



## OROFACIAL GRANULOMATOSIS

## Community Dentistry

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## ABSTRACT

**Introduction:-** Orofacial granulomatosis (OFG) is a disease entity with recurrent or persistent edema within the orofacial region. It frequently manifests as persistent and/or recurrent upper and/or lower labial lip and gingival enlargement. Histological features are non-necrotizing granulomas form in the affected tissues in the absence of any recognized systemic disease. The definite etiology of OFG is unidentified. 1 Numerous theory have been recommended, including infection, genetic predisposition, and allergy.2-6 **Case report:-** This report is a remarkable case of orofacial granulomatosis which presented as a recurrent severe generalized gingival enlargement in a eleven year-old child. There was no family history and no data of an underlying allergic or systemic cause. Oral prophylaxis showed mild alleviation of symptoms. **Conclusion:-** Diagnosis of orofacial granulomatosis is often difficult. OFG is cured by appropriate treatment.

## KEYWORDS

## INTRODUCTION

Orofacial granulomatosis (OFG) is an unusual disease characterized by recurrent swelling of soft tissues in the orofacial region. Clinically the condition is presenting as labial or buccal gingival swelling.. Histologically, there is non-specific granulomatous inflammation. Wiesenfeld et al first recognized the condition in 1985.

The actual etiology of OFG is unknown.<sup>1</sup> Numerous theories such as infection, allergy and genetic predisposition have been suggested. The condition is usually presented as a non-tender, labial gingival swelling.<sup>7</sup> This swelling may affect one or both lips, resulting in labial hypertrophy.<sup>8</sup> Clinical presentation can be highly changeable, as result it is difficult to diagnose. This article describes a case of OFG

Oral manifestation of orofacial granulomatosis is same as a systemic condition such as Crohn's disease, sarcoidosis or, more rarely, Wegener's granulomatosis.<sup>9</sup> So, it is difficult to diagnose.

## CASE REPORT

An 11- year- old boy, reported to the Department of Pediatric and Preventive Dentistry of our institute with the chief complaint of swelling of gums in upper and lower jaws since last one year. Patient gave history of swollen and inflame gingival, bleeding on brushing , difficulty in chewing of food due to impingement. His medical and family histories were unremarkable.

The patient had visited a dental clinic previously before coming to our department where he was treated with oral prophylaxis. Parents gave a history of recurrent gingival enlargement three months after oral prophylaxis. The patient reported variable swelling of upper lip and erythema since last two years.

**Extra oral examination:** There was no enlargement and non-tender of lymph nodes. Swelling of upper lip present.

**Intra oral examination:-** There was gross enlargement of upper and lower gingival. This enlargement extend to attached gingival and covered around one third length of crown. Gingiva was erythematous and soft in consistency. There was not erupting lower premolar, permanent canine and upper permanent canine. Lower anterior teeth were malaligned.

A series of investigations included a complete blood count, fasting blood sugar, test for Tuberculosis (i.e, sputum for acid fast bacilli,

HRCT scan of the chest and Mantoux test), Renal and Liver function tests were done. All reports were normal.

An incisional biopsy have done at the enlarged gingival of upper and lower jaw. Section stained with H & E reveals the presence of two bits of soft tissue consists of stratified squamous epithelium with focal hyperplasia and composed of connective tissue stroma containing epithelioid cell collection, giant cell and plasmalymphocytic infiltration.



