Papilloma (not HPV) By Kristina Walsh

Oral Pathology 2021 Section: Monday

Overview

A papilloma is a common cauliflower-like epithelial proliferation of soft tissue in the oral mucosa. They are vertucous growths of benign epithelium in the uvula, soft palate, and gingiva. Papillomas are hypertonic and slow growing with a rare recurrence rate. Papillomas are often painless and have been associated with the human papilloma virus (HPV). They occur predominantly between 30-50 year olds. However, they can present in children under 10 years old and they account for 8% of all oral tumors in children. Treatment for papillomas include surgical excisions or laser ablations (Orenuga et al.).

Etiology

The etiology of a papilloma is unknown, however, it can possibly be associated with the human papilloma virus subtypes 6 and 11. In addition, it has been associated with trauma (Orenuga et al. 1674).

<u>Clinical Presentation</u>

Papillomas arise from the mucosal surface as sessile or pedunculated projections. "The color of the lesion may vary from white to pink, depending on the level of keratinization and vascularization" (Toledano-Serrabona et al. 434). They are less than 1 centimeter and most likely occur in the buccal mucosa, uvula or soft palate. Papillomas resemble a cauliflower or crown in appearance. They have a pebbly hyperkeratinized surface and a slow growing rate. "It is

identified as an exophytic proliferation giving rise to papillary lesions with finger-like projections" (Pesántez et al., 257). They can also appear flat, making it harder to clinically diagnose. They are always exophytic, usually a noncontagious single lesion (257).

Demographic:

A papilloma is present in people around 30 and 50 years old and has no sex preference. The mean age is 36, however, it can occur in children before 10 years of age (Orenuga et al. 1674).

Biopsy / Histology / Radiographs

An excisional biopsy can be performed to confirm the diagnosis of a papilloma (Toledano-Serrabona et al, 257). Papillomas present as squamous epithelium arranged in finger-like papillary projections. Due to the papillary projections, it can histologically resemble a flower. They have a hyperkeratinized stratified squamous epithelium with a thin fibrovascular connective tissue core. Papillomas can histologically appear with or without a stalk (434). While researching, I could not find any scholarly peer reviewed articles that discussed radiographic features.

Differential Diagnosis

When diagnosing a Papilloma, it is a concern because its clinical appearance can be mistaken for verrucous carcinoma, condyloma acuminatum, or exophytic carcinoma (Orenuga et al. 1674). An excisional biopsy would be able to confirm the diagnosis.

Treatment

The epithelial proliferation is treated by either surgical excision at the base of the lesion or laser ablations. It has a low recurrence rate (Toledano-Serrabona et al. 434).

Prognosis

There is no evidence to fully support that papillomas are pre-malignant. They are different from sexually transmitted papillomas (Human Papillomavirus) which can cause cancer. They have a low recurrence rate and are non-aggressive (Toledano-Serrabona et al. 1676). As stated in a cohort study on recurrence rates, "No differences for recurrence rates for OSCP between groups were found. The recurrence rate is low, happening usually before 15 months of follow-up" (437).

Professional Relevance

As a future dental hygienist, papillomas are relevant to me because they contain antigens of the human papilloma virus (HPV.) They are present in a small number of cases that are due to immunoperoxidase techniques. "HPV is said to have the capability to invade the nuclei of the cells in the spinous layer thereby inducing a series of proliferative alterations resulting in growth" (Orenuga et al. 1676). Since I am in the healthcare field, it is important for me to be aware of the clinical presentation, prognosis and treatment of papillomas and HPV. The human papillomavirus is of concern in America because it is a one of the most seen sexually transmitted infections that can become cancerous. Therefore, it is important to utilize my clinical judgement while assessing these lesions. Since squamous papillomas can account for 8% of cancers in children, it is highly significant for me to be knowledgeable of the pathology. Although papillomas are not cancerous, they can cause discomfort to the patient. Additionally, it can be mistaken for verrucous carcinoma, condyloma acuminatum, or exophytic carcinoma. Therefore, it is important to give the patient a referral if I see any suspicious oral lesion that resembles a papilloma.

Citations:

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- Orenuga, O, et al. "Recurrent Oral Squamous Papilloma in a Pediatric Patient: Case Report and Review of the Literature." *Niger J Clin Pract*, vol. 21, no. 12, 2018, pp. 1674–1677., https://doi.org/10.4103/njcp.njcp_407_17.
- Pesántez J, Romero V, Lafebre F, et al. "Squamous Papilloma in the Oral ... -Dspace.ucuenca.edu.ec." Squamous Papilloma in the Oral Cavity: Case Presentation and Review of the Literature. Journal of Dental Health Oral Disorder Therapy, 2018, http://dspace.ucuenca.edu.ec/retrieve/95046/documento.pdf.
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