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A Taciturn Gingival Growth: Irritational Fibroma

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Abstract

Local reactive overgrowth is occurring in the oral cavity. It may occur due to trauma or due to hormal imbalance. The case represents the middle age women with trauma in lower right posterior of jaw. The overgrowth may afraid the patient of being malignancy.There are also two case report of firoma caused due to irritation.

Keywords: *Trauma, Hormonal, Trauma, Malignancy*

Introduction

Irritational fibroma or traumatic fibroma is one of the mainstream recognizable sub-mucosal response to trauma from teeth or dental prosthesis .It was first and foremost reported in 1846 as fibrous polyp and polypus,(1). It can also be called as Traumatic fibroma due to occurrence after the episode of trauma,(2). Confined reactive focal overgrowths are habitually found in the oral cavity. The causative etiology for this lesion can be endorsed to the local irritants like plaque, calculus, overhanging margins, trauma and dental appliances,(3,4) . The enormous widely held of this localized hyperplasia of the oral mucosa are considered to be unconsidered provocative overgrowths to a certain extent than neoplastic in nature,(5). Irritation Fibroma is the healed outcome of inflammatory hyperplatic lesions. Clinical appearance of the lesion is either pedunculated or sessile mass on any surface of the mucous membrane. Majorities of lesions are small measuring few millimeters. It occurs most commonly in 3-5 th decade of life. Most common site are gingiva and buccal mucosa but it can also been seen on tongue & palate. It is mostly painless ,(6). Mostly all fibromas represent reactive main fibrous overgrowths due to disturbance or limited irritation ,(7). Gingiva is a ordinary site for neoplastic or non neoplastic lesions. The non neoplastic lesions are more often than not inflammatory or represent a response to a number of kind of irritation or low down grade injury, (8). Conservative treatment followed by surgical excision is the treatment of choice. It do not have malignant budding and reappearance is chiefly as an outcome of disappointment to get rid of the irritation (6).

Case Report 1:

A middle aged female patient reported to the department with complaint of swelling in lower right back region of jaw since 7 months. She was apparently alright 7 months back when she noticed a small swelling appearing on the gums in the lower back region. The swelling gradually increased to present size and the patient has come for the treatment of the same. She had history of trauma by a hard object on the same site 7-8 months back but no swelling developed that time, only redness appeared in that region which was also subsided on its own after few days but gradually swelling started appearing on the same site. She had visited local dentist for the same swelling 8 days back and has taken some medication but the swelling was not subsided so then she was referred to our institution by the local dentist. There was no history of fever and bleeding in the area.

On Inspection: A well defined growth was present on attached gingiva in 46,47,48 region approximately 3 cm in size and it was dome shaped. The growth was reddish pink while in some region it was pale in colour. Surrounding tissue was red inflammed anterior to the region of swelling. The lesion was extending from distal surface of 45 to distal surface of 47.(fig 1,2) On palpation: All inspectory finding were confirmed by palpation. The consistency was firm and non tender. Fluctuation, compressibility, pulsatility were absent. Gingiva was red inflammed generalised with loss of contour. Consistency was soft with stippling absent. Bleeding on probing was present. Generalised pocket formation. Grade III mobility with- 14,15,34,35,36.Grade II mobility with- 16,15,14,13,

43. Provisional diagnosis was Irritational Fibroma in lower right back region (46,47,48).

Case Report 2:

Patient came to the department of oral medicine with complains of missing tooth and wanted to replace with artifical set. He had undergone extraction of all his maxillary teeth in private clinic 2 years before and mandibular posterior teeth on both side in our institue before 1 year. He had only lower anterior teeth present. There was overgrowth in upper front region of jaw approximately 1.5cm in size, smooth,oval shape,pink,sessile and non tender (fig3). The tissue was excised under local anesthesia and send for biopsy (fig 4)On biopsy examination A single soft tissue of 1 cm x0.5 cm size and pink in colour when stained with H & E stain shows stratified squamous epithelium and orthokeratinization. The epithelium is few cell layer thick and streched. There are prominent rete ridges. The basement membrane is intact. The basal cell show hyperchromatism. The connective tissue shows numerous plump fibroblasts along with dense collagen fibre bundles. There are presence of chronic inflammatory cells chiefly composed of lympocytes and plasma cells. Engorged and dilated blood vessels are present in few areas. The collagen fibres show hylanization at places. The diagnosis histopatholgicaly was given as fibroma.

Case Report 3:

The patient complains of pain in upper left back region of jaw since 1 week. On examination we had found that there was cariously detructed 27,28 with pain on percussion. There was overgrowth on buccal mucosa in 27,28 region which as 2x3 cm in size, pink,soft, sessile, dome shape, non tender (Fig 5).His over oral condition was poor with grade I mobility with 31,41,32,42.Generalised gingival recession. He had the habit of tobacco and gutkha chewing since 20-22 years with lime 4-5 times per day. There was blaching and fibrous band palpable on both sides. The VAS measurement was taken for burning sensation, which was 7.The tooth 27,28 which were cariously destructed were removed. he overgrowth was excised and send for biopsy. On microscopic examination the H& E stained section showed statified squamous epithelium and shows keratinization at places. The rete ridges are numerous and prominent. Acanthosis is also seen. Basement membrane is intact and shows hyperplasiain basal cell layer. The connective tissue shows collagen fibre bundles and fibroblasts. There are engorged and dilated blood vessels seen in the connective tissue. Extravasted RBCs are seen in few areas. The histopathological diagnosis given was fibroepithelial hyperplasia.

