

Oral Verruca Vulgaris- A Rare Presentation

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Abstract: Verruca vulgaris also known as common warts is a benign lesion of skin and mucous membrane caused by human papilloma virus. Intraoral warts can occur at any age but are most commonly seen in age group of 30-50 years with equal incidence in both genders. It is found commonly on the palate followed by lip, tongue, buccal mucosa and rarely on gingiva. Conservative surgical excision with safe margins is the treatment of choice. The purpose of this paper is to present a rare clinical presentation of oral verruca vulgaris on buccal mucosa occurring in a 40-year-old male. Verruca vulgaris must be considered in the differential diagnosis of papillary lesions.

Keywords: Common warts, human papilloma virus, papillary lesions, verruca vulgaris.

I. Introduction

Verruca vulgaris is one of the most commonly observed skin growths, widely known as "wart". [1, 2] Oral verruca vulgaris (OVV) is a viral papilloma, benign in nature and are rare in oral cavity. [3] Intraoral warts can occur at any age but are most commonly seen in age group of 30-50 years with equal sex predilection. [3] Clinically, it appears as a soft tissue lesion usually white in color but sometimes pink having sessile or pedunculated base with solitary or multiple exophytic, verrucous or papillomatous projections. [4] The solitary or multiple form has acroform, acro-papilloform and cryptiform surface producing conspicuous hyperkeratosis, and elevated with discrete borders.[3] It is found commonly on the palate followed by lip, tongue, buccal mucosa and rarely seen on gingiva. [2] Usually, the lesion is asymptomatic, but may cause cosmetic problems when present on lips. Infectivity rate of oral wart is extremely low. They are usually caused by autoinoculation from lesions on the fingers and hands. [4] Conservative surgical excision with safe margins is the treatment of choice. Recurrence is seen in a small proportion of treated cases. [5] The purpose of this paper is to present a rare clinical presentation of OVV on buccal mucosa with its differential diagnosis.

II. Case Report

A 40-years-old male patient reported to the department of oral medicine and radiology, GDCH, Ahmedabad with complaint of growth on left buccal mucosa since 4 months. Initially it was asymptomatic but now associated with dull aching from last 1 month. Patient had habit of pan masala chewing 10-15 times per day since 20 years. Mouth opening was restricted to approximately 25 mm. On Intra oral examination, a single well defined hyperkeratotic white patch like lesion with multiple long papillary projections present on left buccal mucosa of size approximately 4*3 cm extending anterioposteriorly from 34 to 38 region and superioinferiorly from 1 cm above occlusal line and to the depth of lower vestibule. The lesion was rough surfaced with irregular margins, firm in consistency having sessile base associated with tenderness suggestive of Verrucous growth on left buccal mucosa along with oral sub mucous fibrosis. Left submandibular lymph nodes were enlarged, palpable, tender and not fixed. No similar lesions were noted elsewhere in body. Possibility of Verrucous leukoplakia or verrucous carcinoma was considered. [fig 1,2] CBC, HIV, HbsAg test and incisional biopsy were carried out to rule out other possibilities. Patient was HIV and HbsAg negative. Histopathological examination, revealed hyperkeratosis and papillary hyperplasia in epidermis with scattered koilocytes. Mixed inflammatory cell exudates seen in scanty sub epithelial stroma suggestive of Verruca Vulgaris. [fig 3] Surgical excision with safe margins in aseptic precautions under general anesthesia was carried. Patient also underwent radiotherapy. On follow up of 3 months' patient was completely asymptomatic. [fig 4]

III. Discussion

"Verrucous" means a roughened surface, which is usually a wart or wart-like. Verrucous lesion presents as cauliflower-like, slowly growing lesion, which may be single, multiple or diffuse with either sessile or pedunculated base. The first description of common wart dates back 25 AD when Celsus described the clinical features of the plantar, genital and common skin wart. In 1907, Ciuffo reported the infectious nature of warts. The term "Gingival wart" was first coined by Tomes in 1848 and described it as a localized, benign HPV

induced epithelial hyperplasia on gingiva.[2] These are benign, elevated, firm nodules with characteristic papillomatous surface projections. The most common site of occurrence is fingers. Oral lesions are relatively rare and usually caused by auto inoculation from lesions on the fingers and hands OVV tends to have pointed or verruciform surface projections with very narrow stalk or sessile base, firm, exophytic lesion, reaching maximum size up to 5mm and are white due to considerable surface keratin. Most commonly seen on the palate followed by lip, tongue, buccal mucosa and rarely seen on gingiva, usually caused by auto inoculation from lesions on the fingers and hands. [1, 3, 4, 5] It can occur at any age with preponderance in age group of 30-50 years and equal incidence in both genders. In presented case was present in a 40 year old male having clinical appearance was very similar to verrucous leukoplakia, the presence of tobacco chewing habit, OSMF changes with presence of white hyperkeratotic patch like lesion with multiple papillary projections along with absence of co-existing skin lesions advocate that this lesion does not resembles to OVV.

