

Fibro-Epithelial Hyperplasia Mimicking Mucocele

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ABSTRACT

The effects of chronic local irritation have been seen commonly in the form of fibroma or mucocele in children. We report a ten year old girl with the chief complaint of swelling in the lower right region of labial mucosa which was diagnosed clinically as mucocele and histologically as fibro-epithelial hyperplasia. Surgical excision was done under local anesthesia with no post-operative complication.

KEY WORDS

Fibrous overgrowth, mucocele, oral cavity

Citation

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INTRODUCTION

Parents often are concerned with “lumps and bumps” that appear in the mouth of children. Pediatricians should be able to distinguish the normal clinical appearance of the intraoral tissues in children from gingivitis, periodontal abnormalities, and oral lesions. There are relatively few reports in the literature regarding oral mucosal conditions in children.¹ Inflammatory hyperplastic lesion may be defined as “an increase in size of an organ or tissue due to an increase in the number of constituent cells, as a local response of tissue to injury”. The traumatic irritants include calculi, overhanging margins, restorations, foreign bodies, chronic biting, margins of carious teeth, sharp spicules of bone and overextended borders of appliance.^{2,3} Clinically they appear either as pedunculated or sessile growth on any surface of the mucous membrane. The majorities are small lesions and those measuring more than 1 cm is rare. They do not have malignant potential and recurrences are mostly as a result of failure to eliminate the chronic irritation involved.^{3,4}

CASE-REPORT

A 10 year old female child had come to our department with a chief complaint of swelling on lower right region of labial mucosa for the past nine months. The patient gave history of trauma to lower lip from the anterior teeth. Swelling gradually increased in size because of chronic irritation of lower lip between the upper and lower teeth during mastication. Intraoral examination revealed localized, compressible, oval and well defined soft nodule of 0.5 x 0.5 cm in diameter with bluish red cast in the lower right labial mucosa corresponding to the lateral incisor region (Fig 1). On the basis of clinical finding, provisional diagnosis of mucocele was given.

Considering the size of the swelling, the treatment plan was aimed for a complete surgical excision of the lesion. Excision of the soft tissue mass was performed under local anesthesia, and the wound was sutured using a 3-0 black silk suture (Fig 2). The excised tissue (Fig 3) was sent for histopathological examination, which showed



Figure 1. Nodular swelling seen on the right side of lower lip.



Figure 2. Surgical excision of the soft tissue swelling done under local anesthesia.

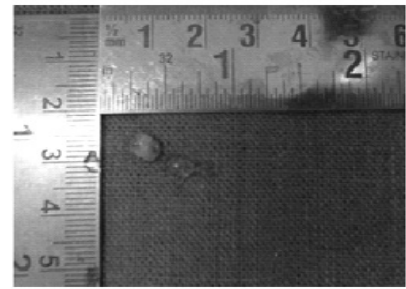


Figure 3. Excised soft tissue mass.

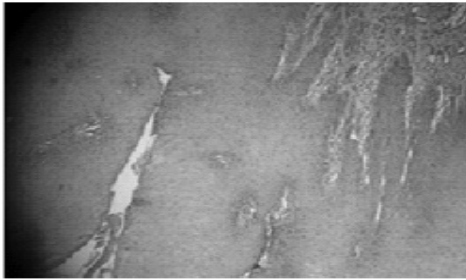


Figure 4. Histopathological analysis of soft tissue showing parakeratinized stratified squamous epithelium. Basal cells appear to be hyperchromatic with elongated rete ridges. Connective tissue stroma appears to be fibro-cellular, dense inflammatory cells with extravasated red blood cells and blood vessels are seen.

parakeratinized stratified squamous epithelium. Basal cells appeared to be hyperchromatic with elongated rete ridges. In the connective tissue stroma, was fibro-cellular, dense inflammatory cells with extravasated red blood cells and blood vessels were seen. In deeper areas muscle fibers were evident (Fig 4). On the basis of histopathological finding final diagnosis of fibro-epithelial hyperplasia was made. Patient was recalled after one week; excised site had healed (Fig. 5).

DISCUSSION

Soft tissue tumor-like lesion is term used to describe any pathologic growth that projects above the normal contour of the oral surface. Different mechanisms may lead to the development of a soft tissue tumor-like lesion in the oral cavity. The most common mechanisms included reactive hyperplasia and neoplasia. The great majority of localized overgrowths of the oral mucosa are considered to be reactive rather than neoplastic in nature.⁵

The literature review has cited the reason for some of the oral lesions like irritation fibroma and mucocele arising as a result of oral habits such as lip biting/sucking.⁶ Rare association of reactive hyperplasia due to local irritation with a natal tooth in a four and a half month old infant has been reported.⁷

Fibrous inflammatory hyperplasia may occur on any surface of the oral mucous membrane as either pedunculated or sessile growth. Lesions more than one cm in diameter are



Figure 5. Post-operative clinical picture of lower lip showing normal healing.

rare in cheeks, tongue and floor of the mouth because masticatory stresses restricts their size through necrosis and ulceration.⁸ Histopathologically, these lesions shows hyperplastic stratified squamous epithelium, thin finger like rete ridges extend into underlying connective tissue stroma which are fibrocellular. Chronic inflammatory cell infiltrate are seen.⁹ These lesions are treated by complete local excision and removal of chronic irritant and low recurrence rate is expected.^{5,10,11}

Mucocele is the common minor salivary gland lesion, which is clinically characterized by a single or multiple, spherical, and fluctuant nodules which are generally asymptomatic and may be classified as the mucous extravasation cyst and the mucous retention cyst. The lower lip is the most common area for occurrence of this lesion but it may also involve cheek, tongue palate and floor of the mouth.^{3,4,12-15} They are the 15th most common oral mucosal lesion, with a prevalence of approximately 2.4 cases per 1,000 people.¹⁵

Few studies have comprehensively reported the incidence of oral soft tissue lesions in children. A study by Jones and Franklin, considering 4,406 pediatric patients, showed that the most common lesion was mucocele (16%).¹⁶ Pour MA et al have reported that 0.38% were diagnosed histologically with irritation fibroma in a total number of 260 cases.⁵ Short term institutional studies by Mathew et al have shown no incidence of mucocele or irritation fibroma in the age group of 2-20 years.¹⁷ Rashid in a five year clinical study report showed diagnosis of mucocele in 28.6% in patient less than 20 years of age and a history of trauma in the form of lip biting was frequently reported.¹⁸

The present case reports an interesting case of fibro-epithelial hyperplasia mimicking mucocele in a lower labial mucosa of 10 year old child.

CONCLUSION

Tissue enlargement of the oral cavity often presents a diagnostic challenge as a diverse group of pathologic processes can produce such lesions. The most common lesions in this group are mucocele, focal fibrous hyperplasia, epulis, giant cell fibroma.

This report helps in refreshing the knowledge of dentist and general physicians that all the swellings on the lower lip should not be taken for granted as mucocele. At the back of mind one should be aware that there is a rare possibility of hyperplastic tissue/ tumor lesions.

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