

Case Report

Squamous papilloma of the hard palate

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Abstract

Oral squamous papillomas are benign proliferating lesions induced by human papilloma virus. These lesions are painless and slowly growing masses. As an oral lesion, it raises concern because of its clinical appearance. These lesions commonly occur between age 30 and 50 years, and sometimes can occur before the age of 10 years. Oral squamous papilloma accounts for 8% of all oral tumors in children. Common site predilection for the lesion is the tongue and soft palate, and may occur on any other surface of the oral cavity such as the uvula and vermilion of the lip. Here, we are presenting a case of squamous papilloma on the palate.

Key words: Cauliflower-like surface, HPV virus, oral lesion, palate, squamous papilloma

INTRODUCTION

Squamous papillomas are exophytic masses of the oral cavity, mostly benign and asymptomatic. They raise concern because of clinical appearance. Its pathogenesis is related to human papilloma virus (HPV) types 6 and 11.^[1-4] The occurrence of these lesions is influenced by smoking, co-existent infections, dietary deficiencies and hormonal changes.^[5] Squamous papillomas are traditionally divided into two types: Isolated-solitary and multiple-recurring. The former is usually found in an adult's oral cavity, while the latter is mostly found in a child's laryngotracheobronchial complex.^[6] The route of transmission of the HPV virus is unknown for oral lesions. These lesions commonly occur between the ages of 30 and 50 years, and sometimes can occur before the age of 10 years. Oral squamous papilloma accounts for 8% of all oral tumors in children.^[1] The common site predilection for the lesion is the tongue and soft palate, and may occur on any other surface of the oral cavity such as the uvula and vermilion of the lip.^[1,2,6] HPV involvement in head and neck carcinogenesis was first proposed by Syrjanen *et al.* in 1983.^[1] Surgical removal is the treatment of choice by either routine

excision or laser ablation. Other treatment modalities include electrocautery, cryosurgery and intralesional injections of interferon. Recurrence is uncommon, except for lesions in patients infected with human immunodeficiency virus (HIV).^[6]

CASE REPORT

A 14-year-old male patient was reported with a painless growth on the palatal surface of the mouth since 8 months. The patient noticed the growth around 8 months back, which started as a small growth, gradually increased in size over a period of 6 months and attained the present size of 3 × 3 cm. There was no history of pain, parasthesia or numbness associated with the growth and no similar lesions were present elsewhere. Family history was not significant. There was no positive medical or dental history. There was no habit of tobacco chewing, alcohol and drug use.

Intraoral examination revealed the presence of a solitary, well-defined, oval-shaped exophytic growth on the right half of the hard palate measuring 3 × 3 cm in size between the first and second molar regions on the palatal side [Figure 1]. The lesion had a cauliflower-like appearance. It was non-tender, firm in consistency and arose from the underlying soft tissue. The diagnostic hypothesis includes squamous

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cell carcinoma and verruca vulgaris.^[2] The lesion was surgically excised without any post-operative complications [Figure 2]. The excised lesion [Figure 3] was sent for histopathological evaluation, which confirmed the squamous papilloma [Figure 4].

DISCUSSION

Oral squamous papilloma is a generic term used for papillary and verrucous growths composed of benign epithelium and minor amounts of connective tissue.^[6] Squamous cell carcinomas are the most common malignancies in adults, but are exceptionally rare in pediatric patients, particularly those involving the oral mucosa. Papillomas generally measure 1 cm in range and appear as pink to white exophytic granular or cauliflower-like appearance. They are generally asymptomatic.^[6] Ribeiro *et al.* reported a case of oral squamous cell carcinoma that is uncommon.^[7]

Squamous papillomas are classified into two types: Isolated-solitary and multiple-recurring. Isolated solitary is usually found in adults' oral cavity while multiple

recurring occurs commonly in children. Isolated lesions are exophytic and pedunculated growths, resembling cauliflower appearance as seen in our case.^[6]

Histologically, these lesions present as many long, thin and finger-like projections extending above the mucosal surface. Each finger-like projection is lined by stratified squamous epithelium and connective tissue centrally. The spinous cells proliferate in a papillary pattern. Koilocytes-HPV altered cells may be observed. The upper epithelial layer shows pyknotic nuclei, often surrounded by edematous or optically clear zone, the so-called "koilocytic" cell.^[6]

The differential diagnosis of solitary oral squamous papilloma are verruciform xanthoma, papillary hyperplasia and condyloma acuminatum. Verruciform xanthoma has predilection for gingiva and alveolar ridge, while condyloma are larger than papilloma with broader base and appear pink to red.^[6] Blood investigations such as enzyme-linked immunosorbent

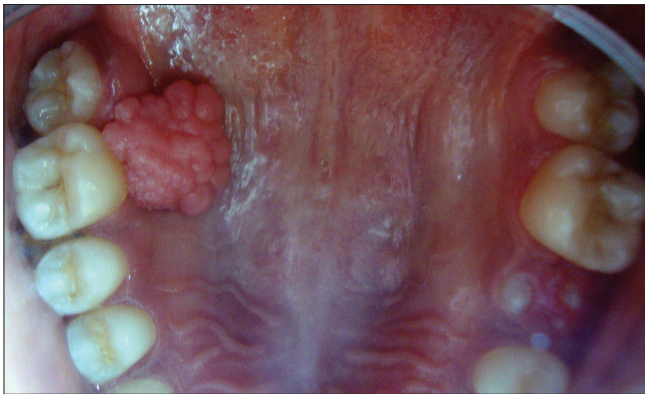


Figure 1: Squamous papilloma on the right side of the maxilla at the palatal surface



Figure 2: Excised squamous papilloma lesion



Figure 3: Post-excision area of the palate

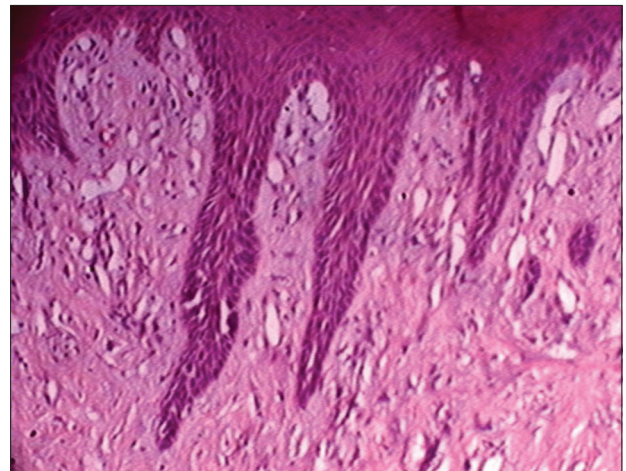


Figure 4: Histopathological picture showing presence of finger-like projections and confirm squamous papilloma

assay and the polymerase chain reaction test can be performed to detect the presence of virus.^[2,5]

Surgical removal of the lesion is the treatment of choice for oral squamous papillomas, either by surgical or electrocautery excision, cryosurgery, intralesional injections of interferon or laser ablation. The recurrence rate is very low for the solitary type compared with multiple lesions.^[5,6]

CONCLUSION

Oral squamous papilloma is a benign proliferating lesions characterized by painless growth. Its pathogenesis is related the HPV. Early diagnosis and surgical excision should be performed to avoid further complications.

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