



Squamous Papilloma on Soft Palate: A Case Report

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Abstract

Introduction: The oral squamous papilloma (OSP) is benign exophytic, sessile, or pedunculated cauliflower-like growth of squamous epithelium. These lesions are usually asymptomatic, tend to progress slowly, and can occur anywhere on the oral mucosa. Although the etiology of oral squamous papilloma is unknown, it is assumed that the squamous papilloma is presumably induced by low-risk types of human papillomavirus (HPV) 6 and 11. However, these types of HPV can also contribute to the development of malignancies, although this is extremely rare. Clinicians should be aware of early and accurate detection of oral squamous papilloma because of the importance of preventing further complications and malignant transformation. **Case report:** The current clinical case presents a 22-year-old female patient with a painless exophytic growth at the left side of the soft palate. The lesion was observed 10 months ago and tended to develop slowly. The patient had a history of smoking cigarettes, rarely consuming alcohol, but no other health-related disorders were reported. After surgical excision and histopathological analysis, the diagnosis of squamous papilloma was confirmed. **Conclusions:** The oral squamous papilloma is a benign painless lesion mostly found on the soft palate. Early detection, differentiation, and removal of asymptomatic oral squamous papilloma should be performed to avoid possible malignancy and further complications.

Keywords: Papilloma, Soft palate Tumor

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Date of Acceptance: 20/02/2021

Introduction

The oral squamous papilloma (OSP) is benign exophytic, sessile, or pedunculated cauliflower-like growth of squamous epithelium^[1]. These types of lesions are usually asymptomatic, tend to progress slowly, and rarely become malignant^[2]. Oral squamous papilloma approximately occurs in 1 of 250 adults^[3]. It usually appears in the third to fifth decade of life without predilection for gender, and its physical appearance may occur pink or white, depending on the degree of keratinization and vascularization^[1, 4]. Generally, the lesion can appear anywhere on the oral mucosa but the

most commonly affected areas are: the soft palate (23%) and border of the tongue (9.8%), followed by the mucous membrane of the lips (7,8%)^[4]. Furthermore, squamous papilloma usually occurs in the isolated-solitary form (98%) although occasionally multiple-recurring form may be seen (2%)^[4]. The etiology of oral squamous papilloma is unknown but it is assumed that the squamous papilloma is presumably induced by low-risk types of human papillomavirus (HPV) 6 and 11, as these genotypes have been the most frequently found in lesions^[5, 6]. However, these types of HPV can also contribute to the development of malignancies, although this has been found to be

extremely rare [5]. Due to similar clinical features, the solitary squamous papilloma is difficult to distinguish from xanthoma, papillary hyperplasia, condyloma acuminatum, or verruca vulgaris, therefore an appropriate biopsy specimen is required for an accurate diagnosis [6-8]. Clinicians should be aware of early and accurate detection of oral squamous papilloma concerning its importance to prevent further complications and malignant transformation. In this publication, we present a case of asymptomatic squamous papilloma arising on the soft palate, and its presentation is expected to raise awareness among clinicians regarding OSP.

Case Report

A 22-year-old female patient attended with the main complaint of a painless growth observed at the left side of the soft palate. The lesion which was first observed 10 months ago had a tendency to slowly increase. The patient had a history of smoking cigarettes, rarely consuming alcohol, but no other health-related disorders were reported.

Extraoral and general examination of the patient revealed no significant findings. Intraoral examination revealed a 5x7mm-sized, white-colored, rough-surface, cauliflower-like lesion on the left side of the soft palate (Figures 1, 2).



Fig. 1. The clinical view of the lesion on the left side of soft palate.



Fig. 2. Post-excision view of the palate.

In the present clinical case, surgical excision of exophytic growth was accomplished and a sample was sent for histopathological examination. After preparation of a sterile operating field, 1 ml of local anesthetic (articaine 4% with epinephrine 1: 100000) was injected to the perilesional site and then an excision using a surgical scalpel (blade No. 15) with peripheral and in-depth safety margins of 1 mm was performed. The surgical site was sutured with 4-0 Vicryl sutures. Subsequently, the obtained wart-like sample was placed in 10% formalin, marked, and sent for histopathological study. Histological examination revealed a diagnosis of squamous papilloma. Histological features consisted of papillary projections covered by orthokeratic (hyperkeratosis without parakeratosis) stratified squamous epithelium with a fibrovascular connective tissue core. After 3 months post-operation, a follow-up was performed. The findings of the follow-up showed no evidence suggesting recurrence of the lesion.

Discussion

The wart-like lesion on the soft palate in the adult patient did not cause any symptoms and was accidentally detected during a dental examination, however, atypical disorders may occur occasionally. L. A. Goodstein et al. [2] noted that lesions on the uvula can even cause dysphagia and choking sensation. However, after removal of the lesion, a study reported

complete resolution of all symptoms. Generally, OSP is a benign tumor that grows slowly and rarely becomes malignant. Undesirable transformation may depend on the location and size of the tumor. Benign lesions formed on the gingiva and larger or equal to 10 mm size have a higher risk of malignancy [9, 10]. Although our case did not show any clinical signs of malignancy, R. H. Saad et al. [11] reported oral squamous cell papilloma transformation to carcinoma within 6 months. The etiology of several benign lesions developing in the oral cavity, including OSP, is controversial and could be related to human papillomavirus (HPV) [12, 13]. The benign oral lesions are associated with low-risk HPV types, such as HPV-6 and HPV-11, while high-risk types (HPV-16 and HPV-18) are prone to cause squamous intraepithelial lesions that usually progress to squamous cell carcinoma [13]. However, additional factors such as tobacco or alcohol are required for the progression of carcinogenesis of HPV-induced lesions [13]. Transmission of human papillomavirus to oral regions is widely discussed in recent years. It is assumed that HPV infection is transmitted basically via direct or indirect horizontal contact (regarded as oral-sexual transmission or via infected lesion). The virus can also be transmitted vertically, via maternal-fetal (perinatal) way [12, 13]. The treatment modality of OSP is the removal of the lesion and postoperative follow-up. Conventional surgical excision, laser ablation, cryosurgery, electrocautery, or intralesional interferon injections may be used as a treatment of choice [2]. Removed oral squamous papillomas do not tend to recur but relapse can rarely occur (2% of cases) [4]. OSP is difficult to differentiate from xanthoma, papillary hyperplasia, condyloma acuminatum, or verruca vulgaris due to the wide variety of its appearance features [6-8]. Therefore, it is not always possible to differentiate OSP according to clinical manifestation and it is highly recommended to take biopsy samples and histologically evaluate them in order to confirm an accurate diagnosis. The histopathologic criteria of squamous cell papilloma are described by T. E. Carneiro et al. [14]. Squamous papilloma has the following features: squamous epithelium arrayed in finger-like projections, normal maturation pattern, hyperparakeratosis in

the epithelium and presence of koilocytes [14]. Prevention of HPV-related lesions is an important and frequently discussed issue. The HPV vaccine is designed to prevent the most common types of HPV caused cervix and other anogenital cancers [13, 15]. There is no reason why these vaccines should not work against the same type of viruses at different sites, such as the oral cavity or the anogenital region. The effectiveness is especially supported when it is known that HPV vaccination induces specific HPV antibodies in saliva, including neutralizing antibodies [13, 15].

Conclusion

The oral squamous papilloma is a benign painless lesion, mostly found on the soft palate. Early detection, differentiation, and removal of asymptomatic oral squamous papilloma should be performed to avoid possible malignancy and further complications.

Conflict of Interest: None declared

Source of Support: Nil

Ethical Permission: Obtained

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