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Case Report

Fibroepithelial Polyp in the Buccal Mucosa of a Libyan Patient: Case Report and Literature Review

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ABSTRACT

Fibroepithelial polyp is one of the benign lesions of oral cavity which occurs as inflammatory response to local irritation or trauma. Clinically, patients with fibroepithelial polyps present as a painless pedunculated or sessile swelling. They can be treated by simple surgical excision or by other methods such as electrocautery or laser ablation. This is case report of a 48-year-old female who reported to the dental clinic with a soft to firm, painless pedunculated swelling in the left buccal mucosa. This patient underwent an excisional biopsy under local anesthesia. Histological examination confirmed the diagnosis of fibroepithelial polyp. In conclusion, fibroepithelial polyp should be kept as one of the differential diagnoses of benign soft tissue lesions of the oral cavity.

Keywords: Fibroepithelial, Oral cavity, Polyp, Benign

INTRODUCTION

Polyp and polyp-like lesions are commonly seen in the oral cavity due to various internal and external factors. A fibro epithelial polyp originates from connective tissue derived from the mesoderm. According to Cooke, any mucosal lesion that is pedunculated is termed a "polyp" (specifically a fibro-epithelial polyp), while similar lesions found in the gingiva are known as "epulides".[1]

Fibroepithelial polyps are often a response to sub-mucosal trauma caused by sharp teeth, poorly fitting dentures, or food debri.[2] These lesions can be found in individuals of different ages, with the highest occurrence noted in the 31 to 40 age group (10.54%), followed by those aged 51 to 60 (7.82%). They are more prevalent in females (29%) compared to males (15%).[3]

Clinically, Fibroepithelial polyps are commonly seen at the buccal mucosa, tongue, labial mucosa and lips, where the highest concentration of lesions was observed on the mucosa along the line of occlusion.[4] These lesions may present as either pedunculated or sessile and are typically small, pink, and knob-like in appearance. Their texture can range from soft to firm, measuring just a few millimeters. While they are usually asymptomatic, larger lesions may lead to difficulties in speech and eating.[5]

Treatment options can vary from simple surgical excision to other methods like electrocautery, laser therapy, cryosurgery, or intra-lesional injections of ethanol or corticosteroids, including sclerotherapy using sodium tetradecyl sulfat.[6] This report discusses a case of a fibro epithelial polyp located on the buccal mucosa, emphasizing its clinical features, histopathological evaluation, and treatment strategies. Patients approved the written

informed consent for the use of her data and images in scientific research.

CASE HISTORY

A 48-year-old female patient reported to the Department of Oral Medicine, oral diagnosis and oral pathology, oral radiology department with a complaint of asymptomatic intra oral swelling in the left buccal commissure area of the mouth from the past 3 years. It was seen by specialist in oral medicine department. The patient's history revealed a habit of chronic cheek biting during mastication many years ago. The lesion started as a small nodule and slowly

Grew reaching to maximum size over the last months. However, no change in size was noted over the last few months.

An oral examination revealed a solitary, round-shaped, well-defined, and pedunculated swelling was noted on the left buccal commissure area along the line of occlusion. The color of the swelling resembled normal mucosa measured about 1.5×2 cm in diameter. On palpation, the painless swelling had a firm consistency, smooth and shiny in appearance (Fig.1a). No other signs and symptoms were detected .

Based on our clinical assessment, we concluded that the fibroepithelial polyp was a reactive response to trauma.

TREATMENT

An excisional biopsy was performed under local anesthesia with epinephrine 1:80,000 dilutions which was administered as an infiltration around the lesion. Using 15 no blade, surgical excision of the lesions was done (Fig.1b) and the wound was sutured (Fig.1c). Excised mass was sent for histopathological examination (Fig.1d). Macroscopically, the excised mass appeared to be fibrous in nature consist from interlacing collagen bundles, few vascular spaces and adipose tissue. The lesion is covered by keratinized epithelium of variable thickness (Fig.1e). Therefore, histopathological findings confirmed the diagnosis of a fibro-epithelial polyp. During subsequent follow-up examinations, there were no indications of recurrence or any remaining tumor tissue (Fig.1f).

Figure -1: a) Pre-operative intraoral View for Fibro epithelial polyp at buccal mucosa at occlusal level. b) Post-surgical wound. c) Post-surgical wound was sutured. d) Excised mass. e) Histopathological Image showing interlacing collagen bundles, few vascular spaces and adipose tissue covered by keratinized epithelium f) Postoperative evaluation after 15 days

DISCUSSION

Fibroepithelial polyps develop as inflammatory hyperplastic lesions in response to ongoing irritation.[2] Their clinical features are not distinctive, which can complicate diagnosis due to overlap with various pathological conditions that exhibit similar characteristics. It is essential to differentiate these polyps from other lesions such as neurofibromas, peripheral ossifying fibromas, pyogenic granulomas, peripheral giant cell granulomas, papillomas, and lipoma.[7] Consequently, submitting the excised tissue for histological examination is important, as other conditions may mimic the clinical appearance of a fibroepithelial polyp.[8]

