

Oral Verrucous Carcinoma - A Case Report

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Abstract: *Verrucous carcinoma of the oral cavity is an uncommon variant of oral squamous cell carcinoma. The clinical presentation and surgical outcomes of oral verrucous carcinoma are unique. This form of cancer is often seen in those who chew tobacco or use snuff orally, so much so that it is sometimes referred to as "Snuff dipper's cancer." Here we report a case of oral verrucous carcinoma in a female patient.*

Keywords: Verrucous carcinoma, Oral squamous cell carcinoma

1. Introduction

Oral verrucous carcinoma (OVC) presents predominantly as an exophytic growth with a pebbly, micronodular surface, a slow growing rate and become locally invasive if not treated properly. ¹The first ever documented evidence of a verrucous carcinoma dates back to 1941 when Fridell and Rosenthal reported a case of well- differentiated squamous cell carcinoma (SCC) of the oral cavity as ‘papillary verrucous carcinoma.’²

Verrucous carcinoma (VC) a variant of well differentiated SCC was defined by Ackerman in 1948 as a diagnostically challenging squamous cell neoplasia involving lip, oropharyngeal, and laryngeal mucosa. ^{3, 4, 5}. Various synonyms used to describe this tumor, including Ackerman tumor, Buschketumor, Lowenstein tumor, florid oral papillomatosis, epitheliomacuniculatum, and carcinoma cuniculatum.⁵ The most common site of occurrence is oral cavity involving buccal mucosa, mandibular alveolar crest, gingiva, and tongue with glottic larynx being the most frequent non-oral site. We report a case of oral verrucous carcinoma in a 65 year old female patient and the literature of the case is reviewed briefly.

2. Case History

A female patient aged 65 years came to the Department of OMR with a chief complaint of exophytic growth in relation to her left cheek region since 1 year. The patient had a history of tobacco and pan chewing for 4 years. The lesion was sudden in onset; initially the growth was small in size which gradually enlarged to attain the present size. No history of pain, bleeding, pus discharge or difficulty in swallowing was reported. The patient had consulted a doctor for the same and biopsied the tissue diagnosing verruca vulgaris with severe dysplasia.

Intraorally, an exophytic proliferative growth of size 4 *3.5 cm present in the left buccal mucosa extending from the corner of the lip to the retromolar region, roughly oval in shape. (Figure 1) The overlying mucosa had cauliflower like appearance.

On palpation, all inspectory findings are confirmed. Non-scrappable, non-tender, no bleeding on touch, pedunculated growth with indurated borders are found. Additionally, depapillation present on the dorsal surface of the tongue. (Figure-2) The left submandibular lymph nodes are palpable.

Based on clinical appearance, provisional diagnosis of verrucous carcinoma was given after which incisional biopsy taken confirmed the lesion as verrucous hyperplasia.

As part of management, the treatment plan was briefly explained to the subject. The initial treatment was surgery and biopsy which is followed by radiation therapy.



Figure 1: Exophytic proliferative growth of size 4 *3.5 cm present in the left buccal mucosa extending from the corner of the lip to the retromolar region, roughly oval in shape



Figure 2: Depapillation present on the dorsal surface of the tongue

3. Discussion

Oral verrucous carcinoma has received increase in recognition in past decades. There is evident advancements in this field including etiological analysis to effective treatment. OVC is a slow growing lesion with exophytic growth pattern in fourth to sixth decade which become locally invasive if not treated properly. Etiology of OVC is multifactorial. The most important etiological factors are tobacco, alcohol, areca nut usage, poor oral hygiene. The presence of oral lichenoid and leukoplakic lesions may act as predisposing factors. Human papilloma virus (HPV) infection also has been implicated in the development of OVC. The odds of presents of HPV in VC was found to be 29.5%. Tobacco use in smokeless and inhaled forms reported predominantly in affected patients which is followed by areca nut usage and use of alcohol. Shear and Pindborg reported that out of 28 patients reported with verrucous lesions 24 used tobacco and one was an area nut chewer.

OVC is a rare type of oral cancer which is less aggressive and has a lower tendency to metastasise. Regional lymph nodes are often enlarged and tender because of inflammatory involvement, simulating metastatic tumor. Regional lymph node metastasise are exceedingly rare and distant metastases have not been reported. Histologically OVC typically presents heavily keratinized, or parakeratinized irregular clefted surface with parakeratin extending deeply into the cleft. Atypia is minimal and there is usually a subepithelial inflammatory infiltrate will present. The clinical and histopathological differential diagnosis should include

pseudoepitheliomatous hyperplasia, well-differentiated squamous cell carcinoma, chronic candidiasis and condyloma accuminatum, proliferative verrucous leukoplakia, reactive keratosis, verucca vulgaris and keratoacanthoma.

With advancement of understanding of mechanism and diagnosis, various treatment regimens have been developed for OVC patients. The most notable ones include surgery, radiotherapy and chemotherapy which have already shows desired results in many cases. Other unconventional modalities such as cryotherapy, shave excision, photodynamic therapy, laser and immune therapies further enhanced the treatment effectiveness although they were often recognized as a means of auxiliary approach.

4. Conclusion

The presence of malignant foci has been reported in OVC cases. Many times it is difficult to the dentist to differentiate clinically. Hence, a thorough clinical knowledge and in-depth microscopic evaluation are required by both clinician and pathologists to diagnose the dilemma. Thus, its easy for them to diagnose warty and exophytic growths in the oral cavity. We conclude that a correct diagnosis is based on precise comparison and integration of all the results and not on the isolated valuation of differential diagnosis.

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