

Irritation Fibroma of Lower Lip in 9 Years Old Child- A Rare Case Presentation

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Abstract: Fibroma of oral mucosa is the most common benign "tumor" of the oral cavity, derived from fibrous connective tissues. Irritation fibroma/ traumatic fibroma is sub-mucosal response to trauma from teeth/ dental prosthesis presenting as painless, sessile or occasionally pedunculated swelling. Fibroma may occur at any oral site, but is commonly seen on buccal mucosa along the plane of occlusion teeth, but in this paper we present a case that reveals fibroma on lower lip, an uncommon site of occurrence. Recurrences are mostly due to failure in eliminating chronic irritation involved, so it is important to remove the source of irritation. In the present case, lip biting habit is the etiology for fibroma; therefore efforts are made to intercept it using appropriate habit breaking appliance. Complete excision is the treatment of choice to ensure good prognosis. The current paper presents a case where an intraoral fibroma of lower lip was successfully managed in child.

Keywords: Excisional biopsy, Irritation fibroma

I. Introduction

Fibromas are considered the most common benign soft tissue growth in the oral cavity, derived from fibrous connective tissues.^[1] Majority of the fibromas occurring in the oral cavity are reactive in nature and represent a reactive hyperplasia of fibrous connective tissue in response to local irritation from sources such as lip/cheek biting, irregular denture borders, overhanging restorations, calculus, sharp tooth edges, or other oral prostheses or trauma rather than being a true neoplasm.^[2]

It presents as a painless, sessile or occasionally pedunculated swelling that can be firm and resilient, soft and spongy in consistency, and lighter in color than surrounding tissue due to a reduced vascularity.^[3] Irritation fibroma is treated by surgical excision. Conservative excisional biopsy is curative and its findings are diagnostic; however recurrence is possible if the exposure to the offending irritant persist, so the source of traumatic irritation must also be eliminated.^[4]

II. Case report

A 9 year old female presented to the Department of Pediatrics and Preventive Dentistry, Himachal Dental College, Sundernagar with the chief complaint of small enlargement seen in relation to the corner of the mouth on lower lip, which had caused a hindrance with function of the oral cavity and resulted in esthetic problem as well. Detailed case history was enquired wherein no relevant medical records or allergies were reported. No submandibular or submental lymph nodes were palpable. The habit of lip biting was confirmed by the parents. Patient gave history of swelling which was initially a small nodule but later showed slow enlargement. Intraoral examination revealed a solitary, elevated, sessile lesion with smooth surface, measuring 7 mm diameter on lower lip [Figure 1]. The lesion was pinkish, soft in consistency, non-tender on palpation. Based on its clinical presentation, a provisional diagnosis of fibroma was established.

2.1 Surgical procedure

Prior to the procedure, following investigations were done including complete hemogram & intraoral radiographs. The excision of this fibromatous mass was carried out under local anesthesia. A circular incision surrounding the lesion was made using scalpel blade no 15 [Figure 2]. Then the tissue mass was dissected free followed by its complete removal [Figure 3A]. Needlepoint electrocautery was employed to manage bleeding and easily achieve hemostasis. The tissues were relaxed and the wound got oriented perpendicular to the direction of muscle contraction. Finally the wound margins were approximated using a surgical black silk suture

no. 4-0 [Figure 3B]. Excised mass was sent for histopathological examination [Figure 4A]. Habit breaking appliance, lip bumper for eliminating lip biting habit was also planned after 15 days when the lesion healed completely. Patient was recalled for follow up after 3 months [Figure 4B]. No pain or discomfort during eating was reported.

III. Discussion

Approximately 60% of Irritation Fibromas occur in the maxilla with 55- 60% presenting in the anterior region (incisor-cuspid areas).^[5] In this case, intra-oral clinical examination of the female child revealed a nodular, dome shaped growth in relation to lower left labial mucosa, firm in consistency, sessile, non-tender mildly erythematous with no vascular markings, no bruit or pulse was felt, although it interfered with the normal oral functions and esthetics of the patient.

