Parameter on Chronic Periodontitis With Slight to Moderate Loss of Periodontal Support*

The American Academy of Periodontology has developed the following parameter on the treatment of chronic periodontitis with slight to moderate 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;71:853-855.

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 extending into 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

Although chronic periodontitis is the most common form of destructive periodontal disease in adults, it can occur over a wide range of ages. It can occur in both the primary and secondary dentition. It usually has slow to moderate rates of progression, but may have periods of rapid progression.

Clinical features may include combinations of the following signs and symptoms: edema, erythema, gingival bleeding upon probing, and/or suppuration. Chronic periodontitis with slight to moderate destruction is characterized by a loss of up to one-third of the supporting periodontal tissues. In molars, if the furcation is involved, loss of clinical attachment should not exceed Class I (incipient). Slight to moderate destruction is generally characterized by periodontal probing depths up to 6 mm with clinical attachment loss of up to 4 mm. Radiographic evidence of bone loss and increased tooth mobility may be present. Chronic periodontitis with slight to moderate 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.

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 the 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 the 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, restorative and prosthetic demands, and the presence and treatment of teeth with more advanced chronic periodontitis.

Treatment considerations for patients with slight to moderate loss of periodontal support are described below.

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

Initial Therapy

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

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.

6. Evaluation of the initial therapy's outcomes should be performed after an appropriate interval for resolution of inflammation and tissue repair. A periodontal examination and re-evaluation may be performed with the relevant clinical findings documented in the patient's record. These findings may be compared to initial documentation to assist in determining the outcome of initial therapy as well as the need for and the type of further treatment.

7. 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.

8. If the results of initial therapy resolve the periodontal condition, periodontal maintenance should be scheduled at appropriate intervals (see Parameter on Periodontal Maintenance, pages 849-850).

9. If the results of initial therapy do not resolve the periodontal condition, periodontal surgery should be considered to resolve the disease process and/or correct anatomic defects.

Periodontal Surgery

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

OUTCOMES ASSESSMENT

1. The desired outcome of periodontal therapy in patients with chronic periodontitis with slight to moderate loss of periodontal support should result in:

   A. Significant reduction of clinical signs of gingival inflammation;
   B. Reduction of probing depths;
   C. Stabilization or gain of clinical attachment;
   D. 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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