EXOPHYTIC AND REACTIVE LESIONS: REPORT OF THREE CASES

A Case Report

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ABSTRACT

The reactive lesions are relatively common in the oral cavity because of the frequency with which the tissues are injured. Oral exophytic lesions often have proven to be diagnostically challenging due to the varied clinical presentation. The proliferative activity of the reactive lesions is considered to be initiated by local irritants. The elimination of local irritants and proper dental replacement may contribute to the reduction of these lesions. Careful clinical interpretation with a better histological understanding of exophytic lesions may ease the diagnosis from the differential diagnosis panel.

Keywords: reactive lesion, exophytic lesion, traumatic fibroma, pyogenic granuloma, epulis fissuratum.

INTRODUCTION:

Lesions in the oral cavity generally present as ulcerations, red and white lesions, pigmentations, and exophytic lesions. Clinical classification of oral lesions is of great importance in the diagnostic process. There are several underlying mechanisms responsible for oral exophytic lesions such as hypertrophy, hyperplasia, neoplasia, and pooling of the fluid, which makes it difficult to approach such lesions clinically.[1] The term oral exophytic lesions represent any pathological growth that projects above the normal contours of the oral surface epithelium.[2] Exophytic lesions can be classified according to their surface texture (smooth and rough), base (pedunculated & sessile), shape (nodular, and dome shaped), and consistency (soft, cheesy, rubbery, firm and bony hard)[1]

Reactive lesions are tumor-like hyperplasias which show a response to a low-grade irritation or injury, such as chewing, food impaction, calculus, iatrogenic injuries such as broken teeth, overhanging dental restorations and extended flanges of denture.[3] The clinical appearance of reactive lesions is very similar to that of neoplastic proliferations.[4]

CASE REPORT:

CASE REPORT 1

A 60 years old male, Hindu patient residing at Nandasan belonging to lower socio-economic class, came to oral medicine and radiology department with the chief complain of broken, ill fitting denture and the growth around the flanges.

Patient had undergone complete denture before 4 years and that cracked before a year, then he had undergone a new denture before a year but that denture was not accommodated, so he wore cracked denture for a year but now as it was completely broken so patient consulted our OPD. On examination of denture, the upper denture had been broken in two halves from middle.

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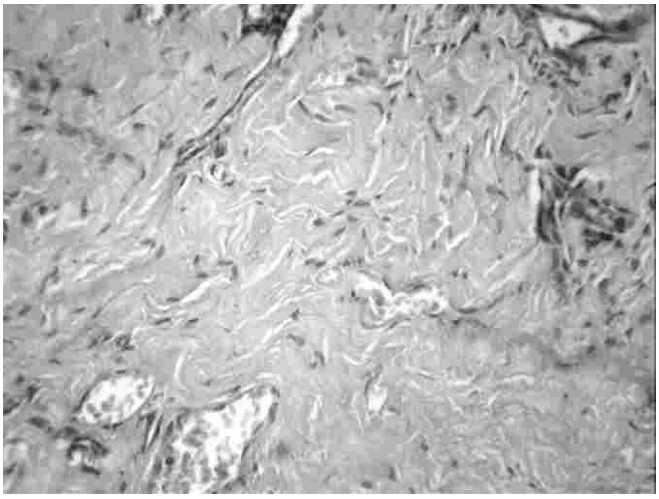
On intraoral inspection, small multinodular growth was present on the upper labial vestibule, left side of the labial frenum. The color of the growth was same as the surrounding. Irregular in shape, sessile and total size approximately 10-12 mm. There is no sign of bleeding or pus discharge.

On intraoral palpation, the growth was irregular in shape, sessile, firm and non-tender. There was noble eding and pus discharge on manipulation.

Provisional diagnosis of epulis fissuratum on the upper left labial vestibule was considered as the lesion was approximating the flanges of broken denture.

The treatment plan was outlined by complete removal of the lesion by means of laser surgery, with a minimally invasive approach. The excised tissue sent for the histopathological report.



The histopathology showed parakeratinized stratified squamous epithelium. Underlying connective tissue showed collagen fibers, fibroblast, RBCs filled dilated blood vessels and extravasated RBCs.

Followup after 15 days showed complete healing of the lesion so patient was advised for construction of new set of dentures.

CASE REPORT 2

A 29 years old male, Hindu patient residing at Sattadhar belonging to lower socio-economic class, came to oral medicine and radiology department with the chief complain of pain on the left buccal mucosa due to cheek biting for 2-3 months. Patient had habit of Gutkha with tobacco chewing 2-3 packets per day and smoking bidi i.e. 1-2 per day for last 15 years.

On intraoral examination, patient had reduced mouth opening up to 25 mm. Maxillary left third molar (28) was buccally erupted. The right and left buccal mucosa were blanched, the tongue movement was restricted and uvula was shrunken. Vertical fibrous bands were palpable on left buccal mucosa.

