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Dentistry

VERRUCOUS CARCINOMA OF LEFT BUCCAL MUCOSA - A CASE REPORT

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ABSTRACT Wart carcinoma or Ackermann tumor is considered a low-grade variant of squamous cell carcinoma and often presents in the oral mucosa and skin. Oral wart cancer presents clinically as proliferative or cauliflower-like lesions of the buccal mucosa, or ulcero-proliferative lesions, followed by other sites such as the gingiva, tongue, and hard palate. Smoking and smokeless tobacco, alcohol, and opportunistic viral infections are the most commonly associated causes for most cases reported in the literature. Here, this article describes a case study of a 52-years-old women diagnosed with verrucous carcinoma of the left buccal mucosa with constant traumatic stimulation from her teeth as the etiology of lesion development. Although described as a benign lesion with minimally invasive potential, cases over the years have shown transformation into squamous cell carcinoma. Therefore, early diagnosis and surgical excision of lesions are the most appropriate treatments for wart tumor.

KEYWORDS : oral verrucous carcinoma, ackermann's tumor, carcinoma cuniculatum

INTRODUCTION

Oral Verrucous Carcinoma (OVC), is a variation of Squamous Cell carcinoma (SCC), first defined through Lauren V Ackermann in 1948 so it turned into acknowledged as "Verrucous Carcinoma of Ackermann" or Ackermann`s Tumor", different names utilized in literature are Buschke Loewenstein tumour, florid oral papillomatosis, epithelioma cuniculatum, and carcinoma cuniculatum. The term VC (Verrucous carcinoma) refers to the ones exophytic mucosal or cutaneous squamous tumors which can be heaped above the epithelial floor with a papillary micronodular floor and pushing margins. The most common site of occurrence is oral cavity, other different sites being larynx, pyriform sinus, esophagus, nasal hollow space and paranasal sinuses, outside auditory meatus, lacrimal duct, skin, scrotum, penis, vulva, vagina, uterine, cervix, perineum, and the leg. This closely keratinized, properly differentiated variation of squamous cell carcinoma suggests warty-like factors and lacks traditional cytologic findings of atypia, showing most effective domestically invasiveness and no metastatic potential. Lymph node involvement and remote metastasis are uncommon in Verrucous Carcinoma. It happens greater regularly in adult males over the 6th decade. Histopathologic and medical prognosis of oral Verrucous Carcinoma can be difficult, so near cooperation among pathologist and health practitioner is needed that allows you to discover the character of the lesion.

Case Report

A 52-years-old female patient visited our Dental College and Hospital with a chief complaint of a painful ulcer in the left lower back tooth region for the past 2 months, associated with continuous and throbbing in nature of pain and does not subside on taking medication. Incisional biopsy was done in our hospital before 8 months and the report was found to be verrucous carcinoma of left buccal mucosa. Patient has no relevant medical history. Patient underwent uneventful extraction in lower left back tooth region. Patient has habit of betel nut chewing and pouching in left buccal mucosa with 5 times a day for past 20 years.

On extraoral examination, no facial asymmetry detected. Greyish discoloration present over the lower lips. On intraoral examination, an ulceroproliferative lesion of size 3x3 centimetres evident on the left retromolar trigone extending anteriorly distal to 35, posteriorly upto the left pterygomandibular raphae, medially involving buccal vestibule, distally involving buccal cortex. Margins are irregular and texture is rough. Surface and shape -irregular. On palpating it is tender, irregular. No bleeding and pus discharge was detected. Able to perform lateral tongue movements with restriction of superior movements. On hard tissue examination-generalized attrition, missing 36,37,38 was evident.

Differential Diagnosis

Verrucous leukoplakia in left buccal mucosa
Chronic non-healing malignant ulcer of left buccal mucosa

Provisional Diagnosis

Verrucous carcinoma in left buccal mucosa
Partially edentulous in 36,37,38

Investigations

Incisional biopsy reveals suggestive of verrucous carcinoma in left buccal mucosa
High dose contrast enhanced computed tomography (CECT) reveals carcinoma in left buccal mucosa – posterior aspect of left buccal mucosa extending upto retromolar trigone

Final Diagnosis

Verrucous carcinoma in left buccal mucosa
Partially edentulous in 36,37,38

Treatment plan and done

Wide local excision + selective neck dissection + left radial foramen free flap reconstruction

DISCUSSION

Verrucous carcinoma is defined as a warty variant of Squamous Cell Carcinoma characterized by a predominantly exophytic overgrowth of well-differentiated keratinizing epithelium with locally aggressive pushing margins, these tumors are slow growing, but they can cause extensive local destruction.

