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## **A LARGE FIBROMA – A CASE REPORT**

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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 (Figure1). 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].



Figure 1: Fibroma in the right pterygomandibular raphe



Figure 2: After excision, Post surgically wound sutured



Figure 3: Excised specimen which was 2x2cm in size

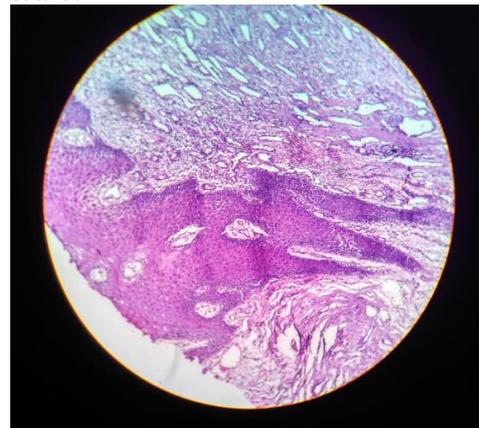


Figure 4: Photomicrograph showing dense interlacing collagen fibres

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 Tetracycline 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.

#### **REFERENCES:**

1. Halim DS, Pohchi A, P Yi. The Prevalence of Fibroma in Oral Mucosa Among Patient Attending USM Dental Clinic Year 2006-2010. *The Indonesian J Dent Res.* 2010; 1(1)
2. Carl M Allen, Charles Camisa. Oral Disease. In: Bologna JL, Jorizzo JL, Schaffer JV, editors. *Dermatology.* 3rd edn. New York: Saunders Elsevier; 2012. P. 1154-55.
3. Patil S, Rao RS, Sharath S, Agarwal A. True Fibroma of Alveolar Mucosa. *Case Reports in Dentistry* 2014;1-3
4. Kar C, Sarkar P, Das S, Ghosh A. Large irritation fibroma of palate- a rare presentation. *Journal of Pakistan Association of Dermatologists.* 2015;25 (3):233-236
5. *Dental Impact* Vol. 4, Issue 1, June 2012
6. Gupta D, Agarwal M, Thakur RK, Mittal S. Diode laser excision of irritation fibroma: A Case Report. *Arch of Dent and Med Res.* 2015; 1(2):54-58.
7. Singh A, Vengal M, Patil N, Sachdeva SK. Traumatic Fibroma- A Saga Of Reaction Against Irritation. *Dental Impact.* 2012;4(1):49-52
8. Chnadan PK, Reddy GVR, Mathur E, Mohapatra S, Motwani R. True Fibroma of Palate (A Case Report). *Journal of Dental and Medical Sciences.* 2015;14(11):69-72.