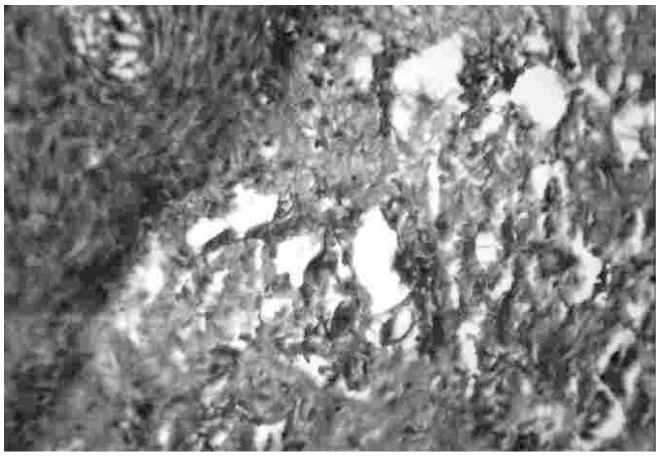
A single exophytic growth present on the left buccal mucosa opposite 28, extending inferosuperior from the level of occlusal plane of 28 to the depth of buccal vestibule. The growth was irregular in shape, reddish pink in color, size approximately 6-7 mm and no sign of bleeding and pus discharge was seen.

On palpation all inspectoryfindings were confirmed, the growth was soft to firm in consistency, non- tender and sessile. There was no sign of bleeding and pus discharge on manipulation.

Provisional diagnosis of oral submucous fibrosis (OSMF) and traumatic fibroma on left buccal mucosa were considered.

OPG was advised to the patient which revealed normal condylar process, TMJ, maxilla and maxillary sinus. All teeth were present except 38. The 18 was distoangular impacted, 28 was vertical and 48 was mesioangular impacted.

The lesion was excised surgically (excisional biopsy) and punch biopsy was taken from left buccal mucosa for the investigation of OSMF.



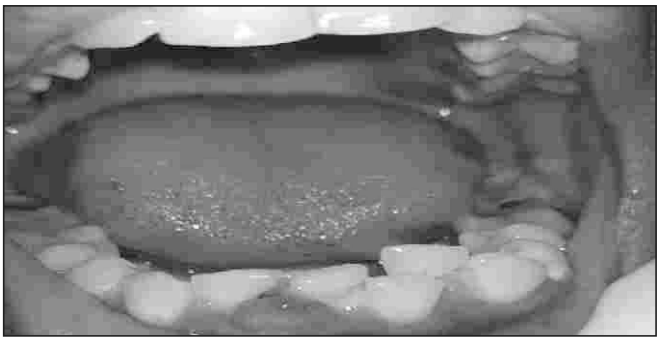
The histopathological examination of growth showed parakeratinizedstratified squamous epithelium with long anastomosing rete ridges. Underlying connective tissue showed collagen fibers, fibroblast, RBCs filled dilated blood vessels and extravasated RBCs. The histopathological examination of OSMF showed parakeratinizedatrophic stratified squamous epithelium exhibiting dysplastic changes like basilar hyperplasia, hyperchromatism, increased N:C ratio and abnormal mitotic figures. Underlying connective tissue showed large numbers of collagen fibers, chronic inflammatory cells and dilated blood vessels.

Final diagnosis was confirmed as fibroma on left buccal mucosa and OSMF with mild dysplasia.

Patient was advised to quit habit but he was not willing for extraction of 28 and for treatment of OSMF.

CASE REPORT 3

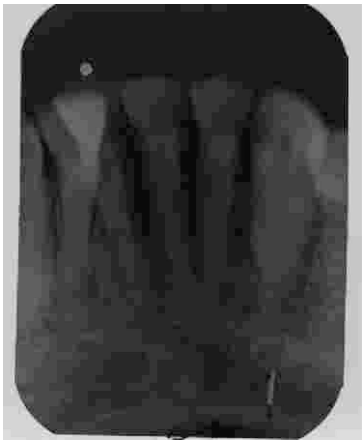
A 33 years old female, Hindu patient residing at Bhadaj belonging to lower socio-economic class, came to oral medicine and radiology department with the chief complain of growth at the lower front tooth region for last two months, gradually increasing in size.



On intraoral inspection, a single round of around 1 cm of diameter growth was present on the marginal gingiva between 41 & 42. It was pink in color with small bleeding spot on the surface. There was no sign of pus discharge.

