

Case Report

Fibro-Epithelial Polyp: A Case Report

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ABSTRACT:

The most prevalent epithelial benign lesion in the oral cavity is a fibro-epithelial polyp. This type of polyp is a painless, sessile, or pedunculated knob-like growth that has a mesodermal origin. It can be pink, red, or white in color. Fibro-epithelial polyps are frequently seen on the buccal mucosa, gingiva, lips or tongue. Fibro-epithelial polyps are hyperplastic, inflammatory lesions seen in reaction to long-term discomfort from uneven denture margins, sharp teeth edges, and calculus or repairs that linger over. Rarely does a polyp like this develop before the fourth decade of life, and its ubiquity is not gender-specific. This paper presents a case of fibro-epithelial polyp seen on the lower labial mucosa which was managed by surgical intervention.

Keywords: Fibroepithelial Hyperplasia, Fibro-Epithelial Polyp, Fibroma

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INTRODUCTION

The oral cavity is a dynamic area that is continuously exposed to a wide range of internal and external stimuli, which can lead to a variety of disorders, ranging from reactive to developmental and neoplastic. Oral mucosal fibroma is the most frequent benign oral cavity neoplasm, and the source of this type of fibroma is fibrous connective tissues. Most frequently, an oral mucosal fibroma is seen, although it may happen at any age, it is more common in elderly people. Fibromas are hyperplastic, inflammatory lesions tear in the fibrous tissue. Fibromas in the oral cavity are typically the result of prolonged difficulty from things like biting one's lips

or cheeks, uneven denture borders, overhanging restorations, calculus, sharp tooth edges, or other oral prosthesis. The healed result of an inflammatory hyperplastic lesion is fibrous hyperplasia. This regional reaction to an organ enlarges as a consequence of tissue injury or tissue as a result of the constituent cells hyperplasia. A polypoid development of the epidermis and dermal fibrovascular tissue is called a fibroepithelial polyp (FEP). Though any skin fold, such as the groin area, may be impacted, the oral cavity, neck, and axilla are the most prevalent locations for this polyp. These polyps seldom appear before the fourth decade of life and are typically less than 5 cm in size.

CASE REPORT



Figure 1: Showing the swelling on lower labial mucosa

A 16-year-old male patient came to department of Oral Medicine & Radiology, St. Joseph Dental college with a chief complaint of swelling in the lower lip region in the past 6 months. Patient gives history of lip bite 10 months ago, no history of pain, no history of increase in size of swelling. During an intraoral examination, on inspection a solitary swelling is

observed on the lower labial mucosa of size approximately 0.5 x 0.5 cm involving the mid region of lower labial mucosa. When the swelling is palpated, it seems non-tender, sessile, firm in consistency, smooth in texture, non-compressible, non-reducible, there is no visible pus or blood discharge. The slip sign is also negative.

Test Name	Result	Units	Reference Range
DEPARTMENT OF HAEMATOLOGY			
COMPLETE BLOOD PICTURE			
Hemoglobin	11.4	gm%	Male : 12.0 – 18.0 gm % Female: 11.0 – 16.0 gm %
RBC count	4.29	mill/cumm	3.5 - 5.5 mill/cumm
PCV	33.5	PERCENTAGE	40-50%
MCV	78.2	FENTO/LITERS	80-100FL
MCH	26.7	PICO/GRAMS	27-32Pg
MCHC	34.1	GRAM/DESI LITERS	32-34g/dl
RDW	14.6	PERCENTAGE	11.6-14.0%
Platelet Count	2.59	Laks /cumm	1.5—4.5Lakh/cumm
Total WBC count	5.82	cumm	4,000 – 11,000/cumm
DIFFERENTIAL COUNT			
Neutrophils	51	%	55 – 70%
Lymphocytes	41	%	25 – 40%
Eosinophils	02	%	01 - 08%
Monocytes	06	%	02 – 06%
Basophils	00	%	00 – 01%
BT CT			
Bleeding Time	1 min 14 sec		1 - 3 minutes
Clotting Time	3 MIN 30 SEC		3 - 7 minutes
DEPARTMENT OF IMMUNOLOGY			
HIV			
HIV I	NON REACTIVE		
HIV II	NON REACTIVE		
HBs Ag			
HBs Ag	NEGATIVE		

Figure 2: Blood Investigation

Clinical diagnosis was given as Traumatic fibroma involving the lower labial mucosa and the differential diagnosis can be fibro-epithelial polyp, mucocele, irritational fibroma. Treatment plan was discussed with the patient and his father, suggested to have an excisional biopsy of the lesion, then advised for blood investigations which includes complete blood picture, clotting time, bleeding time, tridot & HbsAg.



Figure 3: Excisional biopsy done & suture's placed



Figure 4: After 1 month of follow-up

Under local anesthesia, an excisional biopsy was performed; sutures were placed and sent to the histopathology laboratory. Patient was advised to use the medication for 3 days and recalled after 1 week for suture removal. After 1 month, patient came for follow up.

