



PALATAL FIBROMA - A RARE CASE REPORT

Pathology

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ABSTRACT

Fibroma or focal fibrous hyperplasia of the oral mucosa is the most common benign neoplasm of the oral cavity. Fibromas are hyperplasia of fibrous connective tissue in response to local irritation or trauma. Fibroma is found to be the most common benign soft-tissue tumor in oral cavity. Here we present a case of a 52 years female patient reported with a complaint of painless swelling over hard palate on the right side.

KEYWORDS

fibroma, oral cavity, palate, benign

INTRODUCTION

Fibroma or focal fibrous hyperplasia of the oral mucosa is the most common benign neoplasm of the oral cavity. According to Torres-Domingo et al,⁽¹⁾ out of 300 benign tumors of the oral mucosa, 53% were histologically diagnosed as fibroma, and it is the most frequently found benign tumor of the oral cavity.

Fibromas are hyperplasia of fibrous connective tissue in response to local irritation or trauma. Tissue enlargements attributable to injury represent a hyperplastic reaction and are collectively grouped as "reactive proliferations." It is also known as irritational fibroma, traumatic fibroma, fibrous nodule, or fibroepithelial polyp.⁽²⁾ It was first reported in 1846 as fibrous polyp and polypus and is found in 1.2% of adults.^(3,4)

Its most common clinical aspect is that the growth is limited with a smooth surface, usually with normal coloured mucosa, sessile or pedunculated base, of hard consistence⁽⁵⁾, and smaller than 1.5 cm at its largest diameter⁽⁶⁾, though there have been reports of a 4-6 cm injury⁽⁷⁾. Its occurrence is reported to the anterior maxillary, more precisely in the interdental papilla⁽⁸⁾.

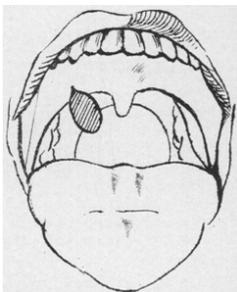


Fig 1. Diagrammatic representation of fibroma of hard palate.



Fig 2. Intraoral examination showing swelling over hard palate on the right side

CASE REPORT

A 52 years female patient reported with a complaint of painless swelling over hard palate on the right side. The duration of the swelling present since birth. The swelling had increased in size since the past 6-7 months causing difficulty in mastication and swallowing for which she reported to the OPD. Patient history revealed condition was of long duration and the patient never had any complaints before the swelling increased in size. On intraoral examination the swelling was located on the palatal region on the right side and was about 1.4 X 1.0 cm. On palpation, the outgrowth was soft, nontender, and attached with a stalk to the palatal mucosa.

Investigation

- Radiographically, no abnormality was seen.
- Routine blood investigations were within normal range
- Incisional biopsy was done, and the tissue was sent for histopathologic examination.

GROSS:

On gross examination it was an ovoid grey white – grey brown, firm to hard tissue measuring 1.4 x 1.0 x 0.4 cms. Cut section of the mass was grey white and firm.

MICROSCOPY:

Showed a lining of parakeratinized stratified squamous epithelium showing numerous rete ridges which are mainly long & slender. The subepithelial connective tissue is chiefly fibrocollagenous with myxoid change with dense collagen fibre bundles & numerous fibroblasts, few endothelial lined blood capillaries & focal dense and mild diffuse infiltration by chronic inflammatory cells chiefly composed of lymphocytes and plasma cells.

Overall, compiling the histopathological features the diagnosis of fibroma was established.

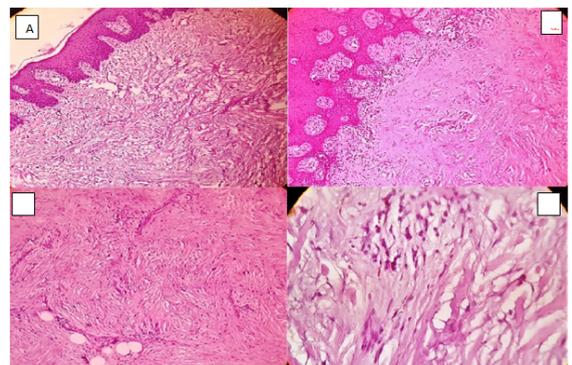


Fig 4. A&B) Parakeratinized stratified squamous epithelium showing

numerous rete ridges with sub epithelial connective tissue is chiefly fibrocollagenous with myxoid change. LP(Low Power). **C&D)** Fibrocollagenous with myxoid change with dense collagen fibre bundles, numerous fibroblasts, focal dense and mild diffuse infiltration by chronic inflammatory cells. HP (High Power)

DISCUSSION

Fibromas is a slowly progressing lesion, the growth of which is generally limited. Fibroma is found to be the most common benign soft-tissue tumor in oral cavity and occurs frequently in sites predisposed to trauma or irritation. In the case presented, although there was no direct history of trauma, a traumatic stimulus could have been inflicted over the years by routine oral hygiene and eating. Many cases will progress for long periods of time like in our case it was present since birth before patients seek treatment because of increase in size over the past 6 to 7 months causing symptoms associated with the lesion. They are asymptomatic lesions found more frequently in the buccal mucosa.⁽⁹⁾ The irritational fibroma has a 66% female predilection and can occur at any age but is usually seen in the 4th to 6th decade of life⁽¹⁰⁾. In our case the patient was a female aged 52 years.

According to Barker and Lucas, irritational fibroma exhibit a pattern of collagen arrangement depending on the site of the lesion. There are two types of pattern (radiating pattern and circular pattern). In radiating type, the fibres radiate towards the epithelium from the base of the lesion. While the circular type shows a combination of disoriented fibres centrally and is surrounded by a peripheral layer of collagen fibres running beneath and parallel to the overlying epithelium. Thus they hypothesized that the former appears when there is greater degree of trauma and in sites which are immobile in nature (eg. Palate) while lesser trauma induces later and it occurs in the site that are flexible in nature (e.g. Buccal mucosa).⁽¹¹⁾

Fibromas, though very common lesions of the oral cavity and characteristic in presentation, may sometimes pose a diagnostic challenge. Clinicians should consider the possibility of diagnosing irritation fibroma in younger age groups and in unusual locations as palate. Detailed history regarding the lesion, precise clinical workup combined with microscopic presentation is required for diagnostic confirmation and proper management of such cases.

CONCLUSION

Fibrous growths of the oral soft tissues are fairly common and include a diverse group of reactive and hyperplastic conditions. Fibromas are benign tumor of fibrous connective tissue. The patient history, clinical examination and histopathological features depicts the characteristic pattern of fibroma.

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