

EARLY ONSET PERIODONTITIS

A case report

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Introduction:

Severe rapid periodontal destruction and tooth loss occur rarely in children and teenagers which are broadly classified into prepubertal and pubertal periodontitis. Pubertal or adolescent forms are usually termed juvenile periodontitis. For nearly a century clinical and experimental research has been continuously carried out in these early onset periodontitis. These experimental research and clinical results varied from patient to patient making it difficult to classify them. Generalized forms of early onset periodontitis are commonly associated with systemic diseases such as Papillon-Lefevre syndrome, Hypophosphatasia, Blood dyscrasias, Chediak highashi syndrome, Leukocyte adhesion deficiency etc., they are classified clinically according to age of onset, extent of involvement, presence of deposits which will be confirmed by certain investigations like radiographic, microbiologic, hematological and biochemical analysis.

Case report:

Here is a case report of early onset periodontitis presented with its features and its treatment and maintenance therapy.

A 13 year old female patient reported to the department of periodontics, SDM College, Dharwad with a complaint of swelling of the gums. The swelling was noticed by the patient since six months which increased in rapid phase to the present stage. A week ago some areas of the gums started showing bleeding while brushing and food mastication.

On extra oral examination of the patient, other than dry lips no other abnormalities were determined. Lymphnodes were not palpable.

Intra oral examination revealed generalized inflammatory gingival enlargement (photo 1) of marginal, papillary and attached gingiva. The gingival swelling showed localized bleeding and tenderness on probing. Occlusion was not disturbed but had grade I mobility with mandibular central and lateral incisors.

Family history reveled no parental involvement but younger brother (9 yrs) having periodic dry skin with scales on knees and palms. No oral lesions were found.

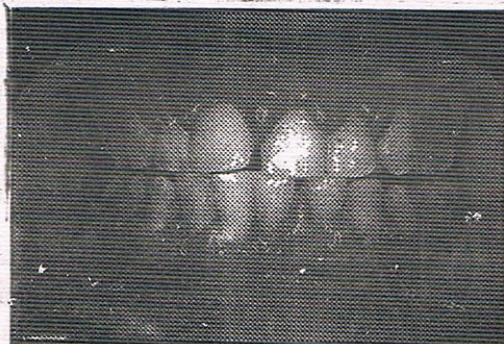


Fig. 1. generalized inflammatory gingival enlargement.

Laboratory investigations included for Hb%, DLC, alkaline phosphatase. All of these found to be in normal limits (Hb-11.8 gms% PMN – 63%, L-35%, E-2%, and M-0%, alkaline phosphatase level was 8 Ak units).

Radiographic investigations included OPG and intraoral periapical x-rays. These investigations showed localized areas of bone loss (photo 2A, 2B).

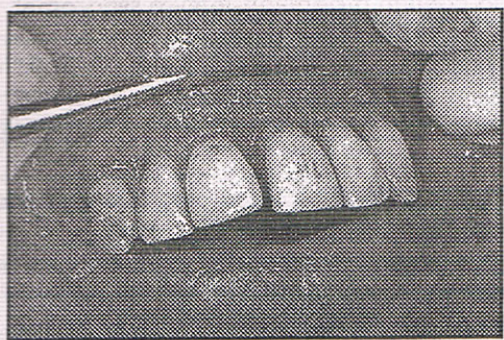


Fig 2A, Bone loss observed in anterior segment.



Fig. 2B, Localized areas of bone loss seen after mucoperiosteal flap was elevated.

Treatment:

A thorough oral prophylaxis was done and patient recalled after 7 days for surgical procedures. A mucoperiosteal flap was elevated utilizing horizontal incision to permit soft tissue debridement. Root surfaces were debrided using curettes and ultrasonic scalers.

Diseased granulation was removed using curettes and osseous recontouring was performed. Further the patient was prescribed with antibiotics, antiinflammatory drugs and 0.2% chlorhexidine mouthwash. Recall check up every 14 days after full mouth mucoperiosteal flap surgery done to assess the healing and found satisfactory. Lower anterior tooth were splinted using fibre splints.

Result:

Radiographic and clinical evaluation after 6 months showed drastic change and recovery with bone growth in the defects (photo 3).

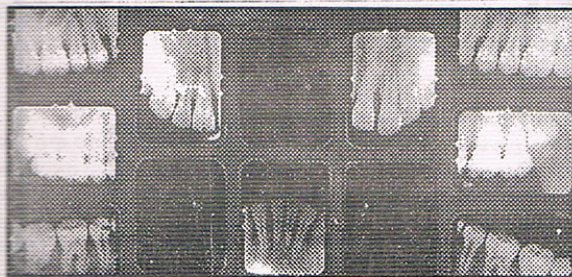


Fig. 3A Preoperative IOPA X-Rayx

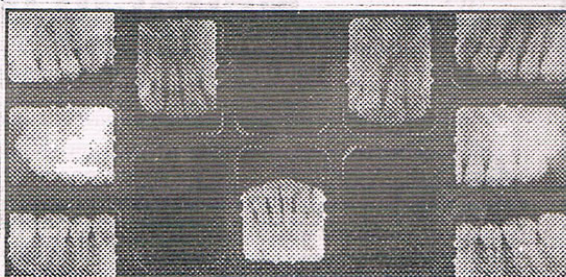


Fig 3B Postoperative IOPA X-Rays

Discussion:

The purpose of the study was to evaluate the result of this case which failed to give the typical features of any classification (i.e., prepubertal, pubertal or adolescent). Patient had gingival inflammatory enlargement which is usually not seen in pubertal or prepubertal. Laboratory findings showed normal alkaline phosphatase which is usually increased and no systemic ailments which are usually associated with it (patient reported to clinic later with slight hyperkeratotic skin over palms but was not severe to confirm a papillon-lefevre syndrome).

Summary:

This case study revealed that:

1. Any intraoral inflammatory conditions in children and adolescent had to be treated seriously and will give a good result.
2. It is not necessary that the intraoral lesions need to give all the typical features of prepubertal or pubertal periodontitis in all cases.
3. All the systemic ailments or typical intraoral clinical features need not be exhibited during the initial stage of the disease.

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