



ORIGINAL RESEARCH PAPER

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EXCISION OF SQUAMOUS PAPILLOMA OF TONGUE WITH USE OF CO₂ LASER- A CASE REPORT

KEY WORDS: Squamous papilloma, paediatric age, benign lesion, CO₂ laser

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ABSTRACT

Squamous papilloma of oral cavity is a benign proliferation of the stratified squamous epithelium. It usually results in a papillary or verrucous exophytic growth induced by human papilloma virus (HPV). Papillary epithelial proliferations are quite common in the oral region, representing at least 3% of biopsied oral lesions. These oral mucosa lesions are mostly asymptomatic and have small progression. Laser assisted surgery is common nowadays with several advantages including successful hemostasis, devoid of sutures, wound sterilization and minimal post-operative pain and oedema. The aim of this report is to present the oral squamous papilloma in a 2 year old child patient and its treatment with CO₂ laser. The lesion was excised with CO₂ laser and the healing was uneventful in follow-up visit after 3 months. Oral squamous papillomas can be found in child's oral cavity and laser excision can be used to treat these kinds of oral lesions and should be considered as an alternative to conventional surgery.

INTRODUCTION

Oral squamous papillomas are papillary or verrucous exophytic lesions caused by human papilloma virus (HPV). These are benign proliferations of the stratified squamous epithelium and the lesion clinically looks like soft and white-pink coloured mass. The sites for localization of the lesions include the tongue, soft palate and uvula, but any surfaces of the oral cavity can be affected. Oral squamous papillomatous lesions raises concern just because of its clinical appearance, which may mimic exophytic carcinoma, verrucous carcinoma or condyloma acuminatum. However, these cases usually have a very slow progression rather than acute symptoms and these lesions are usually asymptomatic and show benign character in histo- pathological examinations.^{3,4,5}

The use of CO₂ laser in oral surgery has been widespread over the last decades with favourable experiences and most of the oral soft tissue surgical procedures are done using CO₂ laser. Among the commonly available lasers today, the CO₂ laser is frequently used in otorhinolaryngology. Bleeding control, visibility and better tissue manipulation are some of the advantages of it.⁴ This paper presents a case of 2 year old male child presenting with squamous papilloma which was excised with CO₂ laser and the post-operational follow-up.

METHODS

A 2-year-old male child was presented with a complaint of soft tissue mass on dorsum of tongue. According to the history given by his parents, this lesion occurred five months ago, however, his parents neglected until they recognized the growth of the lesion size. Clinical examination revealed that there was a pink-coloured mass on dorsum of tongue and was approximately 2 cm in length [Figure 1]. There was nothing abnormal in his systemic examination. Figure 1 showing papilloma over dorsum of tongue in a 2 year old male child



Figure 1 showing papilloma over dorsum of tongue in a 2 year old male child

The lesion was completely excised under general anaesthesia with CO₂ laser (lumenis acupulse duo) [Figure 2,3].

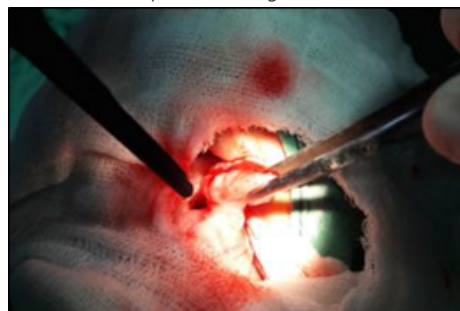


Figure 2 showing excision of lesion with the use of CO₂ laser



Figure 3 mucosal lesion



Figure 4 showing healing of wound

RESULTS

Histo Pathological examination showed characteristic findings of a squamous papilloma.

After a month later, the clinical follow-up showed the complete tissue healing [Figure 4].

Six month of follow-up was done and no recurrence of the lesion was noted.

DISCUSSION

Squamous papillomas are benign mucosal lesions most commonly induced by HPV-6 and HPV-11. Papillary epithelial proliferations are quite common in the oral region, representing at least 3% of biopsied oral lesions^{1,2}. These lesions generally measure less than 1 cm in size and they appear as pink to white papillary and exophytic granular or cauliflower-like surface alterations. They may be found on the vermilion portion of the lips, dorsum surface of tongue, lateral border of tongue and any intraoral site, with a predilection for the hard and soft palate and the uvula.^{3,5,7,8} The clinical view and the site of the lesion in this present case was appropriate to common identifications of oral squamous papilloma. The oral pathology report confirmed the pre-surgical clinical diagnosis. The lesions are commonly asymptomatic⁵ as seen in the present case. Squamous papillomas are divided into two types: isolated-solitary and multiple-recurring. As the literature shows that the isolated-solitary type is usually found in an adult,⁵ the clinical view of the lesion in the present case was appropriate with the isolated-solitary type. According to this situation, the isolated-solitary type of squamous papilloma may be occurred and it should be considered although these lesions is not commonly found in child's oral cavity.

The treatment of choice for these lesions are surgical excision but can be performed with laser excision, electrocautery, cold-steel excision, cryosurgery, or intralesional injections of interferon.^{5,7} In the present case, surgical excision was applied with the use of CO₂ laser. The laser assisted surgery has various advantages such as excellent hemostasis, very high precision in tissue removal, no use of sutures, sterilization of wound and minimal post-operative pain and oedema.⁶ After Considering these various advantages of laser surgery, the CO₂ laser was chosen as an alternative for the removal of the squamous papilloma in this present case. Oral analgesics are given for one day, and wound healing was notable and rapidly achievable. Minimal post-operative pain and rapid healing of wound gives the advantage⁶ of the laser assisted surgery for the lesions like oral squamous papilloma.

CONCLUSION

Oral squamous papillomas can be found in child's tongue and other sites in oral cavity and the clinical diagnosis is very important. CO₂ laser can be used by clinicians to treat these kinds of oral lesions and CO₂ laser should be considered as an alternative to conventional surgery.

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