Case Report

Verruciform Xanthoma of the Soft Palate

XXXX XXXX[1-3], XXXX XXXX[4-6].

1. Department of Stomatology, XXXXXXX, XXXXXXX.
2. Department of Nursing, XXXXXX, XXXXXXX.
3. Department of Medicine, XXXXXX XXXXXXX.
4. Graduate Institute of Oral Biology, XXXXXXXX, XXXXXXXX.
5. Graduate Institute of Clinical Dentistry, School of Dentistry, XXXXXXXX, XXXXXX.
6. Department of Dentistry, XXXXXXXXXXXX, XXXXXXXX.

Background

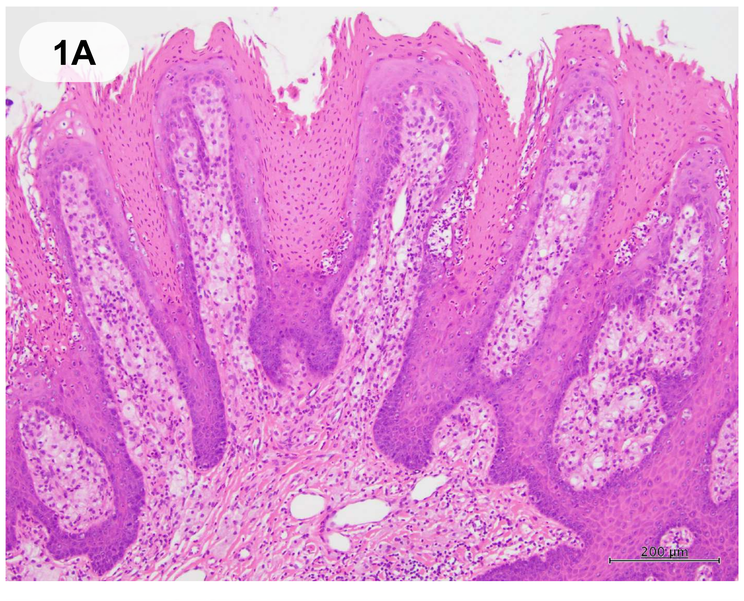
Papillary lesions in the oral cavity may or may not be associated with human papillomavirus (HPV). Non-HPV-related lesions are either reactive or neoplastic. Verruciform xanthoma, a rare non-HPV lesion, predominantly occurs on the gingiva.

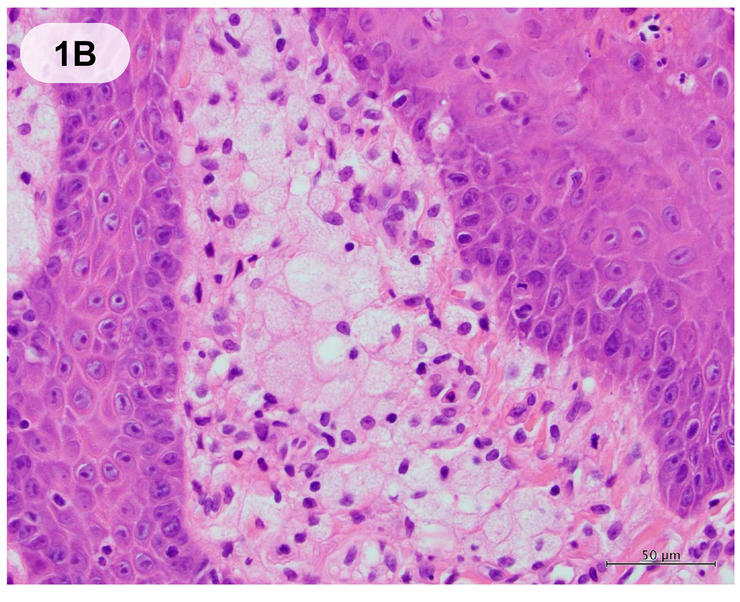
This case report describes a verruciform xanthoma arising on the soft palate, an uncommon site, emphasizing the need to consider non-HPV-related papillary lesions in the differential diagnosis.

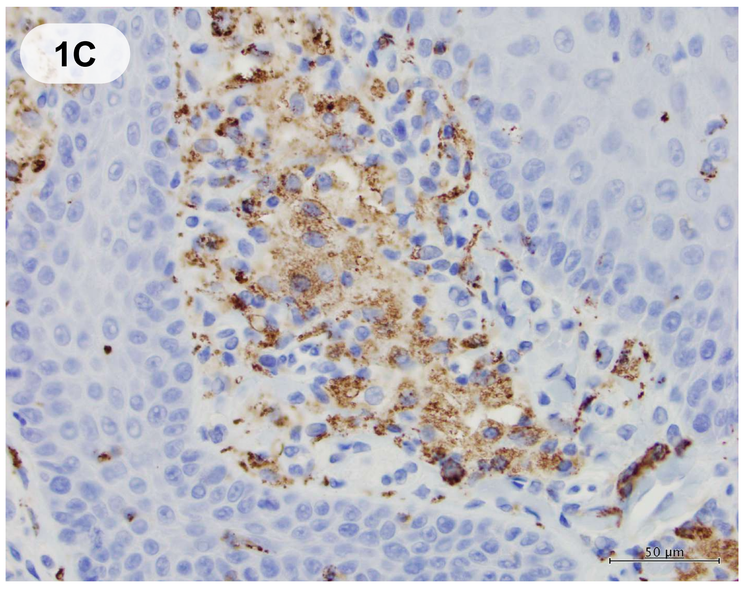
Increased clinical awareness may contribute to improved diagnostic accuracy in dental practice.

