Scholars Bulletin
(A Multidisciplinary Bi-weekly Journal)
An Official Publication of "Scholars Middle East Publishers",
Dubai, United Arab Emirates
Website: http://scholarsbulletin.com/

ISSN 2412-9771 (Print)
ISSN 2412-897X (Online)

A case report of Hybrid verrucous carcinoma of the palate

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Abstract: Verrucous carcinoma (VC) a low-grade variant of squamous cell carcinoma (SCC) is the rarest of all oral cancers. A hybrid VC is a non-verrucous SCC that arises synchronously with the VC.The differential diagnosis of VC remains difficult and requires clinical and pathologic data confrontation.As the malignant behaviour of hybrid VC is confined to the non-VC component, careful examination of these tumors is needed .here we report a case of 44 year old female with hybrid verrucous carcinoma.Clinical and histological features and treatment are discussed with the review of literature.

Keywords: verroucuscarcinoma, hybridverrucous carcinoma, palate

INTRODUCTION

It was first described in 1948 by Lauren V. Ackermann as a neoplasm of the oral mucous membrane, 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 bethel nut chewing, poor dental hygiene and Human Papilloma Virus (HPV) infection have been implicated in the development of oral VC [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, VC most frequently involves the oral cavity, where it commonly seen in buccal mucosa and lip. It appears as a papillary nonulcerated 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 (HCs) [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 [4].Careful examination is recommended because the malignant behaviour of hybrid VC is confined to the non-VC component [4].

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 an ulcer on the hard palate. The patient had a history of diabetes mellitus and renal failure. Clinical intraoral examination revealedMultiple sessile exophitic lesionswith red dotted area measuring 15×9mm. it was painless and without bleeding.Paresthesia of inferior orbital nerve was observed. In radiographic studies no changes were seen. Computed tomography (CT) 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 and sent to histopathological examination (Fig-1).

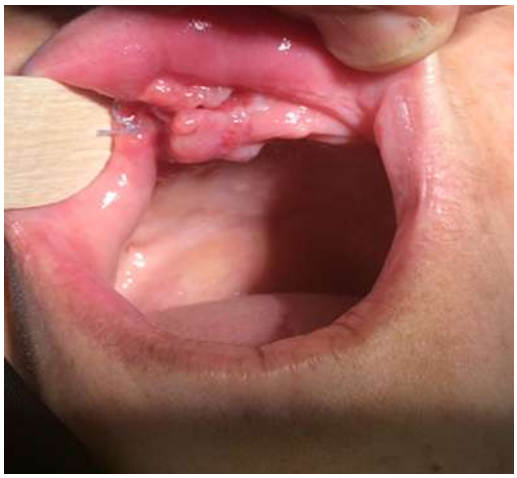

Fig-1: Multiple sessile exophitic lesionswith red dotted area measuring 15×9mm

Histopathologic Findings

The histological appearance was described as well differentiated squamous tumor covered by a thick keratinized layer and papillary surface with broad and deep rete ridges,A typically inflammatory reaction in the stroma composed of lymphocytes, plasma cells and

histiocytes was observedin deep areas frank infiltration to the stroma,cytologicalatypia,individual cell keratinization were seen and the final diagnosis was hybrid verrucous carcinoma(Pictures-2&3).

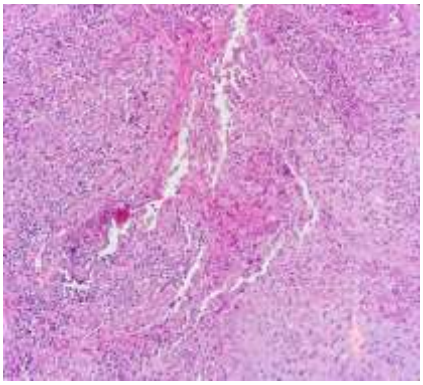

Fig-2: In deep areas frank infiltration to the stroma is obvious (×400)

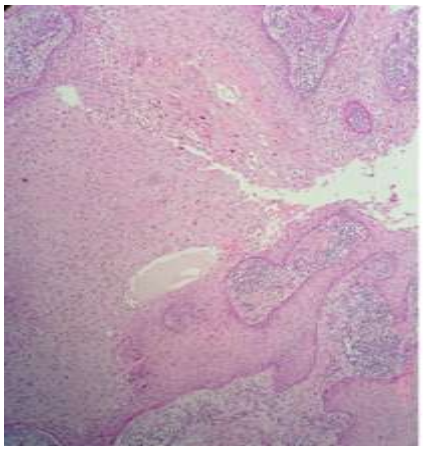

Fig-3: Tumor with broad and deep rete ridges(×200)

DISCUSSION

verrucous carcinoma first described in 1948 by Lauren V. Ackerman is a distinct variant of differentiated 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.The VC most often arises in the upperaerodigestive tract also the oral cavity, particularly the buccal mucosa, gingivae and retromolar areas, remains the most common site of origin [7].The etiology of VC remains unclear. The role of Human papillomavirus (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]. In clinical examinationsurface may be verrucousor show the conventional invasive pattern. To our khowlage it is important to take differrent incisionsbecause in SCC with an exo-endophytic growth patternOften 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 benign microscopic appearance may, also, induce to an erroneous diagnosis ofbenign 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, compare 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 followup and rebiopsyare suggested.

CONCLUSION

As the malignant behaviour of hybrid VC is confined to the non-VC component, careful examination of these tumorsand adequatesampelingis recommended.

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