

A Case Report of Fibroepithelial Polyp in Paediatric Dental Patient

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Abstract: The present case report describes a 12-year-old female patient with an enlarging, painless soft mass in the maxillary anterior region. Intraoral examination revealed satisfactory occlusion with no occlusal interferences and generalized spacing in between the maxillary and mandibular anterior teeth. Radiological examination did not reveal any significant lesion or caries. The patient underwent oral prophylaxis before the surgical procedure. Local anesthesia was given, and an incision was made with a scalpel blade. External bevel gingivectomy was performed, and the swelling was excised along with the periodontal ligament. The mass was sent for histopathological analysis. The periodontal ligament was removed with Gracey curette no 1, 2, haemostasis was achieved, and antibiotics were prescribed. The mass was diagnosed as a pyogenic granuloma based on histopathological analysis. The patient was followed up for six months, and no recurrence was observed. In conclusion, fibro-epithelial polyp is a relatively common benign oral lesion that can present as an enlarging soft tissue mass. Early diagnosis and management are crucial to prevent complications and recurrence. Surgical excision with periodontal ligament removal is an effective treatment option for fibro-epithelial polyp. Regular follow-up is essential to monitor for recurrence.

Keywords: Fibroepithelial polyp, surgical excision, histopathological analysis, external bevel gingivectomy, periodontal ligament excision

1. Introduction

Soft tissue lesions of the oral cavity in children may be normal or developmental findings or indicative of gingivitis, periodontal disease, local or systemic infection, benign tumors, or life-threatening systemic condition. The lesions presenting in the oral cavity of children under 10-12yrs are considerably significant in paediatric dentistry. Because of an absence of parental education, awareness, and resources, these can get clinically misdiagnosed or go untreated.^[1]

The oral cavity being a dynamic region, is constantly exposed to various external and internal stimulating factors which results in a myriad of diseases, ranging from developmental to reactive and neoplastic lesions.

A fibroma can be described as an inflammatory hyperplastic lesion of the connective tissue origin. It is a local response to tissue insult results which causes an increase in the size of an organ or tissue owing to hyperplasia of the constituent cells. Within the oral cavity, a fibroma usually occurs due to chronic irritation from sources or stimulating factors such as lip/cheek biting, irregular denture borders, overhanging restorations, calculus, sharp tooth edges, or other oral prostheses.

Fibro-epithelial polyps most commonly occur in the buccal mucosa along the line of occlusion while epulis commonly occur in the maxillary anterior region. The following terminologies synonyms are commonly used to describe FEP (fibroepithelial polyp) Fibroepithelial Polyp of Gum; Fibroepithelial Polyp of the Gingiva; Fibroepithelial Polyp of the Gum; Fibrous epulis; Gingival fibroepithelial polyp^[2]. The present report describes a rare case of a fibro-epithelial polyp on the buccal-palatal anterior maxillary region.

2. Case Report

A female patient aged 12year old with her parents visited to the hospital unit with a chief complaint of swollen gum in the maxillary anterior region from past few months with no change in its size. Intra oral examination revealed satisfactory occlusion with no occlusal interferences and generalised spacing in between the maxillary and mandibular anterior teeth. There was no history of any deleterious habits. There was no trauma from occlusion.

3. Clinical Findings

An enlarging, painless soft mass in maxillary anterior region noted which is firm, nontender, pinkish-white sessile lesion of 3.5 × 3.5 × 1.5 cm on interdental papilla and attached gingiva on both labial and palatal sides in relation to tooth 21 and 22. Mass was mobile and bleeding on probing was absent.



Radiological Findings: An OPG revealed no significant lesion. No signs of caries in the teeth in question.



Treatment:

- Oral prophylaxis was done before the surgical procedure.
- Local anaesthesia was given.
- Incision was given with 15 no scalpel blade (external bevel gingivectomy was performed).
- Swelling was excised along with periodontal ligament.
- The periodontal ligament was removed with Gracey curette no 1, 2.
- The mass was dipped in 10% formalin solution and was sent for histopathological analysis.
- Haemostasis was achieved and suture was given.
- Antibiotics were prescribed.



Pre-Operative Photographs



Per-Operative Photographs



Post-Operative Photographs



Tissue Specimen Collected for Histopathological Examination

Microscopic Pathology:

H&E-stained section reveals the presence of discontinuous hyperplastic stratified squamous epithelium with underlying fibro vascular connective tissue stroma.

Stromal connective tissue is characterized by fibroblasts and proliferating endothelial cells along with nonspecific chronic inflammatory cell infiltrates. No sign of any malignancy could be detected in the sections.

Histopathological Diagnosis:

Overall histopathological features are suggestive of Epithelial Hyperplasia, corroborative to the clinical diagnosis of Fibro Epithelial Polyp.

4. Discussion

The exposure of oral cavity to various stimuli, results in a variety of diseases, from developmental to reactive and

neoplastic. Thorough knowledge of the various lesions is required for the management and accurate clinical assessment resolve without any intervention. The common cause of such oral polyps could be irritation or any mild trauma to soft tissue from external objects such as pencil or brush. Pediatric patients may present with a variety of intraoral lesions that require definitive diagnosis, treatment and reassurance, and possibly referrals for a dental evaluation. Frequent assessment of oral soft-tissue pathology can assist the medical team in quickly identifying common and unusual abnormalities in youngsters [3]. Recent years have brought new insights into the causes and treatment of periodontal diseases of children, making prevention or treatment of many formerly untreatable conditions possible. Identifying these oral conditions at an early stage can potentially save lives. [4]

5. Conclusion

Oftentimes, the parents are not aware that there exists an oral lesion in their child's oral cavity. This is probably due to the

difficulty in examining their child's mouth and in identifying the exact time of eruption of the primary teeth, as well as others issues such as poor oral hygiene and presence of gingivitis. The purpose of presenting such a rare clinical scenario was to create awareness amongst fellowdentists about such occurrences and emphasis on reassurance to the over concerned parents from nonthreatening oral lesions. Early dental and oral health care is essential for enabling dentists to deliver appropriate treatment for disorders of the oral cavity, as well as effective preventative recommendations and early diagnosis. [5]



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