A LARGE FIBROMA – A CASE REPORT

**ASHWINI BALIGA, **SHRAVAN KINI, *VIDYA HOLLA,
*RAGHAVENDRA KINI AND *PRASANNA KUMAR RAO

*Department of Oral Medicine and Radiology, AJ Institute of Dental Sciences, Kuntikana, Mangalore
**Department of Conservative Dentistry & Endodontics, Yenepoya Dental College,

^Corresponding author: kabaliga@gmail.com
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ABSTRACT:
Isolated soft tissue overgrowths in the oral cavity generally demonstrate a benign, exophytic and reactive nature and are rarely neoplastic. Fibroma is the most common tumor of the oral cavity which occurs mostly in response to trauma or chronic irritation. True fibromas of the oral cavity are rare. We report a case of large fibroma in the right pterygomandibular raphe region in a sixteen year old male patient.

Keywords: Irritation fibroma, reactive hyperplasia, pterygomandibular raphe

INTRODUCTION:
Fibromas are benign tumors that are composed of fibrous or connective tissue. They can grow in all organs, arising from mesenchyme tissue [1]. Isolated or focal intraoral soft tissue enlargements most commonly occur as reactive hyperplasia and are seldom neoplastic in origin. Fibroma is a commonly occurring benign tumour of the oral cavity. In most cases fibroma presents as a reactive hyperplasia of fibrous connective tissue in response to local trauma [2]. The occurrence of irritation fibromas among the South Indian population was found to be 39.1 percent [3]. Chronic irritation or trauma are the most common causes for oral fibroma. True fibromas rarely occur in the oral cavity and demonstrate continuously enlarging slow growth not necessarily arising from the site of potential trauma [4]. It was first reported in 1846 as fibrous polp and polpus [5]. Common site of occurrence is buccal mucosa along the occlusal plane, labial mucosa, gingival and tongue [6]. These benign oral lesions are usually asymptomatic, sessile or pedunculated firm mass usually found in the fourth to sixth decade [5]. We report a case of
fibroma in a sixteen year old male patient in relation to the right pterygomandibular raphe region.

**CASE REPORT:**
A 16 year old male patient reported to our department with a chief complaint of growth behind the lower right back tooth of the jaw since 2 years. Patient was apparently normal 2 years back after which he noticed a growth in the lower right back tooth region of the jaw which was gradual in onset. Initially it was very small in size and had gradually progressed to the present size. There was no difficulty in eating or swallowing. Occasionally the growth was trapped between the upper and lower teeth while chewing food. It was not associated with pain and there was no history of trauma to the region or any bleeding from the growth. There was no history of similar growth elsewhere in the body. The patient had not undergone any treatment earlier for the same. The past medical and dental history was non contributory. On extraoral examination regional lymph nodes were not palpable. Intraoral examination showed a solitary well defined growth on the right pterygomandibular raphae region just distal to the retromolar area around 2x2 cm in size (Figure 1). On occlusion the upper second molar was impinging on the growth. The growth was pedunculated and roughly spherical in shape. The overlying mucosa and surrounding mucosa were pale pink in colour. On palpation, the growth was non tender, soft in consistency, pedunculated and freely mobile. There was no bleeding on palpation.

Based on the clinical findings a provisional diagnosis of fibroma in the right pterygomandibular raphe was given. Neurofibroma and minor salivary gland tumor were considered in the differential diagnosis. The patient was advised that hematological examination and excisional biopsy of the lesion should be done. After obtaining an informed consent from the patient, surgical excision of the lesion was done under local anesthesia and wound was sutured (Figure 2). Histopathological examination of the lesion revealed the presence of squamous epithelium with short rete ridges. The overall thickness was reduced and atrophic. The connective tissue comprised of proliferating bundles of collagen fibres, scanty inflammatory cells, very few blood vessels which is suggestive of fibroma (Figure 3 and Figure 4). Periodic recall and follow up is being done every six months for the past one year and there has been no recurrence.

**DISCUSSION:**
Fibromas are the most common benign soft tissue tumors seen in the oral cavity. They are also known as irritation fibroma, traumatic fibroma, fibrous nodule, fibro-epithelial polyp [6,7]. True fibromas of the oral cavity are rare. Barker and Lucas [8] recognised two cases of true fibromas from 171 specimens of localised...
fibrous overgrowths. Unlike benign fibrous neoplasms, reactive or irritational fibroma usually has an etiology that is a source of irritation [3].

In the present case we did not identify any source of irritation for the lesion to occur. According to Barker and Lucas [8], irritational fibroma exhibit a pattern of collagen arrangement depending on the site of the lesion. There are two types of patterns, radiating pattern and circular pattern. In the radiating type, the fibres radiate towards the epithelium from the base of the lesion. While the circular type shows a central mass of disoriented fibres surrounded by a peripheral layer of collagen fibres running beneath and parallel to the overlying epithelium. Thus, they hypothesized that the radiating pattern appears when there is greater degree of trauma and in sites that are immobile in nature (eg. Palate) while lesser trauma induces the circular pattern that occurs in sites that is flexible in nature (eg Cheek) [8]. Barker and Lucas further stated that irritation fibroma can be differentiated from
true fibroma by pattern of collagen arrangement [8]. True fibroma does not exhibit any pattern and is encapsulated [6]. However, our case presented as a pedunculated and unencapsulated growth with scanty inflammatory cells and blood vessels pointing towards irritation fibroma that does not have potential risk for malignancy. Treatment of irritation fibroma comprises elimination of the causative factors, scaling of adjacent teeth, surgical excision along with involved periodontal ligament and periosteum to reduce the possibility of recurrence [6]. Recent treatment options include electrocautery, Nd:YAg laser, flash lamp pulsed dye laser, cryosurgery, intralesional injection of ethanol or Sodium Tetradecyl Sulfate sclerotherapy [6]. A large irritation fibroma as seen in our case should be differentiated from other solitary soft tissue growths. Based on the site of the growth neurofibroma and minor salivary gland tumor were considered in the differential diagnosis in our case as the lesion was pale, firm and non tender. Neurofibroma was ruled out as no other characteristic features mentioned in the diagnostic criteria for neurofibroma were evident. Minor salivary gland tumor was ruled out as the growth was pedunculated.

CONCLUSION:
Fibromas in most cases are benign conditions whose diagnosis is based on clinical and histopathological examinations. Since oral cavity is a common site for reactive soft tissue lesions it can cause a diagnostic dilemma for an inexperienced clinician because of similar clinical presentations.

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