety of low grade squamous cell carcinoma.

Summary

A case of verrucous carcinoma involving face, nose, and palate, is presented with review of literature.

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