IMPORTANCE OF THE VACCINATION IN RECURRENT SQUAMOUS PAPILLOMA ON THE GINGIVA

1ERKAN OZCAN, DDS, PhD  
2CENK FATIH CANAKEI  
3DENIZ FILINTE, PhD

ABSTRACT

This report presents a case of squamous papilloma (SP) which is rarely seen on the gingiva. 20 year old male patient was admitted to this hospital with complaint of redness of the upper left gingiva. On intraoral examination a raised, soft, finger-like projection, diffuse pink-red pigmented lesion located on the left maxillary gingiva was seen. The lesion was diagnosed as SP after clinical and pathological examination. It was removed using Nd: YAG laser. Six months later recurrence was noticed. SP even when completely excised can recur. Some additional measures such as vaccination must be taken to prevent the recurrence.

Key words: Squamous papilloma, Gingiva, HPV infection, Vaccine against HPV

INTRODUCTION

Squamous papilloma is a benign exophytic proliferation which can occur occasionally in the oral cavity. It is widely assumed that the Human papilloma Virus (HPV) is an etiologic factor of papillomas. The lesion may look wart-like or cauliflower like and may be difficult to differentiate clinically from verruca vulgaris, condyloma acuminatum, verruciform xanthoma or focal epithelial hyperplasia.

Altough oral HPV infection occur frequently, it rarely causes the growth. Review of the literature reveals only a few case reports of gingival SP. Recurrence rate and incidence of multiple papillomas were low.

CASE REPORT

A 20-year-old male patient was admitted in this hospital with the complaint of redness of the upper left gingiva. Intraoral examination of the patient revealed a raised, soft, painless, finger like projection, diffuse slightly erythematous pigmented lesion, located on the gingiva extending from premolar to mesial surface of first molar near the marginal gingiva (Fig 1). The patient’s general hygiene was fair. There was more calculus accumulation. He was healthy and was not taking any medication. Blood tests including tests for HIV were found negative. An incisional biopsy of the gingival lesion was taken.

Its histological examination revealed multiple slender, finger like projections supported by central fibrovascular cores, which were covered by a keratinizing squamous epithelium (Fig 2). Infected squamous
Importance of vaccination in recurrent squamous papilloma
dysplasia or invasive component was seen. Along the basal squamous epithelium, chronic inflammation was recognized.

After initial periodontal therapy including scaling and root planning, lesion was completely excised under local anesthesia by using Nd: YAG laser (Fig 4). No drug was given post-operatively. Gingival excision sites were completely healed after two weeks. However after 6 months the lesion recurred (Fig 5). To prevent the formation of the lesions again, in addition to surgery, the patient received Cervarix vaccine.

Fig 2: Multiple slender, finger like projections supported by central fibrovascular cores, which were covered by squamous epithelium and koilocytic cells (H&E, x40).

Fig 3: Infected squamous cells exhibit dense dark nuclei with clear cytoplasm (koilocytic cells) (H&E, x100).

cell exhibit dense dark nuclei with clear cytoplasm, some of which occasionally have bi-nuclei (koilocytic cells) (Fig 3). There were mild cellular atypical changes in basal layer of squamous epithelium. No high grade

Fig 4: Lesion was completely excised under local anesthesia by using Nd:YAG laser.

Fig 5: Recurrence of the lesion six months after surgery.
DISCUSSION

SP is a benign lesion that appears on oral soft tissues. Its peak incidence was from 40-60 years of age. The most frequently affected sites in the mouth are lips, palate, tongue, gingiva, uvula, tonsils, and the floor of the mouth. The lesion is a soft, painless, usually pedunculated exophytic growth with numerous finger-like projections. Although in most of the cases, the papillomas are single and small (<1cm), in this case, lesion was not single.

Histology is an important method for diagnosing HPV lesion. However, if histology is unable to identify the HPV, molecular biology techniques should be employed.

A small number of cases have been reported with SP on gingiva. That is studies suggest that HPV is less likely to be seen on keratinized tissue. Perhaps one of the reason for these lesions low rate at the gingiva.

Treatment protocol must be determined on a case-to-case basis. Many times, letter immune function may lead to reduction and elimination of oral HPV lesions. Therefore, vaccines could be used as adjuvant treatment fol-lowing surgery by generating an immune response.

Clinical trials to evaluate the efficacy of the HPV vaccine protecting against oral HPV infection are currently underway. A decreased prevalence of squamous papillomas may result in future, due to the effectiveness of the HPV vaccine against types 6 and 11. Two vaccines have been developed; Cervarix and Gardasil that can prevent infections and pre-cancerous lesion caused by HPV infection. Both existing vaccines are able to create a robust humoral immune response which is much more effective than the levels of antibodies that can be acquired after a general infection.

REFERENCES