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Case Report
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Longstanding, Unusual Site and Giant Fibroepithelial Polyp: A Rare Case Report

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ABSTRACT

Localized hyperplastic lesions of oral mucosa are usually responses to chronic inflammation. An important feature of chronic inflammation is that the process of inflammation and repair occurs simultaneously and the production of granulation tissue is one of the hallmarks of the disease process. The present case is a large fibroepithelial polyp with a history of about 25 years, located in the lower left retro-molar region that caused aesthetic and functional problems. Therefore it demonstrates the need for awareness and the role of surgical removal with histopathological evaluation as the size and a very long history may mimic a neoplastic lesion. .

Keywords - *Localized hyperplastic lesions; Fibroepithelial polyp; Surgical removal; Histopathology evaluation..*

INTRODUCTION

Localized hyperplastic lesions of the oral soft tissues are not uncommon and include a diverse group that range from developmental, reactive, inflammatory and neoplastic lesions.[1,2]

Most hyperplasias of the oral mucosa represent the exuberant production of granulation tissue in chronic inflammatory reactions. Although several named lesions are distinguished either on clinical or histopathological grounds, it is important that many are variations of the same basic disease process.[3]

These lesions may present clinically as fibrous epulis, pyogenic granuloma, pregnancy epulis, peripheral giant cell granuloma, fibroepithelial polyp, denture irritation hyperplasia, papillary hyperplasia of palate and peripheral ossifying fibroma which can arise anywhere in the oral mucosa and presented clinically as a localized tumour-like enlargement but are hyperplastic and not neoplastic lesions.[4-9]

Fibroepithelial polyp is a common lesion occurring over a wide age range. It most frequently arises along the occlusal line of the lining mucosa of the cheek followed by lips and tongue and presented clinically as a firm, pink, painless pedunculated or sessile polypoid swelling which varies in size from a few millimeters to a centimeter or more in diameter. Fibroepithelial polyp is also one of the most common cutaneous lesions occuring on the skin of the neck, trunk or face and is also known as fibroma, representing a non-specific and benign growth pattern as opposed to a specific entity. In addition to the skin, fibroepithelial polyps infrequently occurs in the ureteropelvic system, genitals or bronchus.[3,10,11]

Case Report

A 65 year old male patient presented with the chief complaint of a large intra-oral swelling over 25 years. It started as a small painless swelling, gradually increasing to the present size. The swelling caused hampering and interference with his speech, mastication and aesthetics that led the patient to seek advice for a surgical removal.

Medical history was non contributory and OPG have excluded a central lesion that mayhave perforate the cortical plate and appeared clinically as a peripheral lesion. Intra-oral examination revealed a large oval pedunculated polypoid mass of about 3.5 cm long and 2.5cm in diameter located in the lower left retro-molar region.

The swelling had a smooth surface without any ulceration, and was pinkish in color with slightly white and red flecks. The surrounding tissue was normal and no palpable submandibular or cervical lymph nodes were detected.

The polypoid mass was firm in consistency, non-tender, non-reducible and the teeth in this region were missing (Figure 1).

Figure 1: Intra-oral view showing a pedunculated pinkish mass at the left retromolar region

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The patient was advised chlorohexidine mouth wash twice daily along with complete blood investigations. The results of all biochemical and complete blood tests were within the normal limits. Complete excision of the polyp was performed under topical and local anesthesia and then the area was sutured and hemostasis achieved. Antibiotics and analgesics were prescribed postoperatively (Figure 2).

Figure 2: Surgical excision of the lesion

Histopathological diagnosis was received within 10 days later which revealed a covering epithelium was supported by connective tissue core. The covering epithelium is stratified squamous in type that showed acanthosis in some areas, hyperkeratosis and elongation of rate ridges.

The connective tissue core composed of interlacing bundles of collagen fibers with scanty fibroblasts and chronic inflammatory cell infiltration. The histopathological features are in consistent with the diagnosis of fibroepithelial polyp.

