PERIODONTAL MANIFESTATION OF ORO FACIAL GRANULOMATOSIS: A RARE FINDING

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ABSTRACT
Orofacial Granulomatosis (OFG) is a rare idiopathic, non-necrotizing granulomatous inflammation of soft tissue in Oro maxilla facial region. It is clinically characterized by persistent swelling of lips (one or both), oral ulceration and gingival enlargement. This case reported of 40 years male who has diffuse persistent swelling of lower lip since last 3 years with generalized enlargement of gingiva of arches.

KEYWORDS: non-necrotizing granuloma, persistent lips swelling, gingival enlargement.

INTRODUCTION
Orofacial Granulomatosis was reported by Wiesenfeld in 1985.[1] Classical features of OFG are recurrent labial swelling which become persistent.[2] Swelling is non tender and varies in consistency from soft to firm and caused by due to lymphatic blockage by granuloma.[3] Intra orally it may affect the gingiva, oral mucosa or tongue in the form of hypertrophy, erythema or non specific erosion.[4] The etiology of this disease is unknown, but according to some authors it is due to an abnormal immune reaction.[5]

Histopathological finding of OFG revealed non caseating granulomas and multi nucleated giant cells with perivascular lymphocytes in connective tissue.[6]

Oral manifestation of OFG may also have similar clinical features of other systemic conditions and final diagnosis of OFG is made by clinical, laboratory and histopathological examination.

CASE REPORT
A 45 year old male reported in the department of Periodontology with chief complaint of persistent, asymptomatic swelling of lower lip and enlargement of gums since last 3 years.[fig.1, fig.2 and fig.3] His medical history was non contributory and he had not even any history of intestinal disease, Tuberculosis, local trauma and on other signs of chronic fatigue. On examination of lip, swelling was non tender, diffuse and firm. Patient advised routine blood investigation, chest radiograph, complete hemogram, erythrocyte sedimentation rate and serum level of angiotensin converting enzyme, OPG X-rays were done. All these investigation reports were in normal range and OPG X-rays showed generalized horizontal bone loss. Biopsy sample was taken from lower lip, which showed abundant of non caseating granuloma with multinucleated giant cells.[fig.4] Diagnosis of orofacial Granulomatosis was confirmed by clinical and histopathological examination.

In treatment a combination of intra lesion injection of triamcinolone acetonide 10mg/mL weekly was given in lower lip of patient for 4 weeks along with oral metronidazole 400 three times a day for 14 days. Gingival enlargement was treated by quadrant wise gingivectomy. After one month significant improvement of labial swelling was observed.[fig.5] Gingival enlargement subsides after surgical therapy.[fig.6] After one year recurrence of swelling was not observed.
DISCUSSION

The differential diagnosis OFG is extensive because it may be due to wide range of causes. It may be due to oral manifestation of some systemic conditions such as Crohn’s disease, Sarcoidosis or more rarely Wegner’s Granulomatosis. Other condition such as tuberculosis, leprosy infections, allergic reactions, acute immune mechanism and fungal infections also causes OFG.[7]

In most of these conditions, there are very few distinguishing local signs and symptoms, so they create a much more diagnostic as well as therapeutic problems to
the physician. These local and systemic conditions which are characterized by granulomatous inflammation may be differentiated by appropriate history, clinical and laboratory investigations.

Sarcoidosis was excluded due to lack of any positive respiratory symptoms, normal chest X-rays and normal level of serum angiotensin converting enzyme. Crohn’s disease was not suggestive due to insignificant of any gastrointestinal or digestive problems after in depth evaluation of the gastrointestinal system.[6]

OFG may be confused with leprosy because both may be present with labial swelling and non-caseating granuloma. Leprosy can be separate only by demonstration of bacteria in leprous granulomas.

Histopathologically OFG is characterized by well defined non caseating granuloma which consists of epitheloid cells, Langerhans giant cells along with dense inflammatory cell infiltrate.[6] In the present case all these finding was present.

In this case report patient hematological and biochemical parameters were normal. Montoux test and chest x-rays of thorax was normal. Biopsy sample was taken from lower lip, which showed abundant of non caseating granuloma with multinucleated giant cells. Diagnosis of orofacial Granulomatosis was confirmed by clinical and histopathological examination.

In treatment local and systemic corticoids are mainly used for long duration of time. Intra lesional injections of triamcinolone 10-40 mg/ml are commonly used.[8] Other drugs which have been reported to use in the treatment of OFG including hydrochloroquine, metronidazole, clofazime and minocycline, dapsone etc. In severe disfigurement cases surgical resection and radiation therapy have been reported. Some authors reported that relapses are very common after surgical therapy.

REFERENCES
