ORAL SQUAMOUS PAPILLOMA: A CASE REPORT OF 5 YEAR OLD LESION WITH REVIEW OF LITERATURE

Periodontology

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ABSTRACT

Squamous papilloma is one of the common lesions of oral cavity. These are about less than 1cm size and care should be taken in diagnosing them as they resemble verruciform xanthoma, condyloma etc. Papilloma occurs most commonly on tongue, lips and soft palate. We present a case report of oral squamous papilloma that occurred on right labial mucosa of lower lip. Tissue was surgically excised and subjected to histopathological examination. Histopathological reports confirmed the lesion as squamous papilloma. Post operatively patient had no complications and healing was fine.

KEYWORDS

Benign Tumour, Oral Squamous Papilloma, Papilloma

Introduction

Papilloma is a benign neoplasm of stratified squamous epithelium. It is mainly caused by Human Papilloma Virus (HPV), especially with low risk HPV types 6, 11, 13 and 32. It is also seen with high risk HPV types-16, 18, 31, 33, and 35 which are mainly associated with cervical cancers^[1]. Exact mode of its transmission is not known but injuries, or viral infections may be one of the source^[2]. Lesions are also transmitted through saliva, sexual contact and auto inoculation^[3]. The theory which explains the occurrence of papilloma is, HPV invades the deeper layers of body tissues and cause its alterations leading to tumoral growth^[4,5]. Its frequency of occurrence is equal in both male and females. But some retrospective biopsy studies done by Das et al^[6] and AL Khateeb et al^[7] conclude that children were more affected. Whereas Rajendra AS et al. 2017 stated that higher rate of HPV infections were seen in men than in women between 30-34 and 60-64 years. Oral Squamous Papilloma has prevalence rate of 6.9% between 14 and 69 years^[8]. The most common sites of occurrence of papilloma are tongue, lips and soft palate. It appears as soft, painless and pedunculated mass. It may be cauliflower^[9] or wart like appearance with colour ranging from white, red or pale pink based on keratinization^[2]. Generally oral papillomas are indistinguishable from the common warts that are caused by HPV-2 and HPV-575. These two viruses mainly cause skin lesions which also show effect on oral cavity by causing lesions. This can be explained by presence of common warts on fingers of children that get transferred as oral (papilloma) lesion due to thumb/finger sucking habits^[10]. Present case report determines a case of squamous papilloma (five year old lesion) on right side labial mucosa of lower lip.

Case Report: A 32 year systemically healthy male patient came to the department of periodontology and implantology, Institute of Dental Sciences, Bareilly with a chief complaint of sensitivity in all teeth since 6 months. On examination there was generalized gingival recession, moderate amounts of calculus deposits along with that an irregular pinkish white patch like lesion with pebbled surface of about 1cmX 0.5cm also seen on right labial mucosa of lower lip

Figure- 1: Pre-operative lesion on labial mucosa of lower lip.

On history taking patient explained that lesion was present since 5 years. There were no associated symptoms and pain. With these findings, a provisional diagnosis was established as papilloma. It has been differentiated from condyloma, verruciform xanthoma, and focal

epithelial hyperplasia. They appear similar to papilloma but due to some additional features like broad base, multiplicity of lesions and predilection restricted to some other parts of oral mucosa diagnosis was properly ruled out. Firstly, scaling and root planing was performed, followed by oral hygiene instructions and modified stillman brushing technique was explained to patient for prevention of further recession. Then the patient underwent routine blood investigation like CT, BT, HB%, HBsAG and HCV, HIV. After the obtainment of results, as chief complaint should be addressed first periodontal therapy was performed that includes recession coverage.

During the follow up period, we have explained the pros and cons of the lesion to the patient on the right labial mucosa of lower lip. With the acceptance of the patient, the excisional biopsy was done and entire tissue was removed holding from the base. Excision was done with 15 no blade. Entire procedure was performed after achievement of adequate local anaesthesia. Then pressure was applied with moist gauge for control of bleeding and tissue was approximated with 3.0 silk sutures for an intention of primary healing. Then the excised tissue was sent to histopathological examination for establishment of a proper diagnosis. Suture removal was done 1 week post operatively and kept on follow up for three months. There was excellent healing of the surgical site three months post operatively During the follow up period there were no post-operative complications.

Figure-2: After Incision

Figure-3: Sutures placed

Figure-4: excised tissue

Figure-5- histopathological image of excised tissue at X 100 magnification

Figure-6- histopathological image of excised tissue at X 400 magnification where hyperkeratosis is seen on the surface, proliferation of spinous cell layer and some chronic inflammatory cells