Furthermore, there were no cellular atypia nor epithelial dysplastic changes seen in the covering epithelium (Figure 3).

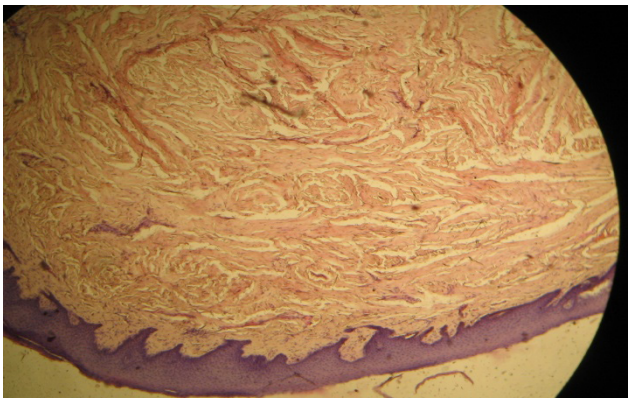

Figure 3: Microscopical feature of fibroepithelial polyp showed a covering epithelium supported by connective core consisting of bundles of collagen fibers.

DISCUSSION

Almost all lesions of the oral mucosa that are called fibromas are not true neoplasms but merely localized fibrous overgrowths occurring in response to chronic inflammation or chronic irritation. Therefore, many authors prefer the term fibroepithelial polyp or fibrous overgrowths.[12,13]

However, the term fibroepithelial polyp should not be confused with the term focal epithelial hyperplasia. Focal epithelial hyperplasia, or Heck's disease, is a rare disease originally described in native North Americans, Inuit and in some immunocompromised patients, which is characterized by multiple small elevated plaques of the oral mucosa.[3, 16, 17] Multiple polyps of oral mucosa were described as early as 1881 by March.[12] Cooke called all pedunculated swelling from the oral mucosal surface as polyp (fibroepithelial polyp), where the most number of polypoid lesions occurred on the mucosa in the line of occlusion and called the entire pedunculated and sessile lesions in the gingival as epulides (fibrous epulides).[15] Although the term is non-specific and literally means on the gum, by common usage it implies a localized chronic inflammatory hyperplasia of the gingival. The exception is the rare congenital epulis of newborn.[3] As the mucosa of the oral cavity is constantly subjected to internal and external irritation,so it is affected by a spectrum of lesions that range from developmental to reactive, inflammatory and neoplastic lesions. These lesions may present as localized or generalized enlargements.[2,5]

Clinically, these lesions often present diagnostic challenges because they usually have similar clinical features but possess distinct histopathological features. Epulides, such as fibrous epulis, pyogenic granuloma, pregnancy epulis and peripheral giant cell granuloma, present clinically as localized tumour-like gingival enlargements that mostly arise from interdental tissues due to irritation from subgingival plaque and calculus.[5] Some authors reported that apart from irritation of dental plaque and chronic inflammation, some drugs and certain hormones may also induce fibro-hyperplastic gingival overgrowths such as anti-epliptics (phenytoin), immunosuppressants (azathioprine, corticosteroids and cyclosporine), non-steroidal anti-inflammatory drugs (ibuprofen), calcium canal blockers (nifedipine, verapamil) and sex hormones (osterogen, progesterone).[3] They are all more common in females than in males and about 80% of cases occur anterior to molar teeth, while over half of the lesions present in the intercanine area and they are slightly more common in the maxilla than the mandible. They may recur if local precipitating factors are not identified or if the lesion has not been completely excised in the first instance.[3] Histopathologically, fibroepithelial hyperplasias are reactive/inflammatory conditions that give rise to a variety of lesions named according to clinical and histological features.[4,7]

Fibrous epulis comprise of varying amounts of richly cellular fibroblastic granulation tissue and interlacing bundles of mature collagen fibers whilst vascular epulides (pyogenic granuloma and pregnancy epulis) are characterized by vascular proliferation, peripheral giant cell granuloma by focal collection of multinucleated giant cells. Fibroepithelial polyps are characterized by a core of dense, relatively avascular and acellular fibrous tissue which has scar-like quality with thick interlacing bundles of collagen fibers and, when a fibroepithlial poly occurs in the palate under a denture, it becomes flattened and appears as a leaf-like structure but histologically has the same features.[3,5]

CONCLUSION

Because the condition described here was of both epithelial and connective tissue origin, chances that it may transform into neoplasia were quite high. However, the histopathological features that we observed in this case were in consistent with a reactive hyperplasia and there were no cellular atypia or epithelial dysplastic changes despite the long duration of about 25 years.