Aetiology

The etiological factors are smoking, alcohol consumption, areca nut chewing and oral microbiota

Epidemiology And Prevalence

Verrucous carcinoma is generally seen in elderly in patients, the mean age of occurrence being 60-70 years, with nearly 75% of the lesions developing in males. It is consistently reported that a very high percentage of patients with the disease are tobacco chewers. A small number of patients give no such history but instead use snuff or smoke tobacco heavily. Occasional patients deny the use of tobacco, and these usually have ill-fitting dentures. The vast majority of cases occur on the buccal mucosa and gingiva or alveolar ridge, although the palate and the floor of the mouth are occasionally involved.

Clinical Presentation

Pain and difficulty in mastication are common complaints, but bleeding is care. The neoplasm is chiefly exophytic and appears papillary in nature, with a pebbly surface, which is sometimes covered by a white leukoplakic film. The lesions commonly have rugae-like folds with deep clefts between them. Lesions of the buccal mucosa may become quite extensive before the involvement of deeper contiguous structures and lesions on the mandibular ridge or gingiva

grow into the overlying soft tissue which rapidly become fixed to the periosteum, gradually invading and destroying the mandible.

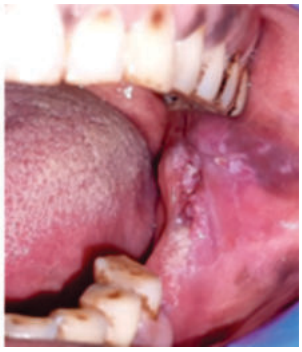
Histologic Features

Histologically, verrucous carcinoma of epithelium is well differentiated and shows little mitotic activity, pleomorphism or hyperchromatism. Characteristically, cleft- like spaces lined by a thick layer of parakeratin extend from the surface deeply into the lesion. Parakeratin also occurs extending into the epithelium. The parakeratin lining the clefts with the parakeratin plugging is the hallmark of verrucous carcinoma.

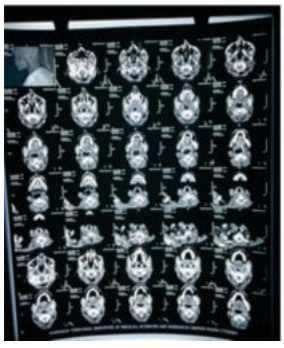
Treatment

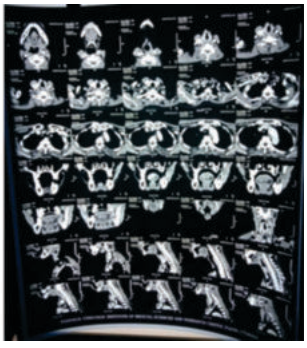
Verrucous carcinoma is mostly treated by surgery. The lesion is slow growing and late to metastasize, it can be treated by relatively conservative excision without a mutilating procedure. The prognosis is much better than for the usual type of oral squamous cell carcinoma.

Extraoral image

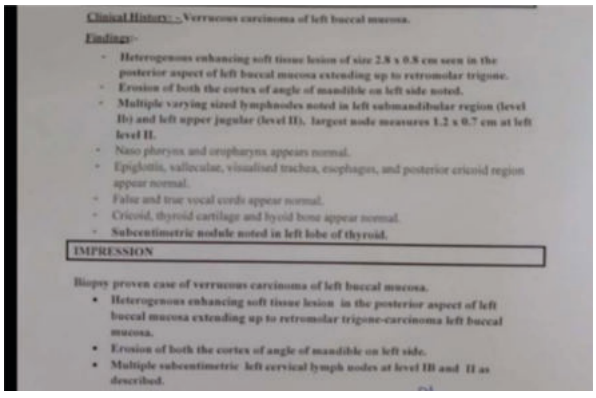


Intraoral image





CT Image



Clinical History: - Verrucous carcinoma of left buccal mucosa.

