# Fibroepithelial Polyp with Sebaceous Hyperplasia: A Case Report

#### Abstract

Fibro epithelial Polyp (FEP) is a polypoid outgrowth of epidermis and dermal fibro vascular tissue. This polyp is most commonly found in oral cavity, neck and axilla, though any skin fold may be affected like groin area. We describe a case of a 25-year-old male patient with a growth over the anterior rugae region of hard palate since 3 years. Based on histological appearance, diagnosis of sebaceous gland hyperplasia in fibroepithelial polyp was given which itself is a rare entity, and in our case, it was encountered at the rarest of sites.

Keywords: Fibroma, Polyp, sebaceous gland hyperplasia

### Introduction

The oral cavity is a dynamic site being exposed to various external and internal stimuli, resulting in a myriad of diseases, from developmental to reactive and neoplastic. Fibroma of the oral mucosa is an inflammatory hyperplastic lesion of the connective tissue and is most commonly seen in older adults but can occur at any age, with a prevalence of 1-2%.<sup>[1]</sup>

Daley *et al.* suggested the term "focal fibrous hyperplasia" (FFH), which implies a reactive tissue response therefore preferable than the term "fibroma." It is also known as irritation fibroma (IF)/traumatic fibroma/ FFH/fibrous nodule/fibro-epithelial polyp.<sup>[2]</sup>

Cooke described all the pedunculated swelling arising from a mucosal surface as "polyp" (fibro-epithelial polyp), where maximum number of lesions occurred on the mucosa in the line of occlusion, and the entire pedunculated and sessile lesion in the gingival as "epulides" (fibrous epulides), which commonly occurred in the maxillary anterior region.<sup>[3]</sup>

Sebaceous adenoma and sebaceous gland hyperplasia (SGH) are rarely diagnosed intraorally,<sup>[4]</sup> being more frequent on the face of elderly patients with a predilection for forehead and scalp. However, intraoral sebaceous glands are quite common and usually found on the vermilion border of the upper lip and on the buccal mucosa<sup>[5]</sup> as Fordyce's spots. Sebaceous SGH is diagnosed based on the following criteria as suggested by Daley.<sup>[6]</sup>

- 1. A clinically distinct lesion requiring biopsy for definitive diagnosis
- 2. Histological presence of well-differentiated sebaceous glands that exhibits no fewer than 15 lobules per gland.

In this article we present a rare case of fibro-epithelial polyp showing sebaceous gland hyperplasia on the anterior region of hard palate.

### **Case Report**

A 25-year-old male patient reported with a growth over the anterior rugae region of hard palate present since 3 years. The growth was smooth and shiny, pedunculated, in appearance and slightly pale in color as compared to the normal mucosa measuring 5 cm  $\times$  2 cm in dimension and situated in the region of anterior hard palate [Figure 1].

histological On examination. hyperkeratinized stratified squamous epithelium overlying dense connective tissue stroma was reported. The epithelium showed areas of keratin plugging along with collection of sebaceous glands in subepithelial regions. These lobules contained undifferentiated cells in the periphery and mature sebocytes with clear cytoplasm in the centre. Sheets, islands and cystic spaces of squamous epithelial cells and sebaceous cells were seen, without any cellular atypia or mitosis [Figure 2]. Underlying connective tissue was dense fibrous and collagenous containing

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Figure 1: Soft, cylindrical growth, 5 cm × 2 cm in dimension, pedunculated, situated near nasopalatine foramen

numerous blood vessels along with areas of adipose tissue. Based on histological appearance, diagnosis of fibroepithelial hyperplasia with ectopic sebaceous gland and keratotic plugging was given.

### Discussion

SGH is rarely diagnosed intraorally. Till date, only 26 cases of SGH have been reported in the English language literature. Ectopic sebaceous glands are found in 80%–85% of adults in the buccal mucosa and lip and less often on the palate, gingivae, and tongue.<sup>[7]</sup> There are many theories regarding its etiology. One of these theories claimed that FEP develops secondary to a focal loss of elastic tissue. Another theory suggests that these polyps are a collection of several tissues that represents a hamartoma with a slow rate of growth or fibroma that exhibit the feature of a benign lesion.<sup>[8]</sup>

The mean age of occurrence is in the third decade of life with a slight female predilection. The present case was a 25-year-old male with a cylindrical polyp hanging from the anterior region of hard palate present since 3 years. SGH originates in the sebaceous follicles.<sup>[9]</sup>

Sebaceous gland lobules may arise from the inclusion of ectoderm in the oral cavity during the fusion of the maxillary and mandibular processes during the development of the embryo.<sup>[10]</sup> Microscopically, SGH originates from a single enlarged sebaceous gland composed of numerous lobules grouped from centrally located wide sebaceous duct. Similar histological picture was seen in the present case with keratin plugging of the ductal opening.

Sebaceous glands are composed of lobules containing a peripheral single or double layer of germinative flattened squamous cells, which proliferate and differentiate to the typical mature, clear sebaceous cells. The secretory product of sebaceous glands is called sebum.<sup>[11,12]</sup> Sebum



Figure 2: An area of keratotic plugging along with invaginating hyperplastic epithelium, collection of sebaceous glands in the subepithelial region with multiple lobules seen to be opening into a single duct

comprises a mixture of lipids, including triglycerides, waxes, squalene, and cholesterol and its esters. Sebum may have weak antibacterial and antifungal properties and can be demonstrated using stain like Sudan Black B.<sup>[13]</sup>

### Conclusion

The inflammatory hyperplastic lesions are difficult to diagnose since all lesions exhibit overlapping clinical features. Their presence may obstruct the insertion of an oral prosthesis, cause difficulty with mastication or speech, or even cause bleeding and ulceration following a secondary infection. Therefore these lesions must be surgically excised. The present article represents a rare case of fibroepithelial polyp showing sebaceous gland hyperplasia.

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#### **Conflicts of interest**

There are no conflicts of interest.

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