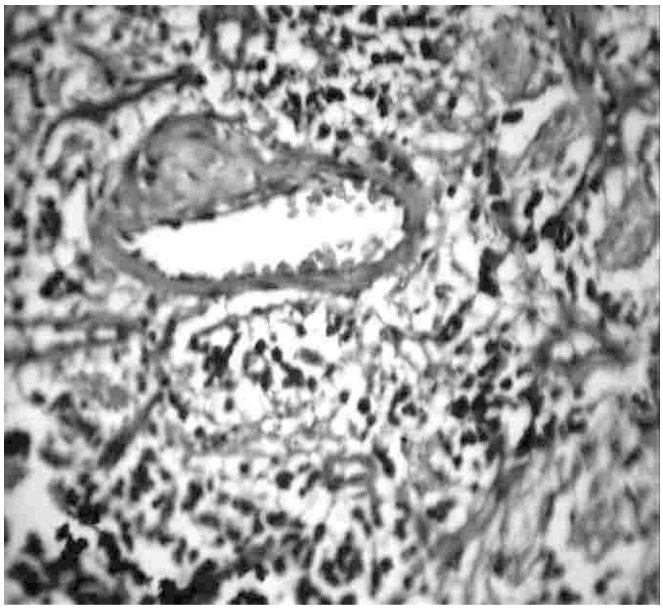
On palpation all inspectory findings were confirmed,the growth was pedunculated, non-tender, firm in consistency with no sign of bleeding or pus discharge on manipulation.

Provisional diagnosis of pyogenic granuloma was considered.



Intraoral periapical (IOPA) radiograph of lower anterior region was taken for examining any bone involvement. The lamina dura of all radiographed teeth were intact with mild interdental horizontal bone loss.

Oral prophylaxis (scaling) was completed and the lesion was excised up to and including the mucoperiosteum under local anesthesia.



Histopathological report revealed parakeratinized stratified squamous epithelium with long rete ridges. Underlying connective tissue shows large numbers of dilated blood vessels filled with RBCs, large number of chronic inflammatory cells and extravasated RBCs were also seen.

The diagnosis pyogenic granuloma was histologically confirmed.

Post-operative instructions were given and patient advised to maintain proper oral hygiene.

DISCUSSION:

The information on clinical character and histological origin of the exophytic growth are two important parameters in decision making. The clinical characters such as consistency of the lesion (soft/ hard), colour and pigmentation of the lesion, shape of the swelling, base of the exophytic growth, location of the lesion (anterior/ posterior jaw; labial/buccal mucosa). Whereas, the histological origin of the growth such as bony, dental, gingival or epithelium. The obtained information should be analyzed step by step for successful diagnosis of the lesion.[2]

Epulis fissuratum is a tumor-like hyperplasia of fibrous connective tissue, which develops in association with an ill-fitting\fractured denture. The anterior portion of the jaw is affected much more commonly than posterior areas.[10]

In this case we kept it as Epulis fissuratum and not papilloma, peripheral giant cell granuloma, mucocele because the site of lesion denotes the lesion is due to constant irritation of fractured denture. Epulis fissuratum is commonly seen in old age population and usually on the oral mucosa of the vestibular sulcus or the palatal region. When the hyperplastic tissue is composed of significant fibrosis, surgical excision is the treatment of choice.[5] In a recent case report, the use of laser surgery has been suggested to manage epulis fissuratum.

Fibroma, a benign neoplasm of fibroblastic origin, is reactive in nature and represents a reactive hyperplasia of fibrous connective tissue in response to local irritation or trauma rather than being a true neoplasm.[6]It develops frequently between second and fourth decades of life.[10]

In this case we kept it as traumatic fibroma and not papilloma, and carcinoma of buccal mucosa because clinically and radiographically shows distoangular 28 which is causing constant trauma to the left buccal mucosa. The lesion typically appears as pink growth which is smooth surfaced and similar in color to the surrounding mucosa.

Kinds of treatment for soft-tissue lesions include scalpel excision, electrical surgery, and laser surgery.[10]

Pyogenic granuloma, also known as lobular capillary hemangioma, is a benign vascular neoplasm. It results from inflammatory hyperplasia of mucosa or the skin.[7] They usually present as a red mass composed predominantly of hyperplastic granulation tissue in which capillaries are very prominent commonly seen arising from interdental gingiva.[8]It is commonly seen in middle age population and usually in females then males.

Other reactive gingival lesions are fibrous epulis, peripheral giant cell granuloma, fibroepithelial polyp, peripheral ossifying fibroma, and giant cell fibroma. That we can considered as differential diagnosis.

Here in this case, treatment of pyogenic granulomas conservative surgical excision is performed, and it is also achieved by cryosurgery, or laser.

CONCLUSION:

Exophytic mass in the oral cavity a clinician should consider some features such as surface texture, shape of base, color, and consistency in order to categorize the lesion.

Proper diagnosis, prevention, management, and treatment of these lesions are of chief importance. Treatment involves removal of the local irritants along with surgical excision of the lesion.

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