

LOCALIZED AGGRESSIVE PERIODONTITIS (LOCALIZED JUVENILE PERIODONTITIS)

LIP occurs in otherwise healthy children and adolescents without clinical evidence of systemic disease. It is characterized by the rapid and severe loss of alveolar bone around more than one permanent tooth, usually the first molars and incisors. It appears self-limiting, and analysis of retrospective data obtained from LAP patients suggests that bone loss around the primary teeth can be an early finding in this disease.

Clinically, patients

- have little or no tissue inflammation
- and very little supragingival dental plaque or calculus. However, they do present with evidence of subgingival plaque accumulation, both tissue-associated and tooth-associated.
- Progression of bone loss is three to four times faster than in adult periodontitis.



TREATMENT OF AGGRESSIVE PERIODONTITIS

- ✓ Successful treatment of EOP depends on early diagnosis,
- ✓ use of antibiotics against the infecting microorganisms. A combination regimen of amoxicillin and metronidazole over 1 to 2 weeks.
- ✓ and provision of an infection-free environment for healing.
- ✓ consultation with the patient's physician if necessary, and mechanical removal of supragingival and subgingival microbial agents via nonsurgical and/or surgical treatment modalities with adjunctive antimicrobial therapy
- ✓ Surgical removal of infected crevicular epithelium and debridement of root surfaces during surgery while the patient is on a 14-day course of doxycycline hyclate (1 g per day) is considered the best effective treatment modality.

PREMATURE BONE LOSS IN THE PRIMARY DENTITION

Advanced alveolar bone loss associated with systemic disease occurs in children and adolescents as well as adults.

In the primary dentition, this is rare. Although most premature tooth loss from ***nonsystemic disease*** results from trauma or caries, the cause of advanced alveolar bone loss is often not readily apparent.

Bony destruction in the primary dentition in the absence of local factors is highly suggestive of ***systemic disease***. Several of these conditions are identified in the pediatric population:

A. Associated with hematological disorders

1. Acquired neutropenia
2. Leukemias
3. Other

B. Associated with genetic disorders

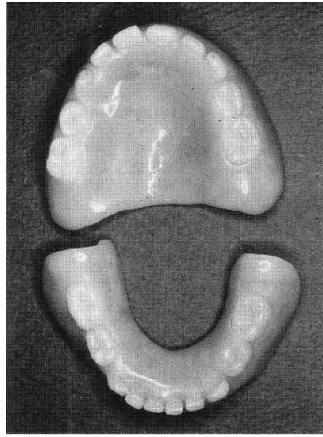
1. Familial and cyclic neutropenia
 2. Down syndrome
 3. Leukocyte adhesion deficiency syndromes
 4. Papillon-Lefèvre syndrome
 5. Chédiak-Higashi syndrome
 6. Histiocytosis syndromes
 7. Glycogen storage disease
 8. Infantile genetic agranulocytosis
 9. Cohen syndrome
 10. Ehlers-Danlos syndrome (types IV and VIII)
 11. Hypophosphatasia
 12. Other
- C. Not otherwise specified (NOS)

PAPILLON-LEFEVRE SYNDROME (PRECOCIOUS PERIODONTOSIS)

- The syndrome is rare and the cause unknown. However, in the families of affected children in which a familial predisposition to the disorder is noted
- The primary teeth erupted at the normal time.
- However, as early as 2 years of age, the child rubbed the gingival tissues and acted as if they were painful.
- There was a tendency toward gingival bleeding when the teeth were brushed.
- Hyperkeratosis of the palms and soles was present ; the first evidence was erythema and scaliness noted initially at 8 months of age. hyperkeratotic lesions of the elbows and knees may be observed



- At 2 1/2 years of age, all the primary teeth showed looseness, and full-mouth radiographs revealed severe horizontal bone resorption.
- Because of gingival inflammation, patient discomfort, and the presence of infected periodontal pockets, all the primary teeth were removed by 3 years of age.
- Complete dentures were constructed 3 months after the removal of the primary teeth. The child tolerated the dentures well, both functionally and psychologically.



- The first permanent molars and mandibular central incisors erupted at the expected time, and the denture base was adjusted to allow for the emergence of the teeth.
- Although previous reports have indicated that the permanent dentition will also be affected The regimen of tetracyclines may have been responsible for eliminating pathogens and preventing the destructive process from being carried into the permanent dentition.