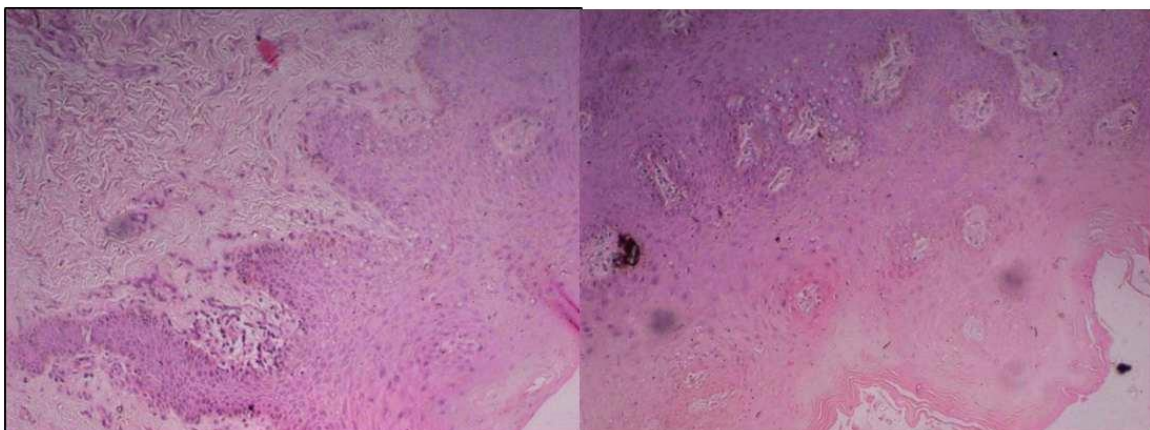


Figure 5: Histopathological Pictures

Histopathology report reveals that the underlying connective tissue shows localized areas of endothelial cell proliferation. Connective tissue fibrosis with few fibroblasts, dense chronic inflammatory infiltrate, and minor salivary glands is also evident and histopathological diagnosis given as FIBROEPITHELIAL POLYP.

MACROSCOPIC FEATURES:

Received multiple bits of soft tissues, irregular in shape, creamish white in color, soft in consistency, with irregular borders.

HISTOPATHOLOGIC FEATURES:

The given H&E stained section shows surface epithelium with hyperparakeratosis. The underlying connective tissue shows localized areas of endothelial cell proliferation. Connective tissue fibrosis with few fibroblasts, dense chronic inflammatory infiltrate, minor salivary glands are also evident. These features are suggestive of fibroepithelial polyp.

HISTOPATHOLOGICAL DIAGNOSIS: FIBROEPITHELIAL POLYP

Figure 6: Histopathology Report

DISCUSSION

Fibro-epithelial polyps, or fibrous hyperplasia, are the most common benign soft tissue tumors in the oral cavity. A submucosal fibrous tumor known as a fibroma arises from a long-term healing process that involves the creation of scars and granulation tissue. Oral soft tissue fibrous growths are rather common and represent a broad spectrum of reactive and neoplastic disorders. Traditionally, fibroepithelial polyps of the oral cavity have been thought to occur after trauma to the oral mucosa. Multiple polyps of the oral mucosa were described as early as 1881 by March, Cooke called all the pedunculated swelling 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 gingiva as "epulides" (fibrous epulides). Fibro epithelial hyperplasia's are reactive/ inflammatory conditions and they give rise to variety of lesions named according to their clinical presentation. A fibro epithelial polyp does not increase the risk of malignancy. Recurrence rates are modest, and the primary reason of recurrence is repeated trauma at the lesionsite. Other treatment options include electrocautery, a Nd: YAG laser, cryosurgery, intralesional injection of corticosteroids or ethanol, and sodium tetradecyl sulfate scrub therapy, in addition to surgery. To differentiate a fibro-epithelial polyp from a malignant tumor, however, one must first do a histological examination of the tissue because the polyps resemble genuine fibromas in terms of their clinical characteristics. A fibro-epithelial polyp is diagnosed based on the location. If swelling is located on the tongue, the possibility of a neurofibroma, neurilemmoma, or granular cell tumor must be considered. Swelling on the lower lip or buccal mucosa may be a mucocele, lipoma, or salivary gland tumor. Another important distinguishing feature is that a traumatic fibroma exhibits two different patterns of collagen arrangement, a radiating pattern and a circular pattern,

depending on the amount of irritation and the site of the lesion.

CONCLUSION

Fibro epithelial polyps are benign, mesenchymal lesions which usually occur after fourth decade of life. These polyps are commonly found in oral cavity, genitourinary area and are usually less than 5 cm in diameter. In such a case, they can mimic a malignant growth. Excisional Biopsy with primary closure is the diagnostic as well therapeutic approach in such case. Because all inflammatory hyperplastic lesions have similar clinical characteristics, diagnosing one might be challenging for medical professionals. Their presence may make it more difficult to eat or speak, impede the placement of an oral prosthesis, or possibly result in bleeding and ulceration after a subsequent infection.

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