# True Fibroma on the Palate: A Unique Case

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## **ABSTRACT**

Benign fibrous overgrowths are often found in the oral cavity. Majority of the fibromas occurring in the oral cavity are reactive in nature and represent inflammatory hyperplasia of fibrous connective tissue in response to local irritation or trauma rather than being a true neoplasm. True fibroma of the oral mucosa is an extremely rare benign neoplasm, only a few cases have been reported in the literature so far. Here, we report an exceptional case of relatively large true fibroma on the palate in an 80-year-old male patient, which was mimicking a hemangioma, not reported earlier in the literature.

**Keywords:** Benign neoplasm, Oral mucosa, Palate, True fibroma.

**How to cite this article:** Jain M. True Fibroma on the Palate: A Unique Case. Int J Experiment Dent Sci 2016;5(1):69-71.

Source of support: Nil
Conflict of interest: None

## INTRODUCTION

True fibroma is a benign neoplasm of fibroblastic origin, rare in the oral cavity. It was first reported in 1846 as fibrous polyp and polypus.<sup>2</sup> It is also called by some other terms, such as irritational fibroma, peripheral fibroma, traumatic fibroma, fibrous nodule, fibroepithelial polyp, or focal fibrous hyperplasia. Fibroma is the submucosal reactive lesion in the oral cavity caused by traumatic irritants, such as foreign bodies, calculi, chronic biting, overhanging margins restoration, sharp bony spicules, and dental appliances.<sup>3</sup> Lesion presents characteristically dome-shaped, painless with a sessile or pedunculated base, smooth surface and contour, firm and rubbery in consistency, pinkish in color similar to the surrounding mucosa. Treatment of fibroma involves complete surgical excision. Here, we report a rare case of a relatively large true fibroma of the palate in an 80-year-old male patient, discussing the clinical features, radiological features, and histopathological

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features that distinguish this lesion from other similar oral mucosal lesions.

## **CASE REPORT**

An 80-year-old male patient reported to the Department of Oral Medicine and Radiology with the chief complaint of soft mass in the palate since 20 years. The growth was small initially but it gradually increased over a period of time to reach the present size. It was interfering with chewing and felt uncomfortable. Patient was edentulous during the last 10 years and there was no history of trauma. Medical history was noncontributory. All vital signs were within normal limits. Extraoral examination was unremarkable. Intraorally, on inspection, a solitary, oval-shaped, deep reddish purple color, lobulated, smooth exophytic mass was found, about  $5 \times 4$  cm in diameter, present in the middle of the palate, which was extending anteriorly from rugae and posteriorly up to the region of third molar (Fig. 1). On palpation, the mass was asymptomatic, firm with pedunculated base. Bleeding on provocation and blanching test was positive. Based on history and clinical appearance of the lesion, a provisional diagnosis of hemangioma was hypothesized. The differential diagnosis of the lesion should include peripheral giant cell granuloma, benign minor salivary gland tumor, neurofibroma, and irritational fibroma. The investigations included complete hemogram and intraoral radiograph. Routine hematological investigation values



Fig. 1: Intraoral photograph showing an oval-shaped, deep reddish purple color, lobulated, smooth exophytic mass measuring about  $5 \times 4$  cm in the middle of the palate



Fig. 2: Preoperative occlusal radiograph did not show any pathological bony change



Fig. 3: Excised specimen

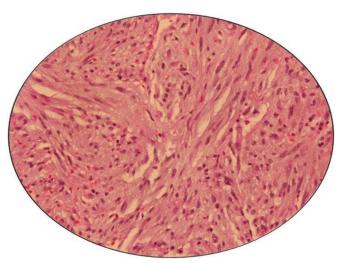


Fig. 4: Postoperative photograph after surgical excision

were also found to be within normal limits. No pathologic bony change was detected on occlusal view of intraoral radiograph (Fig. 2). Based on clinical and radiographic findings, a decision was made to perform an excisional biopsy by the electrosurgical unit under local anesthesia (Figs 3 and 4). Histopathological findings revealed that underlying connective tissue is fibrous with thick bands and interlacing collagen fibers interspersed with varying number of fibroblasts and fibrocytes covered by stratified squamous epithelium (Fig. 5). A diagnosis of fibroma was made on these microscopic findings. A state of good healing was evident at the follow-up of 2 weeks and no recurrent lesion has been detected for 1 year.

# DISCUSSION

True fibroma is an extremely rare benign neoplastic proliferation of fibrous connective tissue origin. Barker and Lucas<sup>5</sup> were the first to establish the histological



**Fig. 5:** Photomicrograph of the lesion showing underlying connective tissue, which is fibrous with thick bands and interlacing collagen fibers interspersed with varying numbers of fibroblast and fibrocytes (hematoxylin and eosin stain; magnification  $40\times$ )

criteria in relation to two cases localized on the lip and palatal mucosa; since then only a few cases have been reported in the literature. Fibroma is usually seen in the 4th to 6th decades of life with female predominance. 2,6,7 But the present case has been reported in an 80-year-old male patient. Fibroma is an asymptomatic lesion most frequently found in the buccal mucosa. But in our case the lesion was occurring in the palate. Usually fibroma grows to a size of less than 1.5 cm in diameter; but in rare cases they grow to a size of more than 3 cm in diameter. In the present case its size was  $5 \times 4$  cm. Considering the size of the lesion Occlusal radiograph are advised in order to rule out bony destruction and determine the extent of the lesion amidst the surrounding structures. But no radiographical changes related to the bone were seen. Definitive diagnosis of fibroma can be made by



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histopathological examination of the excised lesion, which was done in this study and showed a parakeratinized stratified squamous epithelium displaying degenerative changes. The underlying connective tissue is fibrous with thick bands and interlacing collagen fibers interspersed with varying number of fibroblasts and fibrocytes. Surgical removal of fibroma is one of the most common procedures in the oral mucosa. Recurrence rate is rare and is believed to result from incomplete excision, failure to remove etiologic factors, or reinjury of the area. This case is unique because after analyzing history and clinical appearance, diagnosis of lesion was considered a hemangioma, which is the common diagnosis but the histopathology of the lesion revealed true fibroma, which is one of the rarest diagnosis at this location.

#### CONCLUSION

True fibroma of relatively larger size is extremely rare in oral mucosa. This finding was confirmed from the histopathological examination, which can be considered an excellent procedure for its reliability in confirming the definitive diagnosis. From the present case report, it is concluded that such kinds of cases need to be reported as it highlights the importance of keeping the rarities in mind along with common lesions while making a diagnosis.

Dentistry is varying with induction of modern science to practice dentistry.  $^{10}$ 

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