LOCALISED GINGIVAL ENLARGEMENT ASSOCIATED WITH CROHN’S DISEASE - A RARE CASE REPORT

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ABSTRACT

This case report describes a case of a patient with a localised gingival enlargement in the maxillary anterior region in relation to root stumps of maxillary right canine and premolars and the patient also gave a history of being diagnosed and under treatment for Crohn’s disease. It is therefore, imperative to associate the granulomatous localised gingival enlargement to systemic manifestation of Crohn’s disease. Intraoral involvement in Crohn’s disease occurs in 8-9% of patients and may precede intestinal involvement. Excisional biopsy for this case was carried out and the typical histopathological characteristics and systemic clinical manifestations of the patient were considered as the factors for diagnosing the localised gingival enlargement to be associated with Crohn’s disease. The proper diagnosis and treatment plan along with timely intervention are the key to success in management of localized gingival enlargement whether it may originate as an independent entity or modified by local factors or systemically influenced.

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INTRODUCTION:

Increase in the size of gingiva is a common feature of gingival diseases. Accepted current terminology for this condition is gingival enlargement or gingival overgrowth. These are strictly descriptive terms for the erroneous pathologic terminology used in the past “hypertrophic gingivitis” or “gingival hyperplasia”.1

Gingival enlargement can be caused by a wide variety of aetiologies. The clinician can often diagnose the cause by a careful history (e.g. drug induced or pregnancy induced or by a local factor, inflammatory due to plaque accumulation or mouth breathing enlargement or by the clinical presentation, generalised enlargement with gingival hematoma formation seen in leukaemia). Plaque induced inflammation can be the sole cause of gingival enlargement or can be a secondary cause. So in all patients, therapy to control gingival inflammation is essential. If there is a localised lesion, biopsy may be needed to correctly diagnose and treat the gingival enlargement.2,3

This case report describes a case of a patient with a localised gingival enlargement in the maxillary anterior region in relation to root stumps of maxillary right canine and premolars and the patient also gave a history of being diagnosed and under treatment for Crohn’s disease. It is therefore, imperative to associate the granulomatous localised gingival enlargement to systemic manifestation of Crohn’s disease.

Literature describes Crohn's disease (regional enteritis) as an inflammatory disease of the intestines that may affect any part of the gastrointestinal tract, causing a wide variety of symptoms. It primarily causes abdominal pain, diarrhoea (which may be bloody if inflammation is at its worst), vomiting, or weight loss, but may also cause complications outside the gastrointestinal tract such as skin rashes, arthritis, eye, lesions of oral cavity, tiredness, and lack of concentration.4

Crohn's disease is thought to be an autoimmune disease, in which the body's immune system attacks the gastrointestinal tract, causing inflammation. It is classified as a type of inflammatory bowel disease. Noncaseating granulomas are characteristic of orofacial Crohn’s disease.5

CASE REPORT:

A 63 years old female reported to the outpatient section of Department of Dental Surgery, Armed Forces Medical College with a chief complaint of a growth in the right side front portion of the upper gums since last five months. On eliciting the history of the presenting
illness, patient was apparently normal one year back, later she noticed a small growth in the gums which had grown to the present size. (Figures 1) She gives history of mild pain and difficulty in eating, does not gives any history of pus discharge or bleeding from the lesion. On eliciting medical history, patient was diagnosed with crohn’s disease four years back and was operated a year back and is on maintenance dose of prednisolone 10 milligrams per day.

On inspection, a localized well demarcated bluish red pedunculated growth with irregular shape and smooth surface was seen in relation to root stumps of 13,14 and the lesion measured approximately 1.8-2 cm in length and 0.8-1 cm labio-lingually. It extended mesiodistally from distal of 12 to mesial of 15 and extended superiorly from mucogingival junction to middle third of 15 and covered the area in relation to root stumps of 13, 14 which did not extend to palatal side. (Figures 2 and 3) Intra oral periapical radiograph was also not contributory. (Figure 2) Palpatory findings revealed that the lesion was mild tender on palpation and was hard in consistency without any pulsation. The significant pressure test was found to be negative signifying the lesion to be avascular in nature. The initial impression of the lesion was thought to be traumatic fibroma, which was due to chronic irritation by the sharp edges of the root stumps. An excisional biopsy was planned after investigations.