For instance, a peripheral ossifying fibroma typically appears exclusively on the gingiva and

originates from the periodontal ligament. Its stiffer consistency, often due to calcified components within the stroma, helps distinguish it from a fibroepithelial polyp. Radiographically, this type of fibroma may show scattered radiopaque calcifications in its central region, further aiding in differential diagnosis.[9]

Similarly, peripheral giant cell granulomas generally present as soft, purplish-red nodules that contain multinucleated giant cells, surrounded by mononuclear stromal cells and extravasated red blood cells.[10] This distinct presentation emphasizes the need for careful evaluation to differentiate fibroepithelial polyps from other lesions, including papillomas. Papillomas are benign neoplasms composed of squamous epithelial cells that demonstrate marked acanthosis, hyperkeratosis, and a papillary growth pattern. In contrast, fibroepithelial polyps feature a fibrous stroma topped with a non-papillary layer of hyperplastic squamous epithelium, highlighting their unique histological structure.[7]

Furthermore, it is important to consider lipomas in the differential diagnosis, as they present as soft, pale-yellow lesions that feel slippery to the touch. Composed of mature adipocytes

And typically encased in a thin fibrous connective tissue capsule, lipomas differ significantly from fibroepithelial polyps, reinforcing the importance of accurate diagnosis.[11,12]

Hisopathological difference of 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. An irritation fibroma with a radiating pattern occurs at the sites that are immobile in nature e.g. The hard palate and with more severe trauma while An irritation fibroma with a circular pattern is associated with sites that are flexible in nature e.g. The buccal mucosa, cheek and with less severe trauma, but a true fibroma exhibits neither of those patterns.[13]

While fibroepithelial polyps do not pose a risk for malignancy, submitting the excised tissue for microscopic evaluation remains crucial. This step is necessary because other benign or malignant tumors might present similarly, potentially leading to misdiagnosis. Additionally, managing the source of irritation is vital; if the lesion is treated without addressing the underlying cause, recurrence is likely at the site of irritation, underscoring the need for a comprehensive approach to treatment.[7]

CONCLUSIONS

Fibroepithelial polyp, even though is benign growth with a favorable prognosis, should be kept as a differential diagnosis of soft tissue lesions of the oral cavity. It is managed by surgical excision and diagnosis is confirmed by histopathological examination.

REFERENCES

1. Rep A.C. The fibrous epulis and the fibro epithelial polyp: Their histogenesis and natural history. Br Dent J. 1952;93:305–9.

2. Sahoo SR, Authority S, Plant IS, Hospital B. Fibroepithelial Polyp of the Buccal Mucosa : a case report. 2023;3(2):41–2.

3. Bataineh, A., Al-Dwairi ZN. A survey of localized lesions of oral tissues: a clinicopathological study. J Contemp Dent Pr. 2005;6(3):30–9.

4. Lee KW. The fibrous epulis and related lesions. Granuloma pyogenicum,'Pregnancy tumour', fibro-epithelial polyp and calcifying fibroblastic granuloma. A clinico-pathological study. Periodontics, 1968;6(6):277–92.

5. Rajeesh Mohammed PK, Choudhury BK, Dalai RP R V. Fibroepithelial polyp with sebaceous hyperplasia: A case report. Indian J Med Paediatr Oncol. 2017;38:404–6.

6. Mishra A PR. Fibro-epithelial polyps in children: A report of two cases with a literature review. Intractable Rare Dis Res. 2016;5:129-32.

7. Pittala R, Akhil R. Self Inflicted Injury of Oral Mucosa : A Case Report and Review of Fibro Epithelial Polyp. 2022;9(11):1–3.

8. Halim, D. S., Pohchi, A., Pang EE. The prevalence of fibroma in oral mucosa among patient attending USM dental clinic year 2006-2010. Indones J Dent Res. 2010;1(1):61–6.

9. Barot VJ, Chandran S VS. Peripheral ossifying fibroma: A case report. J Indian Soc Periodontol. 2013;17(6):819–22.

10. Tandon PN, Gupta SK, Gupta DS, Jurel SK SA. Peripheral giant cell granuloma. Contemp Clin Dent. 2012;3(1):S118–21.

11. Jain M. True Fibroma on the Palate: A Unique Case. Int J Exp Dent Sci. 2016;5(1):69–71.

12. Anisa, M. K.; Nayana, V. G.; Somayaji, K. S. G.; Saimanohar, S.; Sheetal R. Fibroepithelial Polyp from Retromolar Trigone. Arch Med Heal Sci. 2019;7(1):87–9.

13. Patil VS RS. Importance of Histopathology in Diagnosis of Large Fibroepithelial Polyp in Oral Cavity: A Case Report. Ann Clin Case Rep. 2018;3:1489.

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