Supplement

Parameter on Chronic Periodontitis With Advanced Loss of Periodontal Support*

The American Academy of Periodontology has developed the following parameter on the treatment of chronic periodontitis with advanced loss of periodontal supporting tissues. Patients should be informed of the disease process, therapeutic alternatives, potential complications, expected results, and their responsibility in treatment. Consequences of no treatment should be explained. Failure to appropriately treat chronic periodontitis can result in progressive loss of periodontal supporting tissues, an adverse change in prognosis, and could result in tooth loss. Given this information, patients should then be able to make informed decisions regarding their periodontal therapy. J Periodontol 2000;71:856-858.

KEY WORDS

Disease progression; periodontitis/diagnosis; periodontitis/complications; periodontal attachment loss/prevention and control; tooth loss/prevention and control; patient care planning.

CLINICAL DIAGNOSIS

Definition

Chronic periodontitis is defined as inflammation of the gingiva and the adjacent attachment apparatus. The disease is characterized by loss of clinical attachment due to destruction of the periodontal ligament and loss of the adjacent supporting bone.

Clinical Features

Clinical features may include combinations of the following signs and symptoms: edema, erythema, gingival bleeding upon probing, and/or suppuration. Chronic periodontitis with advanced loss of periodontal support is characterized by a loss of greater than one-third of the supporting periodontal tissues. Loss of clinical attachment, in the furcation, if present, will exceed Class I (incipient). Advanced destruction is generally characterized by periodontal probing depths greater than 6 mm with attachment loss greater than 4 mm. Radiographic evidence of bone loss is apparent. Increased tooth mobility may be present.

Chronic periodontitis with advanced loss of periodontal supporting tissues may be localized, involving one area of a tooth's attachment, or more generalized, involving several teeth or the entire dentition. A patient may simultaneously have areas of health and chronic periodontitis with slight, moderate, and advanced destruction.

* Approved by the Board of Trustees, American Academy of Periodontology, May 1998.

THERAPEUTIC GOALS

The goals of periodontal therapy are to alter or eliminate the microbial etiology and contributing risk factors for periodontitis, thereby arresting the progression of disease and preserving the dentition in a state of health, comfort, and function with appropriate esthetics; and to prevent the recurrence of periodontitis. In addition, regeneration of the periodontal attachment apparatus, where indicated, may be attempted.

TREATMENT CONSIDERATIONS

Clinical judgment is an integral part of the decision-making process. Many factors affect the decisions for appropriate therapy(ies) and the expected therapeutic results. Patient-related factors include systemic health, age, compliance, therapeutic preferences, and patient's ability to control plaque. Other factors include the clinician's ability to remove subgingival deposits, prosthetic demands, and the presence and treatment of teeth with more advanced chronic periodontitis.

Treatment considerations for patients with advanced loss of periodontal support are described below.

Initial Therapy

1. Contributing systemic risk factors may affect treatment and therapeutic outcomes for chronic periodontitis. These may include diabetes, smoking, cer-

tain periodontal bacteria, aging, gender, genetic predisposition, systemic diseases and conditions (immunosuppression), stress, nutrition, pregnancy, HIV infection, substance abuse, and medications. Elimination, alteration, or control of risk factors which may contribute to adult periodontitis should be attempted. Consultation with the patient's physician may be indicated.

2. Instruction, reinforcement, and evaluation of the patient's plaque control should be performed.

3. Supra- and subgingival scaling and root planing should be performed to remove microbial plaque and calculus.

4. Antimicrobial agents or devices may be used as adjuncts. Subgingival microbial samples may be collected from selected sites for analysis, possibly including antibiotic-sensitivity testing.

5. Local factors contributing to chronic periodontitis should be eliminated or controlled. To accomplish this, the following procedures may be considered:
   A. Removal or reshaping of restorative overhangs and over-contoured crowns;
   B. Correction of ill-fitting prosthetic appliances;
   C. Restoration of carious lesions;
   D. Odontoplasty;
   E. Tooth movement;
   F. Restoration of open contacts which have resulted in food impaction;
   G. Treatment of occlusal trauma;
   H. Extraction of hopeless teeth.

6. For reasons of health, lack of effectiveness or non-compliance with plaque control, patient desires, or therapist's decision, appropriate treatment to control the disease may be deferred or declined.

Compromised Therapy

In certain cases, because of the severity and extent of disease and the age and health of the patient, treatment that is not intended to attain optimal results may be indicated. In these cases, initial therapy may become the end point. This should include timely periodontal maintenance.

Periodontal Surgery

In patients with chronic periodontitis with advanced loss of periodontal support, periodontal surgery should be considered. A variety of surgical treatment modalities may be appropriate in managing the patient.

1. Gingival augmentation therapy
2. Regenerative therapy:
   A. Bone replacement grafts;
   B. Guided tissue regeneration;
   C. Combined regenerative techniques.
3. Resective therapy:
   A. Flaps with or without osseous surgery;
   B. Root resective therapy;
   C. Gingivectomy.

Other Treatments

1. Refinement therapy to achieve therapeutic objectives.

2. Treatment of residual risk factors should be considered; e.g., cessation of smoking, control of diabetes.

3. Problem focused surgical therapy. This approach may be considered to enhance effective root debridement, to possibly enhance regenerative therapy, to reduce gingival recession, etc. on patients who demonstrate effective plaque control and favorable compliance in their prior dental care.

4. An appropriate initial interval for periodontal maintenance should be determined by the clinician (see on Periodontal Maintenance Parameter, pages 849-850).

OUTCOMES ASSESSMENT

1. The desired outcome of periodontal therapy in patients with chronic periodontitis with advanced loss of periodontal support should include:
   A. Significant reduction of clinical signs of gingival inflammation;
   B. Reduction of probing depths;
   C. Stabilization or gain of clinical attachment;
   D. Radiographic resolution of osseous lesions;
   E. Progress toward occlusal stability;
   F. Progress toward the reduction of clinically detectable plaque to a level compatible with gingival health.

2. Areas where the periodontal condition does not resolve may occur and be characterized by:
   A. Inflammation of the gingival tissues;
   B. Persistent or increasing probing depths;
   C. Lack of stability of clinical attachment;
   D. Persistent clinically detectable plaque levels not compatible with gingival health.

3. In patients where the periodontal condition does not resolve, additional therapy may be required.
   A. Not all patients or sites will respond equally or acceptably;
   B. Additional therapy may be warranted on a site specific basis.

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