GINGIVAL RECESSION

Gingival recession is often observed in children. Several factors predispose patients to gingival recession. These factors include

- presence of a narrow band of attached or keratinized gingiva,
- toothbrush trauma,
- tooth prominence,
- impinging frenum attachment,
- soft tissue impingement by opposing occlusion,
- orthodontic tooth movement,
- use of impression techniques including subgingival tissue retraction,
- oral habits,
- periodontitis, and pseudorecession (extrusion of teeth).

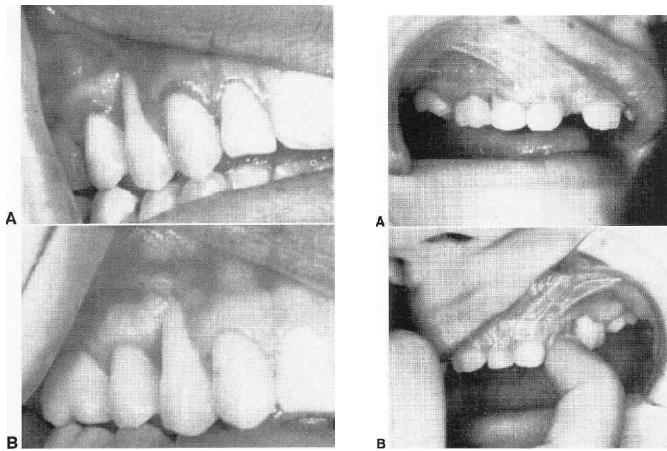
Recession is dealt with conservatively by

- ✓ elimination of the stimulus if possible,
- ✓ while excellent oral hygiene is maintained in the affected areas.
- ✓ If the recession of the affected area remains unchanged (nonprogressive)

or improves (less recession observed) over time, continued periodic monitoring is recommended.

SELF-MUTILATION

- occasionally children purposely traumatize their oral structures.
- An attempt should be made to determine the cause.
- If it is found to be the result of local dental factors, it can be corrected.
- However, in the majority of children an emotional problem is involved, and the family must be directed to competent counseling services.



ABNORMAL FRENUM ATTACHMENT

A mucous membrane fold containing epithelium and connective tissue fibers but no muscle." A normal frenum attaches apically to the free gingival margin so as not to exert a pull on the zone of the attached gingiva, usually terminating at the mucogingival junction.



An abnormal or high frenum is present when there is inadequate attached gingiva in the terminal insertion area.



Indications for treating a high frenum include the following:

1. A high frenum attachment associated with an area of persistent gingival inflammation that has not responded to root planing and good oral hygiene.
2. A frenum associated with an area of recession that is progressive.

3. A high maxillary frenum and an associated mid-line diastema that persists after complete eruption of the permanent canines.
4. A mandibular lingual frenum that inhibits the tongue from touching the maxillary central incisors. This would interfere with the child's ability to make /t/, /d/, and /l/ sounds. As long as the child has enough range of motion to raise the tongue to the roof of the mouth, no surgery would be indicated.

Most children cannot normally make these sounds until after 6 or 7 years of age. Speech therapy may be indicated. *A frenectomy* involves complete excision of the frenum and its periosteal attachment.

A frenotomy involves incision of the periosteal fiber attachment and possibly suturing of the frenum to the periosteum at the base of the vestibule.

EXTRINSIC STAINS AND DEPOSITS ON TEETH

Staining is generally believed to be caused by extrinsic agents, which can be readily removed from the surface of the teeth with an abrasive material.

Pigmentation, in contrast to extrinsic staining, is associated with an active chemical change in the tooth structure, and the resultant pigment cannot be removed without alteration of the tooth structure.

GREEN STAIN

- ✓ believed to be the result of the action of chromogenic bacteria on the enamel cuticle.
- ✓ It tends to recur even after careful and complete removal.
- ✓ The enamel beneath the stain may be roughened or may have undergone initial demineralization.



ORANGE STAIN

- ✓ Orange stain occurs less frequently and is more easily removed than green stain.
- ✓ The stain is most often seen in the gingival third of the tooth and is associated with poor oral hygiene.



BLACK STAIN

- ✓ is much less common than the orange or green type
- ✓ The black type of stain is difficult to remove, especially if it collects in pitted areas.
- ✓ Many children who have black stain are relatively free from dental caries



CALCULUS

- Calculus is not often seen in preschool children, and even in children of grade school age it occurs with much lower frequency than in adult patients.
- A low caries incidence is related to high calculus incidence.
- Children with mental retardation often have accumulations of calculus on their teeth. This accumulation may be related to abnormal muscular function, a soft diet, poor oral hygiene, and stagnation of saliva.
- The fact that the child chewed mostly on one side accounts partially for the greater cleanliness on that side, and cause calculus accumulation.