FIG 1: PATIENT SHOWING ENLARGED LIPS



FIG 2: PATIENT WITH CHEEK RETRACTOR IN PLACE SHOWING THE IRREGULAR DENTITION



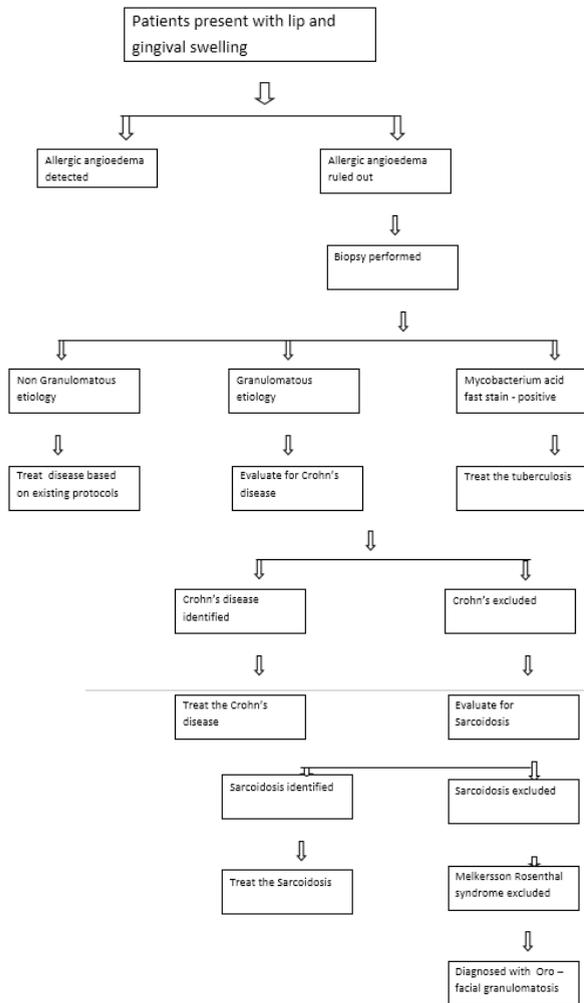
**FIG 3: INTRAORAL PICTURE SHOWING THE MAXILLARY DENTITION**



**FIG 4: INTRAORAL PICTURE SHOWING THE MANDIBULAR DENTITION**



**FIG 5: GINGIVAL SITE FOR BIOPSY**



**Histology**

An incisional biopsy was taken in Pedodontics department of DR. R Ahmed dental college and Hospital and specimen sent to the Oral pathology department. The hematoxylin and eosin – stained reveals the presence of two bits of soft tissue consist of stratified squamous epithelium with focal hyperplasia. The H and E- stained reveals stratified squamous epithelium with focal hyperplasia and composed of connective tissue stroma containing epithelioid cell collection, giant cell and plasmalymphocytic infiltration

Orofacial granulomatosis is confirmed by combined results of hematology and serology.

**Treatment**

Systemic corticosteroid therapy should not used in eleven years old child because steroid retard growth of child. This patient good response with local application of clobetasole propionate ointment on lip and oral dose of azithromycin 250 mg for two weeks. After three months regular follow up showed there was no recurrence of lip and gingival swelling.

**Discussion**

Orofacial granulomatosis is increasing day to day, specifically in the pediatric age group.<sup>20</sup>Recent evidence has shown OFG to be an immunologically induced granulomatous disorder.<sup>21</sup>

Orofacial granulomatosis (OFG) mainly affects lip and gingiva. Common clinical signs are persistent non pitting and non tender labial enlargement.<sup>20</sup>Our case represent gingival hyperplasia and upper lip swelling.

Genetic and immunological theories give details about course and clinical outcome of this disease.<sup>20</sup>Current research in OFG supports an immunologic or allergen triggering factor as the chief aetiological basis.<sup>22</sup>

Orofacial granulomatosis is diagnosed by biopsy report showed non-casating granuloma formation. Other condition such as allergic angioedema, crohn's disease, Sarcoidosis, Tuberculosis, Malkersson Rosenthal syndrome, cheilitis grandularis must be rulled out by clinical and laboratory investigation.

Clobetasol propionate ointment which belongs to topical steroids. Patient's lip swelling reduced by this topical steroid application. Patient also taken azithromycin 250 mg orally for two weeks. There was no recurrence of lip and gingival swelling.

Laboratory findings showed patient had no systemic disease. Recurrences rate are more common. So, mandatory regular clinical check up advised for these idiopathic OFG.

**Conclusion**

The diagnosis and consequent prognosis of orofacial granulomatosis is challenging to our Profession. Idiopathic gingival granulomatosis should be confirmed as early as possible by clinical and laboratory investigation. This patient found good response with azithromycin orally and clobetasole propionate ointment local application of lip. Patient should aware regular intermittent check up and long duration of treatment.

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