Unhealthy habits like biting, licking or sucking of lips and cheeks) when repeated excessively become harmful, contributing to orofacial muscular imbalance. Fibromas rarely occur before the fourth decade of life. A variant of irritational fibroma, juvenile (aggressive) irritational fibroma, has been described in children and young adults who are younger than 15 years of age.^[6] A fibro-epithelial polyp commonly occurs on buccal mucosa, the tongue, or the gingiva but in the current case it was observed on the lower lip mucosa in a child younger than 10 years of age, which contrasts with the affected site as well as the age group described by the literature.

It is important to submit the excised tissue for microscopic examination because other benign or malignant tumors can also mimic the clinical appearance of a fibroma.^[2] The excisional biopsy and H&E stained section revealed parakeratinized stratified squamous epithelium with elongated rete ridges, collagen fibres, plump fibroblasts, chronic inflammatory cells, blood vessels and extravasated RBCs. Thus, a final diagnosis of irritation fibroma was revealed. The list of differential diagnosis included chronic fibrous epulis, peripheral giant cell granuloma, osteosarcoma, gingival cyst, chondrosarcoma, pyogenic granuloma and peripheral odontogenic fibroma. The peripheral ossifying fibroma appears exclusively on gingiva, and it may be firmer to palpate because of calcified material in stroma. The pyogenic granuloma and peripheral giant cell granuloma generally appear more vascular and bleed when palpated or probed.^[7] The differential diagnosis of irritation fibroma is based mainly on the location of the soft tissue swelling. If it is located on the tongue, the possibility of neurofibroma, neurilemmoma or granular cell tumor is considered. On the lower lip or buccal mucosa, the lesion might be a mucocele or salivary gland tumor. Irritation fibroma does not hold a risk for malignancy and recurrences are rare.

IV. Figures



Fig. [1]: Preoperative photograph presenting an Irritation Fibroma on lower lip



Fig. [2]: Surgical procedure showing excision of fibromatous lesion

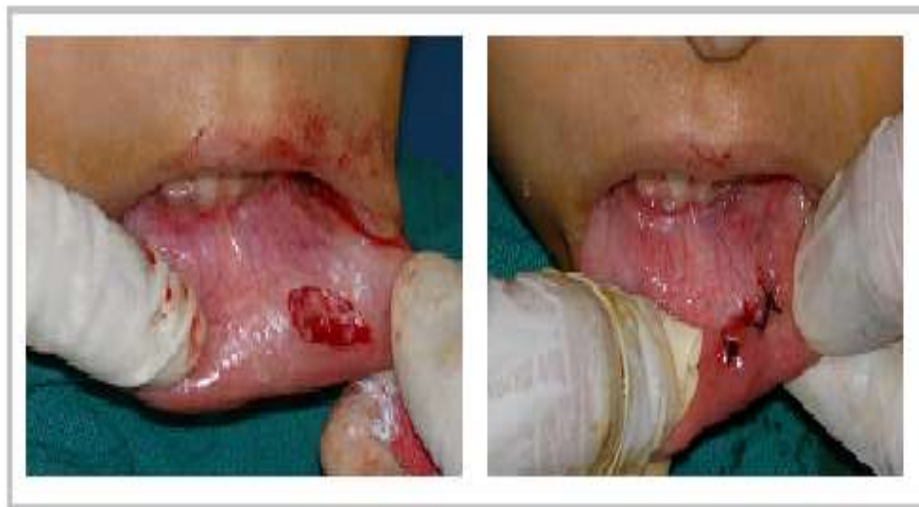


Fig. [3]: A: Labial mucosa after complete surgical excision of fibroma, B: Suturing done using black silk suture no. 4-0



Fig. [4]: A: Histological view, B: Post operative photograph showing complete healing after 3 months

V. Conclusion

Swellings arising in the soft tissue should be diagnosed clinically and histopathologically to arrive at definitive diagnosis, as such lesions can be seen at variable sites. Similar clinical presentation of reactive soft tissue overgrowths might present a diagnostic dilemma for the dentists. Conservative excisional biopsy is curative, and its findings are diagnostic. To prevent recurrence, patient should be advised to wear lip bumper for intercepting the lip biting habit.

VI. Clinical significance

The Irritation Fibroma being asymptomatic is not a matter of concern to the patient till it grows in size or it interferes in normal function. So it is very important to rule out the lesion and its cause, both clinically and histologically to improve the prognosis and reduce the recurrence by planning definitive treatment.

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