



CORRESPONDENCE

Multiple oral verruciform xanthoma treated with cryotherapy



Oral verruciform xanthoma is an uncommon tumor of oral epithelium. It was first reported by Shafer in 1971. The reported incidence was 0.025–0.095% of all pathology cases.¹ The gingiva, alveolar mucosa, and hard palate are the most common intraoral sites for oral verruciform xanthoma.^{2,3} It usually presents as a solitary, sessile, or pedunculated lesion with a rough or pebbly surface, although multiple lesions have been reported.³ A 33-year-old female patient presented with discomfort at the left hard palate for several months. She was generally healthy and a nonsmoker. On oral examination, more than 50 papules were noted at the left hard palate (Figure 1A). All papules were slightly yellowish in

color and showed a papillary surface. The patient did not complain about pain, but had a strange feeling when licking with her tongue. She denied having similar lesions anywhere else on her body and denied taking any medications, including nutrient supplements. Histopathological examination demonstrated a small mass with papillary surface and mild hyperkeratosis. The connective tissue papilla was filled with foamy histiocyte-like cells (Figure 1B). Immunohistochemical studies showed that the foamy cells were CD68-positive and S-100 protein-negative. The final histopathological diagnosis was a verruciform xanthoma. Due to the widespread nature of her condition, she decided to receive

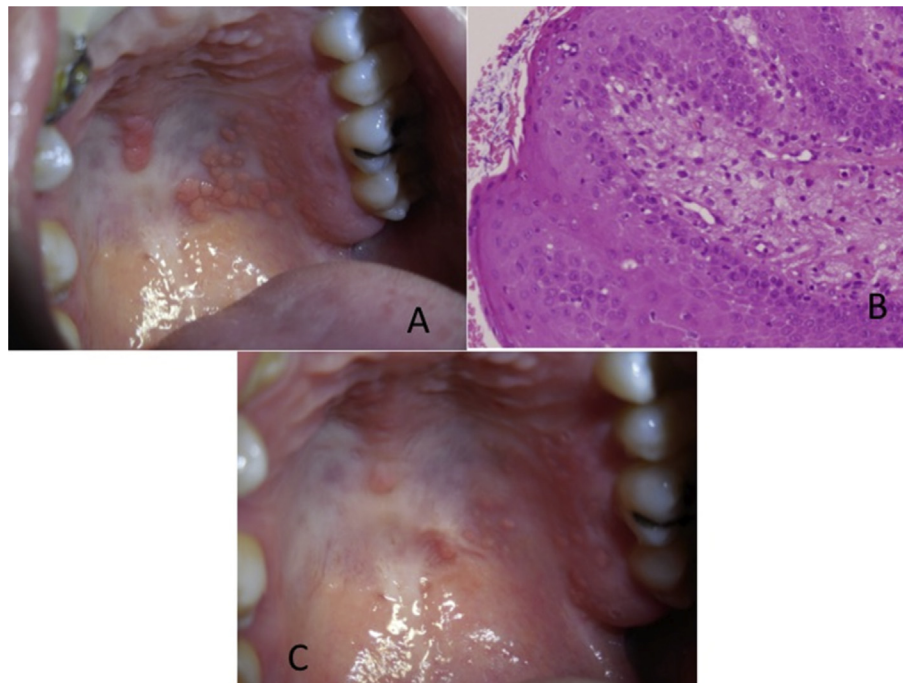


Figure 1 Clinical and histological photographs of our case of verruciform xanthoma. (A) Clinical photograph showing more than 50 papules at the left hard palate. (B) Hematoxylin and eosin-stained microphotograph demonstrating the lesion with papillary surface and mild hyperkeratosis. The connective tissue papilla was filled with foamy histiocyte-like cells. (C) Clinical photograph of the 18-month follow-up exhibiting no recurrence of the treated lesions after cryogun cryotherapy, although some papules remained untreated.

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cryogun cryotherapy,⁴ although surgical excision was the traditional treatment of choice. Cryogun cryotherapy was performed every other week and the treated papules disappeared without recurrence after 18 months of follow up (Figure 1C). Although there were still untreated papules, she decided to terminate the procedure since she had no discomfort or disturbing sensation.

The temperature of liquid nitrogen for cryotherapy was -196°C , which created an ice ball in the liquid nitrogen-contacting tissue/cell. There are three mechanisms that can destroy the target tissue, including direct damage by freezing cells, by freezing blood vessels causing ischemia and death of cells, and by repeated freeze-thaw process-induced inflammation that destroys the damaged cells.⁴ The advantages of cryotherapy include convenient handling, no scar formation, fast wound healing, and minimal pain during the procedure. Cryotherapy can also be combined with photodynamic therapy for treatment of oral lesions, especially the oral precancers.⁵ To the best of our knowledge, this is the first report of oral verruciform xanthoma showing more than 50 papules at the time of diagnosis. It is also the first report to treat the disease with cryotherapy successfully. Although there were still papules left untreated, no recurrence was noted on those treated lesions after 18 months of follow up.

Conflicts of interest

The authors have no conflicts of interest relevant to this article.

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Yu-Feng Huang

Department of Stomatology, Chung Shan Medical University Hospital, Taichung, Taiwan

College of Oral Medicine, Chung Shan Medical University, Taichung, Taiwan

Jeng-Dong Hsu

Department of Pathology, School of Medicine, Chung Shan Medical University, Taichung, Taiwan

Department of Pathology, Chung Shan Medical University Hospital, Taichung, Taiwan

Hui-Wen Yang*

Department of Stomatology, Chung Shan Medical University Hospital, Taichung, Taiwan

College of Oral Medicine, Chung Shan Medical University, Taichung, Taiwan

*Corresponding author. Department of Stomatology, No. 110 Section 1, Jianguo N. Road, Taichung City, 40201, Taiwan.

E-mail address: hwyang@csmu.edu.tw (H.-W. Yang)

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