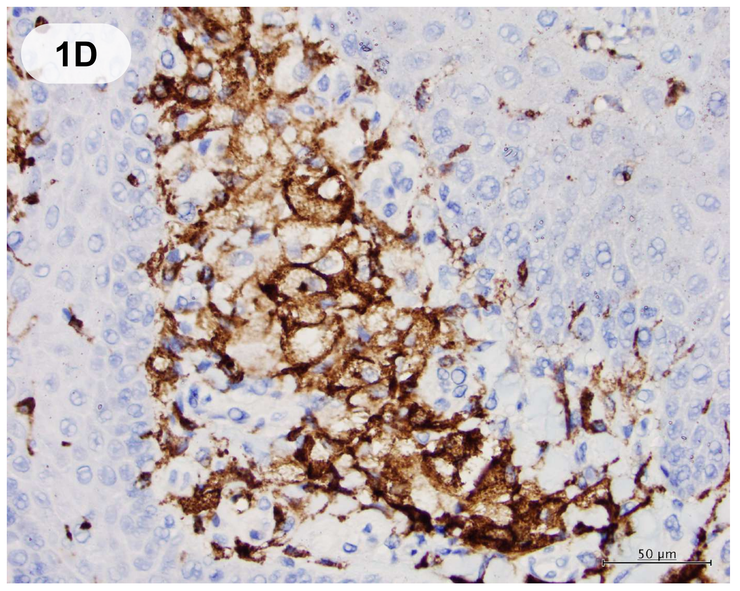
Case Report

A 58-year-old male patient visited our hospital with the chief complaint of a mass on the oral cavity. Intraoral examination showed a lump with papillary surface, measuring 0.7 × 0.5 cm, on the left soft palate. The lesion was soft in consistency without tenderness. Under the clinical impression of a squamous papilloma, total surgical excision of the lesion was performed and the specimen was sent for histopathological examination.









Histopathology and Immunohistochemical Studies

Microscopically, it showed epithelial hyperplasia with a papillary surface (Fig. 1A). The hyperplastic epithelium revealed a parakeratin plugging feature (Fig. 1A).

The lesion was characterized by the accumulation of lipid-laden foamy histiocytes in the connective tissue papillae between two slightly elongated epithelial ridges (Fig. 1B).

Immunohistochemical studies revealed that the foam cells were positive for both CD68 (Fig. 1C) and CD163 (Fig. 1D).

Because the microscopic features were so characteristic that the histopathological diagnosis of a verruciform xanthoma was confirmed.

Discussion

1. Challenges in Diagnosing Oral Papillary Lesions

Papillary lesions are frequently encountered pathoses located in the oral cavity.[1] The various entities manifesting as papillary lesions make it sometimes difficult to make a diagnosis by gross inspection of the oral mucosal lesions. Definitive diagnosis of oral papillary lesions generally depends on careful histopathological analysis of the lesion with a reference to the clinical information.[1]

2. Role of Histopathology and Ancillary Tests

Histopathological examination is essential for diagnosing verruciform xanthoma.[2] Histochemical and immunohistochemical analyses can aid confirmation.[2] Foamy histiocytes are typically highlighted by CD63, CD68, CD168, or cathepsin B.[2] PAS-positive, diastase-resistant granules are also observed in their cytoplasm.[2] These features together support the diagnosis in this case.

3. Clinical Implication of This Case

The current case report adds another case of a verruciform xanthoma in the soft palate of a 58-year-old male patient that may contribute to the epidemiological data and assistance in the differential diagnosis of the oral papillary lesions.

4. Typical Clinical Features of Verruciform Xanthoma

Verruciform xanthoma typically presents as an asymptomatic, slow-growing mucosal plaque with a white, yellow-white, pink, or red appearance.[1,4] It is well-demarcated with a rough or papillary surface.[2] The lesion shows a slight male predilection, with some studies reporting a near-equal gender distribution.[1,2,4] The most commonly affected site is the masticatory mucosa, particularly the gingiva.[1,2,4,5] Grossly, the lesion may appear papillary, verrucous, or flat.[2,5]

Refferences

1. Mainville GN. Non-HPV Papillary lesions of the oral mucosa: Clinical and histopathologic features of reactive and neoplastic conditions. Head Neck Pathol 2019;13:71-9.
2. Neville BW. et al. Epithelial Pathology. In: Neville BW. et al., eds. Oral and Maxillofacial Pathology. 5th ed., Elsevier, 2024, p. 365-366.
3. Shafer WG. Verruciform xanthoma. Oral Surg 1971;31:784–9.
4. Philipsen HP. et al. Verruciform xanthoma—biological profile of 282 oral lesions based on a literature survey with nine new cases from Japan. Oral Oncol 2003;39:325326.
5. Belknap AN. et al. A. Oral verruciform xanthoma: A series of 212 cases and review of the literature. Head Neck Pathol 2020;14:742-8.

Questions or Thoughts?

Want to discuss this further or share your own experiences? We'd love to hear from you. Use the QR code to get in touch.

Google Forms