

Palatal Fibroma - A Case-report

Farooque Khan, Romita Gaikwad

VSPMs Dental College & Research Centre, Nagpur, India

Correspondence

Dr. Farooque Khan
M.D.S. Periodontics, VSPMs
Dental College & Research
Centre,
Nagpur - 440019, India
Email:
farooquekhan20@gmail.com

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ABSTRACT

Fibroma is a benign tumor of fibrous connective tissue. Fibromas represent inflammatory state rather than neoplastic conditions, which are mostly sessile or slightly pedunculated with a smooth contour, pale pink and are firm in consistency, which commonly occurs on gingiva, tongue, buccal mucosa and palate. Clinical, radiographical as well as histologic findings in combination with surgical findings are beneficial, but it further requires more studies to determine the nature of such fibromatous lesions. An interdisciplinary access is thus needed in treatment of fibrous lesions, so as to reduce its recurrence and to boost the standard of life, thus providing better functioning and esthetics.

Key words: Benign tumor, cemento-ossifying, fibroma, palate

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INTRODUCTION

Benign tumors of fibrous connective tissue are commonly seen in the oral cavity. Fibroma is a benign tumor of fibrous connective tissue.¹ A majority of fibromas occurring in the oral cavity are reactive in nature and represent inflammatory hyperplasia and are not true neoplasias. Thus, fibromas represent inflammatory rather than neoplastic conditions. These lesions are mostly sessile or slightly pedunculated with a smooth contour, pale pink and are firm in consistency, which commonly occurs on gingiva, tongue, buccal mucosa and palate.² Presence of fibromas affects normal functioning and esthetics which can notably reduce the standard of life and can result in functional impairment & also emotional and social problems. An interdisciplinary access is thus required in treatment of such cases so as to decrease its reappearance and to improve the standard of life, thus providing better functioning and esthetics.

CASE REPORT

A female patient of age 40 years, was referred to Department of Periodontics at VSPM's Dental College & Research Centre, Nagpur, India. The patient had no subjective symptoms other than history of growth on palate & discomfort. Patient had a complaint of growth in mid-palatal area since two years. Patient was apparently alright two years ago, then she noticed a growth in mid-palatal area, of size approximately 0.5x 0.5 cm. She gave no history of any traumatic injury. Even there was no history of pain or pus drainage in same region. Her medical history was not contributory. Patient was

having a habit of tobacco chewing 4-5 times a day since 10 years.

Intraoral examination :

A single growth of approx size 0.5 X 0.5cm was present on left side of hard palate in 24, 25 region. The lesion was found to be round in shape which was extending medio-laterally from the mid-palatal raphe to approx 1cm below the palatal gingiva in the region of teeth 24, 25 (Fig. 1). The lesion was pale pink in colour. On palpation it was slightly pedunculated and non-tender. The lesion was not fluctuant, did not blanch on pressure and was rubbery in consistency. On the basis of history and clinical data, it was diagnosed as fibroma. Apart from poor oral hygiene and abundance of plaque and calculus, the oral cavity showed no abnormality.

Radiographic examination:

Intraoral periapical radiograph of 24, 25 region revealed mild horizontal bone loss with 23, 24, 25. Any root resorption or pathologic tooth migration was absent. The bone around the outer limits of the lesion was appeared to be normal. (Fig 2)

Other investigations:

Hemoglobin, total & differential white blood cell counts, bleeding as well as clotting time were in the normal limits. Aspiration of lesion was not done as it appeared to be solid.

Phase-I therapy /Non surgical treatment:

Patient was informed about the treatment procedure and after obtaining her consent, Phase- I therapy was performed. Patient was given advice for complete stoppage of tobacco chewing. Patient was also motivated to keep good oral hygiene. (Fig 3)



Fig 1: Pre-Operative intraoral photograph showing the lesion

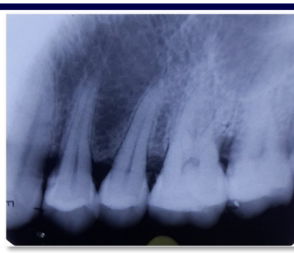


Fig 2: Intraoral periapical radiograph of 24,25 region



Fig 3: Intraoral photograph of lesion after Phase-I therapy



Fig 4: Excision of lesion (Intra-surgical)



Fig 5: Excised tissue



Fig 8: Recall after 15 days

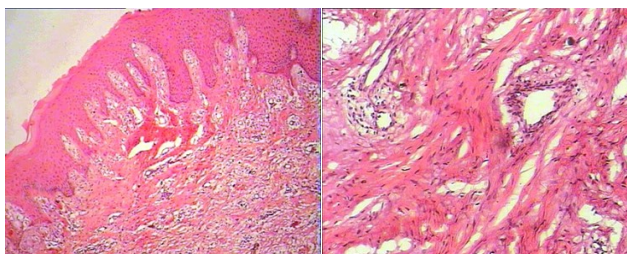


Fig 6, 7: Histologic pictures of fibroma

Operative procedure

Under all aseptic precautions and conditions, excision of tissue was done in region of 24,25 under local anaesthesia with adrenaline. (Fig 4 and 5) After excision of tissue, hemostasis was achieved. Surgical site was covered with periodontal dressing. Post-operative instructions were explained. Medications were prescribed. Patient was recalled after 1 week for re-evaluation.

The H and E stained section shows parakeratinized stratified squamous epithelium showing numerous rete ridges which are mainly long & slender. The

underlying connective tissue is chiefly fibrocellular with dense collagen fibre bundles & numerous fibroblasts, few endothelial lined blood capillaries & mild chronic inflammatory cell infiltrate chiefly of lymphocytes. Features were suggestive of Fibroma. (Fig 6 and 7)

Recall:

Healing was found to be uneventful and patient is still under follow-up. (Fig 8)

DISCUSSION

Fibromatous lesions are benign tumors which are composed of fibrous connective tissue. 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. They can grow in all organs. They are asymptomatic lesions found more frequently in the buccal mucosa and are more common in the fourth decade of life.³ Fibro-osseous lesion is a generic term for a group of jaw disorders which histopathologically shows a connective tissue matrix and islands/bone trabeculae. Ossifying fibromas usually elaborate calcified tissues such as alveolar bone, cementum and ovoid calcifications, which has given rise to different nomenclature for these benign fibro-osseous neoplasms. If bone predominates ossifying is the appellation, if cementum predominates the term cementifying is used.⁴ If bone & cementum like tissues are seen, the lesions are referred as cemento-ossifying lesions. The term cemento-ossifying fibroma is scientifically invalid as there is no histomorphologic or biochemical difference between bone and cement. As well as the clinical and histopathologic appearance of cemento-ossifying fibroma are same in those regions where there is absence of cementum.⁵ Presence of malformed spheroidal basophilic bone particles within ossifying fibromatous lesions are called as cementicles. Such cementicles are not from cementum but instead represent a malformed product of this tumor corresponding to the keratin pearls. 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 (eg. Buccal mucosa).⁶

CONCLUSION

Fibromas are benign tumor of fibrous connective tissue. The present histopathological features depicts the characteristic pattern of fibroma. Clinical findings, as well as radiographic and histopathologic appearance in combination with surgical findings are though vital, but it further requires more studies to evaluate the true nature of such fibromatous lesions.

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