

Case Report

Hybrid Verrucous Carcinoma of the Palate: A Case Report

Parya Emamverdyzade, Sona Rafieyan, Kuroush Taheritalesh, Ali Mortazavi, Saeed Hajizade

Abstract

Verrucous carcinoma a low-grade variant of squamous cell carcinoma is the rarest of all oral cancers. A hybrid verrucous carcinoma is a non-verrucous squamous cell carcinoma that arises synchronously with the verrucous carcinoma. The differential diagnosis of verrucous carcinoma remains difficult and requires clinical and pathologic data confrontation. As the malignant behavior of hybrid verrucous carcinoma confined to the non-verrucous carcinoma component, careful examination of these tumors is needed. Here we report a case of 44 year old female patient with hybrid verrucous carcinoma with detailed review on clinical, histological features and treatment.

Keywords: Ackermann's; Hybrid; Low Grade; Squamous Cell Carcinoma; Verrucous Carcinoma.

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Introduction

Verrucous Carcinoma (VC) was first described in 1948 by Lauren V. Ackermann, which is now also known as Verrucous Carcinoma of Ackermann or Ackermann's tumor. Tobacco chewing is a significant etiological factor for its development.¹ Other irritants to the oral mucosa such as betel nut chewing, poor dental hygiene and Human Papilloma Virus (HPV) infection have been implicated in the development of oral verrucous carcinoma.² This uncommon lesion can be considered a disease of older age, typically occurring in the seventh-eighth decades, with a strong male predominance. In the head and neck area, it is commonly seen on buccal mucosa and lip. It appears as a papillary non-ulcerated gray-white or red mass with a very wide base of attachment.³ Carcinomas composed of both verrucous carcinoma and conventional squamous cell carcinoma are referred to as hybrid verrucous squamous cell carcinoma.⁴ Although uncommon it is estimated that about 10% of all verrucous carcinoma of the larynx and 20% of all verrucous carcinoma of the oral cavity are hybrid. Careful examination is recommended because the malignant behavior of hybrid verrucous carcinoma is confined to the non-VC component.² Here we report one such case of hybrid verrucous carcinoma in a 44 years old female patient.

Case Report

A 44-year-old woman presented to the Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran,

with a chief complaint of ulcer on the hard palate. The patient had a history of diabetes mellitus and renal failure. Clinical intraoral examination revealed multiple sessile exophytic lesions with red dotted area measuring 15x9 mm. (Fig 1) it was painless and without bleeding. Paresthesia of inferior orbital nerve was observed. On radiographic studies no changes were seen on the palatal bone. Computed tomography scan of this massive lesion did not show sinus involvement and bone erosion. The biopsy of lesion was done with differential diagnosis of verrucous carcinoma. The histopathological appearance was described as well differentiated squamous tumor covered by a thick keratinized layer and papillary surface with broad and deep rete ridges. A typical inflammatory reaction in the stroma composed of lymphocytes, plasma cells and histocytes was observed. Deep areas showed frank infiltration within the stroma. (Fig 2) Cytological atypia, individual cell keratinization were seen and the final diagnosis was hybrid verrucous carcinoma.

Discussion

Verrucous carcinoma is a distinct variant of differentiated squamous cell carcinoma (SCC) with low grade malignancy, slow growth and low metastatic potential.⁵ The tumor representing 2–12% of all oral cancers mainly occurs in older men.⁶ It is often associated with long-term use of smokeless tobacco. Retro molar area remains the most common site of origin.⁷ The etiology of VC remains unclear. The role of HPV infections in the etiology of verrucous lesion of the skin and genitalia is

well documented, and HPV may also play an important role in the development of VC.²



Figure 1: Multiple sessile exophytic lesions with red dotted area measuring 15x9mm

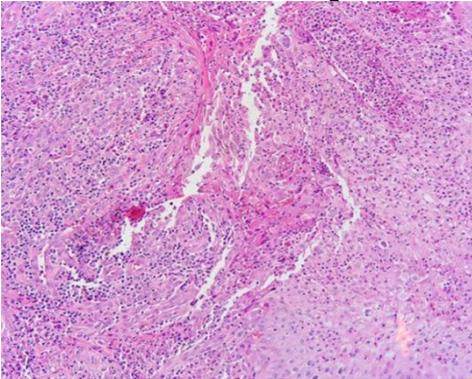


Figure 2: In deep areas frank infiltration to the stroma is obvious (×400)

On clinical examination surface may be Verrucous or show the conventional invasive pattern. To our knowledge it is important to take different incisions, because in SCC with an exophytic or endophytic growth pattern often the invasion can be lacking in incisional biopsies, and it is not possible to exclude an underlying conventional carcinoma. Diagnosis from classical squamous cell carcinoma is a frequent problem also for clinicians because of the extensive nature of the lesion mimicking an invasive cancer. In superficial biopsies without an obvious invasive growth, the microscopic appearance may also induce to an erroneous diagnosis of benign squamous proliferation.³ In particular it is essential to rule out hybrid carcinoma including VC and conventional SCC. Hybrid carcinomas should be staged and managed as conventional SCC because of their metastatic potential, compared to classical VC and fortunately it shows excellent prognosis following complete surgical removal in the early stages.³ Finally, it is essential that the pathologist alerts the clinician to the progressive nature of the

lesion and because of the possibility of nodal metastasis complete excision or close follow up and re-biopsy are suggested. As the malignant behavior of hybrid VC is confined to the non-VC component, careful examination of these tumors and adequate sampling is recommended.

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