Verruca vulgaris is most commonly induced by HPV-2, HPV-4 or HPV-40. Its association with HPV has raised questions about its association with oral squamous cell carcinoma. The resulting growth in most of the cases eventually disappears after a year or two even if left untreated. Hence exact role of the virus in the etiopathogenesis of these lesions is yet unclear. [2, 3, 4]

Differential diagnosis of oral warts includes verrucous leukoplakia, squamous papilloma, condyloma acuminatum, focal epithelial hyperplasia, exophytic squamous cell carcinoma, keratocanthoma, exophytic verrucous carcinoma and verruciform xanthoma which share similar clinical impression but can only be differentiated on the basis of histopathological examination. The virus lives within the epithelium of the lesion and can be seen microscopically as intra nuclear viral inclusions. Histologically, a wart demonstrates acanthotic epidermis with papillomatosis, hyperkeratosis and parakeratosis with elongated rete ridges often curving towards the center of the wart. Dermal capillary vessels are prominent and may be thrombosed, and mononuclear cells may be present. HPV-associated papilloma are characterized by large keratinocytes with an eccentric, pyknotic nucleus surrounded by a perinuclear halo (koilocytes). HPV infected cells may have small eosinophilic granules and diffuse clumps of basophilic keratohyaline granules. [7] Histopathology picture of our case revealed hyperkeratosis and papillary hyperplasia in epidermis with scattered koilocytes. Mixed inflammatory cell exudates seen in scanty sub epithelial stroma suggestive of Verruca Vulgaris. Surprisingly, it was diagnosed as verruca vulgaris.

Conservative surgical excision with safe margins is the treatment of choice. Frequently similar lesions if left untreated may resolve spontaneously and those that persist should be removed surgically either by routine excision or laser ablation. Intralesional injections should be used as a last resort. In our case the conservative surgical excision with safe margins was performed. [2]

IV. Conclusion

Oral verruca vulgaris is a viral papilloma, and are common on the skin than in the oral cavity. As such typical lesion of OVV is identical to squamous papilloma, Heck disease and condyloma acuminatum but in the presented case, OVV had clinical features very similar to verrucous leukoplakia. OVV produce irreversible oral mucosal changes that have the propensity to progress to either verrucous carcinoma or oral squamous cell carcinoma (OSCC). Therefore, the history, clinical features as well as histopathologic features are of paramount importance in diagnosing any verrucous growth of oral cavity.

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FIGURES



fig.1: Profile picture

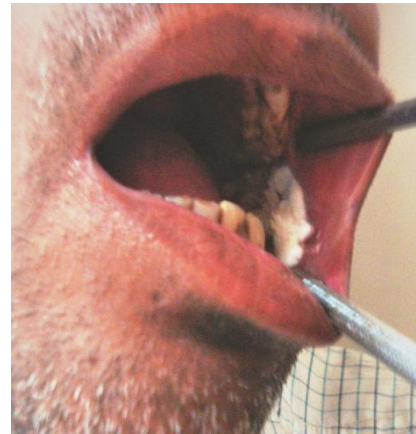


fig.2: Verrucous lesion on left buccal mucosa

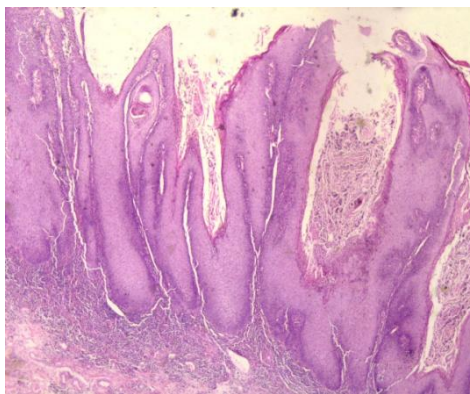


fig.3: Histopathological picture



fig.4: Post operative picture

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