Journal of Community Hospital Internal Medicine Perspectives
co-action publishing

IMAGING COLUMN

Oral verrucous hyperplasia due to repetitive chewing on lips

Salik Nazir, MD*, Priya Rajagopalan, MD, Stephen Melnick, DO, Noelle Juliano, DO and Richard Alweis, MD

Department of Internal Medicine, Reading Hospital & Medical Center, West Reading, PA, USA

*Correspondence to: Salik Nazir, Department of Internal Medicine, Reading Hospital & Medical Center, Sixth Avenue & Spruce Street, West Reading, PA 19611, USA, Email: Salik.nazir@readinghealth.org

Received: 11 March 2016; Revised: 2 May 2016; Accepted: 6 May 2016; Published: 6 July 2016

Fifty-year-old male smoker presented with a slow-growing raised lesion on the mucosal surface of his upper lip (Fig. 1). He underwent an excisional biopsy and pathology confirmed verrucous hyperplasia without evidence of malignancy as shown in Fig. 2. Patient made an uneventful recovery.

The most common site of presentation involves the buccal mucosa (48%) followed by the tongue (20%), palate (18%), gingiva (7%), and labial mucosa (7%) (1). Causative factors include smoking cigarettes, smokeless tobacco, chewing habits, poor oral hygiene, and alcohol consumption. Clinically, oral verrucous hyperplasia (OVH) resembles verrucous carcinoma and these can generally only be distinguished from each other by histopathology. Although no consensus guidelines exist, the following criteria is proposed by Kallarakkal et al. for the diagnosis of verrucous hyperplasia (2):

1) Long and narrow heavily keratinized verrucous processes or broad and flat verrucous processes that are less keratinized.
2) Absence of invasion of the hyperplastic epithelium into the lamina propria as compared with the adjacent normal mucosal epithelium.
3) Presence of cytological features of dysplasia.

The absence of invasion into the lamina propria is the main feature distinguishing verrucous hyperplasia from verrucous carcinoma, and the presence of dysplasia is common but not always (3). The two entities should be managed similarly because of the significant overlap in their clinicopathologic features. Treatment involves total surgical excision. Recurrence and transformation of OVH to either verrucous carcinoma or squamous cell carcinoma have been reported after surgical intervention (4). Wide surgical excision with adequate mucosal and soft tissue margin is necessary to avoid recurrence (5).

This case highlights the importance of considering verrucous carcinoma in the differential diagnosis of OVH

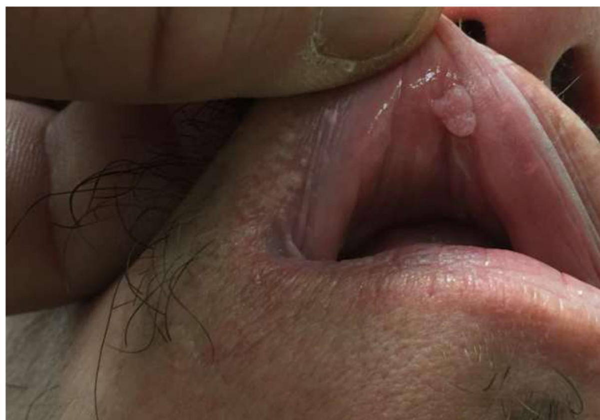

Fig. 1. A 5 mm raised irregular lesion along the mucosal surface of upper lip to the right of midline.

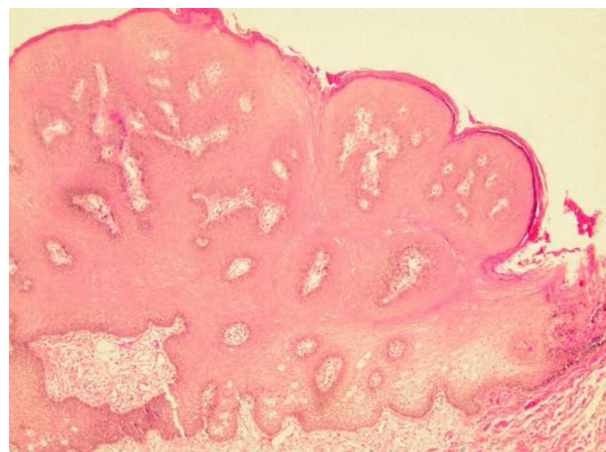

Fig. 2. Broad, short, and blunt verrucous projections with parakeratinized epithelium that does not invade the lamina propria.

Journal of Community Hospital Internal Medicine Perspectives 2016. © 2016 Salik Nazir et al. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Journal of Community Hospital Internal Medicine Perspectives 2016, **6**: 31595 - http://dx.doi.org/10.3402/jchimp.v6.31595
(page number not for citation purpose)

and the importance of surgical treatment even in the absence of dysplasia because of the premalignant nature of these lesions.

Conflict of interest and funding

The authors have not received any funding or benefits from industry or elsewhere to conduct this study.

References

1. Wang YP, Chen HM, Kuo RC, Yu CH, Sun A, Liu BY, et al. Oral verrucous hyperplasia: Histologic classification, prognosis, and clinical implications. J Oral Pathol Med 2009; 38(8): 651–6.
2. Kallarakkal TG, Ramanathan A, Zain RB. Verrucous papillary lesions: Dilemmas in diagnosis and terminology. Int J Dent 2013; 2013: 298249.
3. Hazarey VK, Ganvir SM, Bodhade AS. Verrucous hyperplasia: A clinico-pathological study. J Oral Maxillofac Pathol 2011; 15(2): 187–91.
4. Shear M, Pindborg JJ. Verrucous hyperplasia of the oral mucosa. Cancer 1980; 46(8): 1855–62.
5. Sadasivan A, Thankappan K, Rajapurkar M, Shetty S, Sreehari S, Iyer S. Verrucous lesions of the oral cavity treated with surgery: Analysis of clinico-pathologic features and outcome. Contemp Clin Dent 2012; 3(1): 60.