Patient was scrubbed and draped aseptically; part preparation was done before excisional biopsy. Excision of the lesion was done under local anesthesia injection 2% lignocaine hydrochloride with adrenaline (1:80,000). (Figure 3) The excised lesion was sent in 10 % formalin for histopathological examination to Department of Pathology. Post operative instructions were given, antibiotics and analgesics were prescribed and the patient was advised to report after seven days for suture removal. The lesion showed uneventful healing after seven days. The case was followed up for three months and showed complete healing without recurrence.

Histopathologically, the overlying epithelium was thin and atrophic and was noncaseating epitheloid type consisting of tissue composed of a delicate reticular and fibrillar connective tissue stroma containing large number of ovoid or spindle shaped young connective tissue cells and multinucleated Langerhans giant cells. There was moderate inflammatory cell infiltration. (Figure 4)

DISCUSSION:

Crohn’s disease is an idiopathic disorder that can involve the entire GI tract with transmural inflammation, noncaseating granulomas, and fissures. The peak incidence is in the second and third decades of life, with a second peak occurring in the sixth and seventh decades.

There is evidence of a genetic link to Crohn's disease, putting individuals with siblings afflicted with the disease at higher risk. Mutations in the CARD15 gene (also known as the NOD2 gene) are associated with Crohn's disease and with susceptibility to certain phenotypes of disease location and activity. In the head and neck region, granulomatous diseases are often classified using a broad term of orofacial granulomatosis (Wisenfeld et al. 1985), because similar lesions may result from a diverse group of granulomatous diseases that may induce noninfectious granulomatous disorders of the face, lips, and oral cavity. These include oral tuberculosis, cheilitis granulomatosa, sarcoidosis, or even contact allergic reactions.

Intraoral involvement in Crohn’s disease occurs in 8-9% of patients and may precede intestinal involvement. With oral involvement, the likelihood of extraintestinal
manifestations is greater. Extraintestinal features are also common in persons with Crohn’s disease, and these may manifest systemically as arthritis, clubbing of the fingers, sacroilits, and erythema nodosum.5-7

Orofacial symptoms of Crohn’s disease include diffuse labial, gingival or mucosal swelling, cobblestoning of the buccal mucosa and gingiva, aphthous ulcers, mucosal tags and angular cheilitis. Noncaseating granulomas are characteristic of orofacial Crohn’s disease. Oral granulomas may occur without characteristic inflammatory involvement (orofacial granulomatoses).

Labial swelling is most often a cosmetic complaint, but it can be a painful manifestation of the disease. Gingival and mucosal involvement may cause difficulty while eating. The pattern of swelling, inflammation, ulcers, and fissures is similar to that of the lesions occurring in the intestinal tract. Acute and chronic inflammation, with lymphocytic and giant cell perivascular infiltrates and lymphoid follicles are the most common histologic findings in oral and GI Crohn’s disease. Noncaseating granulomas are present in biopsy samples in a number of cases. Increased dental caries and nutritional deficiencies may be related to decreased saliva production and malabsorption in the intestinal tract.8-10

The granuloma in the case under discussion was detected at a close vicinity of retained root stumps of 13 and 14, therefore chronic irritation as a contributing factor for the growth cannot be under estimated. But the typical histological characteristics and systemic clinical manifestations of the patient were considered as the factors for diagnosing the localised gingival enlargement to be associated with chron’s disease.

CONCLUSION:

Management of any localised gingival enlargement depends on the nature of etiopathogenesis involved. However the role of plaque as a local factor remains as the secondary modifying factor for any enlargement. The proper diagnosis and treatment plan along with timely intervention are the key to success in management of localized gingival enlargement whether it may originate as an independent entity or modified by local factors or systemically influenced. Early recognition and treatment of all diseases is crucial in the total health and well-being of patients.

REFERENCES:


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