

RESEARCH ARTICLE

FOCAL FIBROUS HYPERPLASIA: A CLINICAL AND HISTOLOGICAL INSIGHT

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..... Manuscript Info Abstract Manuscript History Fibrous type gingival overgrowth is commonly seen in oral cavity and Received: 10 February 2021 can be either benign or malignant lesions. Chronic irritation is one of Final Accepted: 16 March 2021 the most common causes of nonneoplastic type of lesion. Focal fibrous Published: April 2021 hyperplasia also called as irritational or traumatic fibroma usually can be self limiting in nature or sometimes excision is recommended. Present case report demonstrates clinical and histological insight on the lesion.

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Introduction:-

Localised or generalised focal reactive gingival lesions are often found inside the oral cavities. Different forms of localized reactive lesions might also additionally arise at the gingival epithelium such as focal fibrous hyperplasia, pyogenic granuloma, fibrous epulis, peripheral giant cell granuloma peripheral ossifying fibroma (POF) and pregnancy epulis. The causative etiology for this lesion can be attributed to plaque, calculus, overhanging margins, trauma, and dental appliances.^{1, 2}. Daley et al. in the year 1990 recommended the term focal fibrous hyperplasia which suggests a reactive tissue response.

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Case Report:-

A 32 year old male reported to the Department of Periodontics with a chief complaint of pain and swelling in the lower left front region of the jaw. No significant medical history was present which could influence the clinical findings. Past dental history narrated by the patient reveals that the intra oral swelling over the gingiva which had been present since past 9 months and was apparently static in size from past 2 months. The patient complains of discomfort while chewing. Patient also reported bleeding while toothbrushing from the area of chief complain. Extraoral examination showed no significant findings.

Intraoral examination revealed a painless, sessile polypoid gingival overgrowth, with a more reddish hue as compared to adjacent tissue (Fig 1). Lesion measured approximately 12 mm in height with 8 mm of mesiodistal dimension. On palpation, the lesion had firm consistency and was non tender. Patient's oral hygiene was poor with enormous amount of plaque and calculus. Radiograph showed no significant finding. After scaling and root planing (Fig 2), exisional biopsy was performed after 21 days with scalpel blade under local anaesthesia (Fig 3).

The histopathologic report showed fibroblasts along with bundles of collagen fibres with presence of few blood capillaries. There was also infiltration of chronic inflammatory cells like lymphocytes and plasma cells (Fig 4). Ultimately final diagnosis was confirmed as focal fibrous hyperplasia. Follow up was done up to 1 year from the day of excision.

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Discussion:-

Reactive hyperplasia comprises a group of fibrous connective tissue lesions that commonly occur inside the oral cavity because of high frequency of tissue injuries or chronic irritation.⁴ Chronic trauma can induce inflammation, which produces granulation tissue with endothelial cells, chronic inflammatory cells and later fibroblasts proliferate and manifest as an overgrowth called reactive hyperplasia. These tumour-like lesions are non neoplastic in nature but indicate a chronic process in which an exaggerated repair occurs (granulation tissue and formation of scar).⁵

Fibrous hyperplasia is an inflammatory condition typically considered to be a benign soft-tissue tumour and this condition is commonly associated with the continuous use of poorly adapted dentures, chronic irritation caused by the sharp edges of teeth, treatment procedures (iatrogenic in origin), roots fragments or other trauma.^{6,7}

Histologically, inflammatory fibrous hyperplasia, counting on age and vascularity vary from rapidly growing connective tissue consisting of dilated blood vessels along with presence of chronic inflammatory cells like plasma cells or lymphocytes to mature scar or collagenous in consistency, composed of solid fibrous tissue with prominent vascular pattern. When inflamed the surface of the epithelium is uniformly hyperplastic in nature and ranges from normal to acanthotic, ulcerated, keratotic or a mixture of two or more of those features.⁸ These hyperplastic conditions are considered self limiting. Since they interfere with form and performance, they have to be excised. Also long standing hyperplastic lesions within the presence of chronic irritation can get converted to neoplasia.⁹

Figures & Legends:-



Fig 1 Preoperative lesion



Fig 2 After Scaling and Root Planing



Fig 3 After Exicisional Biopsy



Fig 4 Histological section showing Hyper- plastic parakeratinized stratified squmous epithelium with elongated rete ridges.

Conclusion:-

Surgical excision is indeed the preferred treatment of choice along with removal of local irritants to stop recurrence of lesion. Thorough follow-up of the patient together with proper guidance regarding maintenance of oral hygiene is required because it exhibits an inclination to recur.

References:-

- 1. Narty N, Masadomi H, Al-Gilani M, AlMobeerik A. Localized inflammatory hyperplasia of the oral cavity: clinico-pathological study of 164 cases. Saudi Dent J1994;6 (3):145-50.
- 2. 2. Bouquot J. Common oral lesions found during a mass screening examination. The Journal of the American Dental Association1986;112 (1):50-7.
- 3. Daley TD, Wysocki GP, Wysocki PD, Wysocki DM. The major epulides: Clinico pathological correlations. J Can Dent Assoc 1990; 56: 627-30.
- 4. Regezi JA, Sciubba JJ. Oral Pathology: Clinical-Pathologic Correlation. Philadelphia: Saunders. 2008;5:156-9.
- Shadman N, Ebrahimi SF, Jafari S, Eslami M. Peripheral giant cell granuloma: A review of 123 cases. Dent Res J. 2009;6(1):47-50
- 6. Barros RMG, Campos KSM, Cabral LM. Relato de caso clínico de hiperplasia fibrosa inflamatória. Rev Odontol Araçatuba. 2014;35 (2):15-18.
- 7. 4. Palmeira ARBLS, Florêncio AG, Silva Filho JP, Silva UH, Araújo NS Non neoplastic proliferative lesions: a ten-year retrospective study. RGO, Rev Gaúch Odontol. 2013;61(4):543-7.
- 8. Shafer, Hine, Levy.Benign and malignant tumors of oral cavity.In:R. Rajendran, Shivapathasundaram(ed) Shafer's Textbook of Oral Pathology. 5ed. New Delhi, Elsevier. 2007:178-180.
- 9. Inflammatory overgrowths and neoplasms. Br Dent J 1974; 136:111-16.