Fig.1 Swelling on gingiva in right posterior region

Fig.2 Dome shaped reddish pink swelling

Fig.3 Fibroma on upper anterior region Preoperative

Fig.4 Post opertaive picture of fibroma

Fig.5 Fibroma on left buccal mucosa with blanching suggestive of OSMF

Discussion

Inflammatory hyperplasia is used to explain a outsized mixture of repeatedly taking place nodular growths on the oral mucosa. It represents as a inflamed fibrous and granulation tissue histologically (3,9,10) .It is also called as Focal fibrous hyperplasia, Inflammatory fibrous hyperplasia due to inflammatory origin , Fibrous nodule depending on consistency, or Fibro-epithelial polyp .The size of these reactive overgrowth masses might be larger or smaller, depending on the extent to which one or more of the mechanism of the provocative reaction and healing retort are exaggerated in the particular lesion. Epulis is the name for such growths on gingiva (3,11). These localized lesions of the oral cavity have been broadly differentiated as: Irritation fibroma, Peripheral ossifying fibroma, benign tumor like Squamous papilloma, Giant cell fibroma, soft tissue lesion like Pyogenic granuloma and Peripheral giant cell granuloma (12). Irritation Fibroma occurs more repeatedly in females. It occurs between2-5th decade of life. As in our case Irritation Fibroma occurred in middle age female patient. Due to occurrence in 2-5th decade and female preference suggested that there may be hormonal influences on these overgrowth ,(13). The lesion is generally presents as a painless. The overgrowths is sessile, round or ovoid, broad based. The growth is lighter in color than surrounding tissue due to an abridged blood supply. It occurs anywhere in the mouth but on the whole universal location is the buccal mucosa. It is commonly seen along the bite line (14). The consequence of trauma from biting the cheek. Other common sites are labial mucosa, tongue and gingiva (15). Foci of radiopaque material, bone formation or dystrophic calcification may be seen, particularly in large lesions or lesions with overt mineralization. Overgrowths of gingiva can bring into being movement of teeth with interdentally bone devastation (16).

Histologically it exhibit as an intact or ulcerated stratified squamous epithelium. There is shortening and pulling down of rete pegs. The treatment of this lesion includes exclusion of etiological factor which is followed by scaling of adjacent teeth and total aggressive surgical excision along with involved periodontal ligament and periosteum to reduce the opportunity of reappearance. Any restricted nuisance such as an ill-fitting dental appliance and improper restoration should be removed (17). Surgical excision of overgrowths with the Nd:YAP laser is safe. It is the quickest procedure without postoperative complications, (18). Long-term postoperative follow-up is extremely important because of the high growth potential of incompletely removed lesion(13).

References

[1]. Bhaskar SN, Jacoway JR. Peripheral fibroma and peripheral fibroma with calcification: report of 376 cases. J Am Dent Assoc 1966; 73(6):1312–20.

[2]. Eversole LR, Rovin S. Reactive lesions of the gingiva. J Oral Pathol 1972; 1(1):30–8.

[3]. Mathur LK, Bhalodi AP, Manohar B, Bhatia A, Rai N, Mathur A. Focal fibrous hyperplasia: a case report. International Journal of Dental Clinics. 2010;2(4).

[4]. Nartey NO, Mosadomr HA, Al-Cailani M, Al-Mobeerik A. Localized inflammatory hyperplasia of the oral cavity: clinico-pathological study of 164 cases. Saudi Dent J. 1994;6(3):145-50

[5]. Gardner DG. The peripheral odontogenic fibroma: an attempt at clarification, Oral Surg Oral Med Oral Pathol 1982; 54(1):40–8.

[6]. 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.

[7]. Feller L, Buskin A, Raubenheimer EJ. Cemento-ossifying fibroma: case report and review of the literature. J Int Acad Periodontol 2004; 6(4):131–5.

[8]. Zain RB, Fei YJ. Fibrous lesions of the gingiva: a histopathologic analysis of 204 cases. Oral Surg Oral Med Oral Pathol 1990; 70(4):466–70.

[9]. Jafarzadeh H, Sanatkhani M, Mohtasham N. Oral pyogenic granuloma: a review. Journal of oral science.2006;48(4):167-75.

[10]. Baldawa R, Saluja H, Kasat V, Kalburge J, Baheti S. An ususually large oral pregnancy tumor. Pravara Medical Review. 2011;3(4):23-6.

[11]. Macleod R, Soames J. Epulides: a clinicopathological study of a series of 200 consecutive lesions. British dental journal. 1987;163(2):51-3.

[12]. Kumar SK, Ram S, Jorgensen MG, Shuler CF, Sedghizadeh PP. Multicentric peripheral ossifying fibroma. J Oral Sci 2006; 48(4):239–43.

[13]. Bagde H, Waghmare A, Savitha B, Vhanmane P. Irritation fibroma – A case report. Int. J. Dent.Clinics. 2013;5(1): 39-40

[14]. Buchner A, Hansen LS. The histomorphologic spectrum of peripheral ossifying fibroma. Oral Surg Oral Med Oral Pathol 1987; 63(4):452–61.

[15]. Kenney JN, Kaugars GE, Abbey LM. Comparison between the peripheral ossifying fibroma and peripheral odontogenic fibroma. J Oral Maxillofac Surg 1989; 47(4):378–82

[16]. Bagde H. Peripheral Cemento Ossifying Fibroma–Cas E Report. Int J Dent Case Reports. 2012;2(5):15-8.

[17]. Walters JD, Will JK, Hatfield RD, Cacchillo DA, Raabe DA. Excision and repair of the peripheral ossifying fibroma: a report of 3 cases. Journal of periodontology. 2001;72(7):939-44.

[18]. Cuisia ZE, Brannon RB. Peripheral ossifying fibroma — a clinical evaluation of 134 pediatric cases. Pediatr Dent 2001; 23(3):245–8.