Findings:-

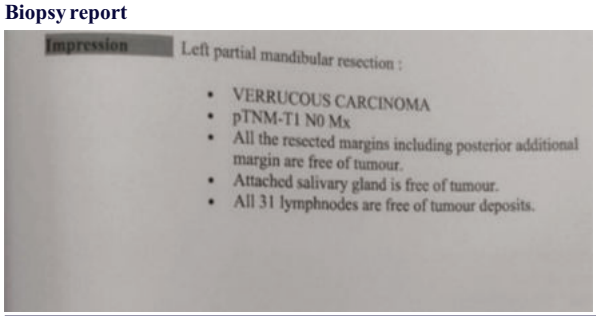
- Heterogenous enhancing soft tissue lesion of size 2.8 x 0.8 cm seen in the posterior aspect of left buccal mucosa extending up to retromolar trigone.
- Erosion of both the cortex of angle of mandible on left side noted.
- Multiple varying sized lymphnodes noted in left submandibular region (level Ib) and left upper jugular (level II). largest node measures 1.2 x 0.7 cm at left level II.
- Naso pharynx and oropharynx appears normal.
- Epiglottis, valleculae, visualised trachea, esophagus, and posterior cricoid region appear normal.
- False and true vocal cords appear normal.
- Cricoid, thyroid cartilage and hyoid bone appear normal.
- Subcentimetric nodule noted in left lobe of thyroid.

IMPRESSION

Biopsy proven case of verrucous carcinoma of left buccal mucosa.

- Heterogenous enhancing soft tissue lesion in the posterior aspect of left buccal mucosa extending up to retromolar trigone-carcinoma left buccal mucosa.
- Erosion of both the cortex of angle of mandible on left side.
- Multiple subcentimetric left cervical lymph nodes at level IB and II as described.

Biopsy report



Impression Left partial mandibular resection :

- VERRUCOUS CARCINOMA
- pTNM-T1 N0 Mx
- All the resected margins including posterior additional margin are free of tumour.
- Attached salivary gland is free of tumour.
- All 31 lymphnodes are free of tumour deposits.

REFERENCES

1. Shergill AK, Solomon MC, Carnelio S, Kamath AT, Aramanadka C, Shergill GS. Verrucous carcinoma of the oral cavity: Current concepts. Int J Sci Study. 2015;3:114–8.
2. Kallarakkal TG, Ramanathan A, Zain RB. Verrucous papillary lesions: Dilemmas in diagnosis and terminology. Int J Dent. 2013;2013:298249
3. Kawakami M, Yoshimura K, Hayashi I, Ito K, Hyo S. Verrucous carcinoma of the tongue: Report of two cases. Bull Osaka Med Coll. 2004;50:19–22. Eur J Dent.
4. Santoro A, Pannone G, Contaldo M, Sanguedolce F, Esposito V, Serpico R, et al. A troubling diagnosis of verrucous squamous cell carcinoma ("the bad kind" of keratosis) and the need of clinical and pathological correlations: A Review of the literature with a case report. J Skin Cancer. 2011;2011:370605.
5. Agnihotri A, Agnihotri D. Verrucous carcinoma: A study of 10 cases. Indian J Oral Sci. 2012;3:79–83
6. Asha ML, Vini K, Chatterjee I, Patil P. Verrucous carcinoma of buccal mucosa: A case report. Int J Adv Health Sci. 2014;1:19–23.
7. Malik M, Sawhney H, Saini RS, Laller S. Verrucous hyperplasia, proliferative verrucous leukoplakia and verrucous carcinoma - A diagnostic dilemma - Case report. J Periodontal Med Clin Pract. 2014;01:112–7.
8. Alkan A, Bulut E, Gunhan O, Ozden B. Oral verucous carcinoma: A study of 12 cases 2010;4:202–7.
9. Ackerman LV. Verrucous carcinoma of the oral cavity. Surgery 1948;23(4):670–8.
10. Demian SD, Bushkin FL, Echevarria RA. Perineural invasion and anaplastic transformation of verrucous carcinoma. Cancer 1973;32(2):395–401.
11. Rekha KP, Angadi PV. Verrucous carcinoma of the oralcavity: a clinico-pathologic appraisal of 133 cases in Indians. Oral and Maxillofac Surg. In press.
12. Tornes K, Bang G, Stromme KH, Pedersen KN. Oral verrucous carcinoma. Int J Oral Surg 1985;14(6):485–92.
13. Jacobson S, Shear M. Verrucous carcinoma of the mouth. J Oral Pathol 1972;1(2):66–75.
14. Shear M, Pindborg JJ. Verrucous hyperplasia of the oral mucosa. Cancer 1980;46(8):1855–1862.
15. Walvekar RR, Chaukar DA, Deshpande MS, Pai PS, Chaturvedi P, KakadeAet al. Verrucous carcinoma of the oral cavity: A clinical and pathological study of 101 cases. Oral Oncol 2009;45:47– 51