

Traumatic Fibroma in Buccal Mucosa: A Local Reactive Lesion- Report of a Case

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ABSTRACT

Introduction: The response to local irritants or trauma cause a reactive hyperplasia of fibrous connective tissue occurs called Fibroma, which is a benign neoplasm of fibroblastic origin.

Case report: The present case report presents a case of traumatic fibroma on left buccal mucosa in a 40yrs old female patient. The case was diagnosed based on clinical features and histopathological investigations.

Conclusion: Removal of irritational agents and complete surgical excision is the treatment of choice to prevent the recurrence of lesion.

Keywords: Fibroma; Irritation; Trauma

INTRODUCTION

A local response of tissue to injury is characterised by an increase in the size of consistent cells in a tissue or an organ, leading to an inflammatory hyperplastic lesion. Various irritants causing the lesion are overextended or overhanging margins of caries, restorations and appliances, calculus, foreign bodies, chronic biting etc.¹ In response to these local irritants or trauma, reactive hyperplasia of fibrous connective tissue occurs, called Fibroma.² Fibroma is a benign neoplasm of fibroblastic origin. Traumatic or irritation fibroma is a healed inflammatory hyperplastic lesion that can involve any age group and any soft tissue site of oral cavity. The most commonly involved oral tissues are buccal mucosa, gingival and tongue.

The clinical appearance of traumatic fibroma is presented as a localized, smooth lesion, hard in consistency, normal in color, with sessile or pedunculated base, usually varying upto 1.5cm in size and it is characterized by slow painless growth that takes period of months or years.³ The most common site of occurrence is usually interdental papillary region in anterior maxilla.⁴ The present case report reveals a benign lesion present on posterior region of buccal mucosa opposite to the region of mandibular first and second molars.

CASE REPORT

A 40 years old female patient reported to the Department of Oral Medicine and Radiology with a chief complaint of growth on the inner aspect of left cheek since 4 months. History of present illness reveals that growth was initially small but gradually increased in size. Patient gave the history of cheek biting on the left side of oral cavity since few months. Then she started feeling discomfort while chewing food because of the interference of growth.

The past dental and medical history was non contributory. The extraoral examination revealed no abnormality. On intra oral examination, a solitary well circumscribed sessile growth was observed on left side of buccal mucosa, corresponding to the sharp buccal cusp of mandibular left first and second molar. The growth was normal in colour, resembling colour of normal mucosa with a smooth surface texture. The growth was round to oval in shape, measuring about 1x1.5 cm in its greatest dimension (Fig no. 1). On palpation the growth was observed to be non tender and firm in consistency.

Based on case history, clinical findings and location of the growth, the provisional diagnosis of Traumatic Fibroma was made. For definitive diagnosis, excisional biopsy was performed under local anaesthesia (Fig no. 2,3). Histopathological examination revealed connective tissue stroma comprising of loose to dense bundles of collagen fibres with plump, spindle and few stellate shaped fibroblasts, few endothelial lined blood vessels with red blood cells. The epithelium was stratified squamous parakeratinised type.

Based on case history, clinical and histopathological examination, diagnosis of Traumatic Fibroma involving left side of buccal mucosa was made.

DISCUSSION

Various pathological processes occurring in oral cavity can lead to tissue enlargements that challenge the diagnoses of these lesions. Among these pathologies, few enlargements are because of chronic tissue trauma and irritation that causes an excessive tissue response.⁵

The result of this chronic repair process leads to the formation of granulation tissue and scars that result in formation of a fibrous sub-mucosal mass, called Fibroma.⁶ Torres-Domingo S et al.⁷ in 2008 observed 300 patients which revealed 53.3% lesions that were histologically diagnosed as fibroma, indicating it as the most common benign tumor of oral cavity. Parkavi et al.⁸ in 2018 presented a case report of irritational fibroma that also occurred due to local trauma. Similar

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Figure-1: Intraoral picture showing lesion on left side of buccal mucosa



Figure-2: Excisional biopsy done



Figure-3: Excised tissue after excisional biopsy

findings were observed in our case report that presented fibroma because of trauma.