Figure-7: three months post-operative follow up

Discussion

Present case determines its presence on the labial mucosa of lower lip. Flint et al^[11] reported its occurrence on tongue while Abbey et al^[9] and Das et al^[6] reported their occurrence on uvula, tongue, lips and gingiva. Squamous papilloma virus has an incubation period of 3 to 11 months and has a very low infective rate. But some authors declare that papilloma occurs as a reaction to trauma rather than a true neoplasm that occur by virus. According to literature children are the most common sufferers; this might be due to obtainment of virus during their birth time while passing through the birth canal. In adults viral infection occurs due to sexual contact or any other unknown condition. In the present case patient didn't have any sought of systemic complications that were ruled out through blood investigations thus revealing its unknown mode of occurrence. Recent years there has been well established connection between HPV and squamous papilloma^[12,13]. Lesion may be isolated –solitary or multiple recurring. In the present case report patient was presented with isolated- solitary that is most common in oral cavity. As stated in literature, present lesion was seen as whitish pink colour with granular surface. These lesions have a higher chances of recurrence but when properly excised they have a lesser tendency to recur. For the determination of clinical diagnosis and to know the treatment that was rendered was satisfactory, histological examination was done and diagnosed as papilloma. This diagnosis was given based on following features: Mucosal epithelium showing irregular exophytic proliferation in form of verruca-papillary pattern in low power view. Whereas under higher magnification epithelium showed hyperkeratosis on the surface, proliferation of spinous cell layer, some blood vessels and some chronic inflammatory cells. These findings are in accordance with Carneiro et al^[4] in diagnosing the case of oral papilloma. Thus it was confirmed as a case of oral squamous papilloma. Apart from conventional clinical examination, wide field optical fluorescence imaging devices have been introduced for screening of oral lesions. This was approved by food and drug administration because of increased visualisation of oral abnormalities which could be imperceptible to conventional examination and delimitation of adequate surgical margins^[14]. As prevention is better than cure, there was a development of vaccine against this HPV virus. This was approved by Center for Disease Control (CDC). It recommends two doses between 6-12 months for children of 11-12 years whereas 3 doses for 12 months for teens greater than 14 years. Even food drug

administration has used 9vHPV vaccine for patients of age ranged between 27-45 years. Thus these measures are helpful in the reduction of pathologies including warts, precancerous and cancerous lesions^[12].

Conclusion:

Thus present case report determines the rare case of oral papilloma in right labial mucosa of lower lip region. There were no complications post operatively and healing was good. Surgical excision was the treatment that was used in this case. Some other treatment modalities like electrocautery, laser and cryosurgery using liquid nitrogen can also be use. Only histological sectioning analysis was done for diagnosis. Due to lack of sophisticated equipment and final constraints or else PCR analysis would have been done. The recurrence rate is also less and mostly it doesn't recur for longer time periods.

References

1. Varnai AD, Bollmann M, Bankfalvi A, Kovacs K, Heller H, Schmitt C, et al. (2009) The prevalence and distribution of human papillomavirus genotypes in oral epithelial hyperplasia: proposal of a concept. *Journal of Oral Pathology and Medicine*, 38(2),181-187. Doi: <https://doi.org/10.1111/j.1600-0714.2008.00723.x>
2. Neville BW, Damm DD, Allen CM, Chi AC. *Oral and maxillofacial pathology*: Elsevier Health Sciences; 2015.
3. Rautava J, Syrjänen S. (2011) Human papillomavirus infections in the oral mucosa. *Journal of American Dental Association*, 142:905-914. Doi: <https://doi.org/10.14219/jada.archive.2011.0297>
4. Carneiro TE, Marinho SA, Verli FD, Mesquita AT, Lima NL, Miranda JL. (2009) Oral squamous papilloma: clinical, histologic and immunohistochemical analyses. *Journal of Oral Science*, 51:367-372. Doi: 10.2334/josnusd.51.367.
5. Anselmi A, de Percoco Premoli G. (1989) Epidemiologic study of 147 cases of oral papilloma. *Acta Odontol Venez*, 27(2-3),27-32. Doi: PMID: 2488735
6. Das S, Das A. (1993) A review of pediatric oral biopsies from a surgical pathology service in a dental school. *Pediatric dentistry*, 15(3),208-211. PMID: 8378160
7. Al-Khateeb T, Hamasha AA-H, Almasri N. (2003) Oral and maxillofacial tumours in north Jordanian children and adolescents: a retrospective analysis over 10 years. *International Journal of Oral and Maxillofacial Surgery*, 32(1),78-83. Doi: 10.1054/ijom.2002.0309.
8. Rajendra AS, Ogle OE, Williams D, Woodbine EF. (2017) Epidemiology of Oral and Maxillofacial Infections. *Dental Clinics of North America*, 61,217-233. Doi: 10.1016/j.cden.2016.11.003
9. Abbey LM, Page DG, Sawyer DR. (1980) The clinical and histopathologic features of a series of 464 oral squamous cell papillomas. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology*, 49(5),419-428. Doi: [https://doi.org/10.1016/0030-4220\(80\)90286-8](https://doi.org/10.1016/0030-4220(80)90286-8)
10. Goodstein LA, Khan A, Pinczewski J, Young VN. (2012) Symptomatic squamous papilloma of the uvula: report of a case and review of the literature. *Case Rep Otolaryngol*, 8, 329289:1-2. Doi: 10.1155/2012/329289
11. Flint PW, Haughey BH, Niparko JK, Richardson MA, Lund VJ, Robbins KT, et al. *Cummings Otolaryngology-Head and Neck Surgery E-Book: Head and Neck Surgery*, 3-Volume Set: Elsevier Health Sciences; 2010.
12. Pésantez Alvarado JM, Romero Rodríguez VP, Lafebre Carrasco MF, Vazquez Ramos VR, Reinoso Carrasco J. *Squamous papilloma in the oral cavity; case presentation and review of the literature*. 2018.
13. Orenuga O, Oluwo A, Oluwakuyide R, Olawuyi A. (2018) Recurrent oral squamous papilloma in a pediatric patient: Case report and review of the literature. *Nigerian Journal of Clinical Practice*, 21(12),1674-1677. Doi: 10.4103/njcp.njcp_407_17.
14. Andrade SA, Pratavieira S, Paes JF, Ribeiro MM, Bagnato VS, Varotti FdP. (2019) Oral squamous papilloma: a view under clinical, fluorescence and histopathological aspects. *Einstein (São Paulo)*, 1(2),1-4. Doi: https://doi.org/10.31744/einstein_journal/2019rc4624