This case report supports the idea that the fibroepithelial polyp arises as result of a reactive hyperplasia due to the connective tissue response of varied intensities to irritation from the dental plaque deposition and the process of inflammation and repair.

The histopathological examination of the biopsy has helped in the treatment planning for the patient and prevents the recurrence of these lesions.

REFERENCES

1. Cotran R, Kumar V and Collins T (2012) Robbins pathologic basis of disease, Chapter **16**, 8th edn., W.B Saunders, p.741.
2. Effiom OA, Adeyemo WL and Soyele OO (2011) Focal reactive lesions of the gingiva: An analysis of 314 cases at a tertiary health institution in *Nigerian Medical journal*. **52**, 35-40
3. Soames JV and Southam JC (2007) Oral pathology, Chapter 8, 4th edn, p.103-107.
4. Kfir Y, Buchner A and Hansan LS (1980) Reactive lesions of the gingiva. A clinic-pathological study of 741 cases, *J Periodontal* **51**, 655-661.
5. Shafer, Hine and Levy (2007) Benign and malignant tumours of oral cavity. In: R. Rajendran, Shivapathasundram(ed) Shafer's Textbook of Oral Pathology. 5th edn. New Delhi, Elsevier, p.178-180.
6. Sonis ST, Fazio RC and Fang LST (1995) Principles and practice of oral medicine, 2nd edn. WB Saunders, Philadelphia, p. 416.
7. Regezi JA and Sciubba (2008) Connective tissue lesions. Oral pathology: Clinical pathlogic correlations. 5th edn. St. Lois, Saunders, Elsivier, p.155-178.
8. Rawi NH (2009) Localized reactive hyperplastic lesions of the gingiva: A clinic-pathological study of 636 lesions in Iraq, *Internet Journal of Science* **7**, 1-4.
9. Lee KW (1968) The fibrous epulis and related lesions. Granuloma pyogenicum, Pregnancy tumour, Fibroepithelial polyp and calcifying fibroblastic granuloma. A clinico-pathological study, *Periodontics* **6**, 277-292.
10. Lloyd S, Lloyd PB and Dhillon R (2001) Chondroid metaplasia in a fibroepithelial polyp of the tongue, *Journal of Laryngology and Otology* **115**(8), 681-682.
11. Amin PB and Baciewicz F (2009) Benign fibroepithelial poly arising in the bronchus A case report and review of literature, *Archives of surgery* **144**(11), 1080-1083,
12. Tyldesley WR (1974) Oral medicine for the dental practitioner. Inflammatory overgrowths and neoplasms, *Br Den J* **136**, 111-16.
13. Daley TD, Wysocki GP, Wyscoki PD and Wyscoki DM (1990) The major epulides: Clinico-pathological correlations, *J Can Den Assoc*. **56**, 627-30.
14. Gustafson BA and Greenspan JS (1974) Multiple polypoid conditions of oral mucosa, *British J Oral Surgery* 91-95.
15. Cooke BED (1952) The fibrous epulis and the fibroepithelial polyp: their histogenesis and natural history, *Br Dent J* **93**, 305-309.
16. Madhusudan AS. Santosh G and Sowmya GV (2011) Focal fibrous hyperplasia. Report of two cases. *Int J Dent clinics* **3**, 111-112.
17. Mathur LK, Bhalodi P and Manohar B (2010) A focal epithelial hyperplasia; A case report, *Int J Dent Clin* **2**, 56-57.