In a study by Barker DS et al.⁹, they observed that irritational fibromas presented a particular histopathological pattern of collagen arrangement depending the site of lesion and quantity of irritation. The pattern can be circular or radiating

in fashion. In our case report, histopathology examination revealed connective tissue stroma comprising of loose to dense bundles of collagen fibres with plump, spindle and few stellate shaped fibroblasts. Thus, diagnosing the lesion as Fibroma.

Various studies reported high prevalence of traumatic fibromas among females and that too in 4th decade of life.¹⁰⁻¹² In our case report lesion was detected in female aged 40yrs. The lesion may be sessile or have a pedunculated base slowly progressing to its maximum size within a couple of months. The size ranges up to 1.5 cm.¹² In our case, the lesion achieved maximum size of 1.5cm with a sessile base.

Fibromas are usually self-limiting without any malignant transformation. Complete surgical excision with removal of irritant is required to prevent recurrence of this pathology. However, long term evaluation is needed to evaluate transformation and recurrences of such lesions.

CONCLUSION

Fibromas are the common benign lesions of oral cavity. It is required to differentially diagnose the condition on the basis of clinical features, case history, irritational factors, and histopathological investigations. Removal of irritational agents and complete surgical excision is the treatment of choice to prevent the recurrence of lesion.

REFERENCES

1. Jain G, Arora R, Sharma A, Singh R, Agarwal M. Irritation fibroma: Report of a case. *J Curr Res Sci Med* 2017;3:118-21.
2. Barker DS, Lucas RB. Localised fibrous overgrowths of the oral mucosa. *Br J Oral Surg* 1967;5:86-92.
3. Wood NK, Goaz PW. *Differential Diagnosis of Oral and Maxillofacial Lesions*. 5th ed. Missouri: Mosby; 2006.p.136-8.
4. Kohli K, Christian A, Howell R. Peripheral ossifying fibroma associated with a neonatal tooth: Case report. *Pediatr Dent* 1998;20:428-9.
5. Mohammed NA, Chandrasekaran SC, Mohan V. Fibroma of the gingiva: a case report of a 20 year old lesion. *Int J Contemp Dent* 2010; 1:107- 109.
6. Nartey NO., et al. Localized inflammatory hyperplasia of the oral cavity: clinicopathological study of 164 cases. *Saudi Dental Journal* 1994;6:145-150.
7. Torres-Domingo S, Bagan JV, Jiménez Y, Poveda R, Murillo J, Díaz JM, et al. Benign tumors of the oral mucosa: A study of 300 patients. *Med Oral Patol Oral Cir Bucal*. 2008; 13: E161-E166.
8. Pedrona IG, Ramalhob KM, Moreirac LA, Freitasd PM. Association of two lasers in the treatment of traumatic fibroma: Excision with Nd: YAP laser and Photobiomodulation Using InGaAlP: A case report. *JOLA*. 2009; 9: 49- 53.
9. Barker D. S. & Lucas R. B. Localized fibrous overgrowths of the oral mucosa. *British Journal of Oral Surgery*, 1967;5:8692.
10. Pai JB, Padma R, Divya, Malagi S, Kamath V, Shridhar A, et al. Excision of fibroma with diode laser: A case series. *J Dent Lasers* 2014;8:34-8.
11. Suryavanshi, Pooja P et al. Comparative evaluation

of effectiveness of surgical blade, electrosurgery, free gingival graft, and diode laser for the management of gingival hyperpigmentation. Journal of Datta Meghe Institute of Medical Sciences University 2017;12:133 - 137.

12. Vasant R et al. Traumatic Fibroma: A Case Report. European Journal of Molecular & Clinical Medicine. 2020;7:1653-60.

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