

# SUPPORTIVE PERIODONTAL THERAPY AND PATIENT'S COMPLIANCE: AN OVERVIEW

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## ABSTRACT:

Supportive periodontal treatment is an integral part of periodontal therapy. Supportive periodontal treatment is usually started after completion of active periodontal therapy and continues at varying intervals. Equally important is the extent to which the patient cooperates with the clinician so as to enable him to keep a periodic check on the stability of active periodontal treatment. Thus, patient cooperation is termed as patient's compliance. Therefore, both the supportive periodontal therapy and patient's compliance are of critical importance to the survival of the dentition.

**Keywords:** Supportive periodontal therapy, Patient's compliance, supervision, dental hygienist.



## INTRODUCTION:

Supportive periodontal treatment is usually started after completion of active periodontal therapy and continues at varying intervals for the life of the dentition or its implant replacements. The patient may move back into active care if the disease undergoes a period of exacerbation.<sup>[1]</sup> Supportive periodontal treatment should include an update of medical and dental histories, radiographic review, extra-oral and intra-oral soft tissue examination, dental examination, periodontal evaluation, removal of bacterial plaque from the supragingival and subgingival regions. Scaling and root planing where indicated, polishing of the teeth and a review of the patient's plaque control efficacy and other appropriate behavior modification.<sup>[2]</sup> These procedures are

performed at selected intervals to assist the periodontal patient in maintaining oral health. The SPT varies greatly from office to office, therapist to therapist, patient to patient, and for the same patient over time.<sup>[3]</sup>

## THERAPEUTIC OBJECTIVES

The therapeutic objectives of supportive periodontal therapy are:

1. To prevent the progression and recurrence of periodontal disease in patients who have previously been treated for gingivitis and periodontitis.

2. To prevent the loss of dental implants after clinical stability has been achieved.
3. To reduce tooth loss by monitoring the dentition and any prosthetic replacements of the natural teeth.
4. To diagnose and manage, in a timely manner, other diseases or conditions found within or related to the oral cavity.

#### **FREQUENCY AND EFFICACY:**

For most patients with gingivitis but no previous attachment loss, supportive periodontal treatment twice a year will suffice.<sup>[7]</sup> For patients with a previous history of periodontitis, the results from a number of clinical trials suggest that the frequency of supportive periodontal treatment should be less than 6 months. Intervals of 2 weeks<sup>[4,5]</sup> 3 months,<sup>[6,7,8,9,10,11,12,13,14]</sup> 3-4 months<sup>[15,16]</sup>, 3-6<sup>[17,18,19]</sup> months and (4-6)<sup>[20]</sup> months have been proposed and studied. These data indicate that most patients with a previous history of chronic periodontitis should be seen at least four times a year, because that interval will result in a decreased likelihood of progressive disease as compared with patients seen less frequently.<sup>[21,22]</sup> Compliance with suggested supportive periodontal treatment intervals can affect the success of treatment. This body of data supports the concept that it is advantageous if supportive periodontal treatment visits are performed every 3 months. This interval should be individualized. Supportive periodontal

treatment intervals can be tailored to the individual needs of each patient and further modified based on ongoing clinical studies.

#### **STEPS OF SUPPORTIVE THERAPY:**

From a clinical point of view, the stability of periodontal condition reflects a dynamic equilibrium between bacterial challenge and an effective host response. Whenever changes occur in either of these aspects homeostasis is disturbed. Hence, it is evident that the diagnostic process must be based on a continuous monitoring of the multilevel risk profile.<sup>[23]</sup> Steps of supportive therapy include review and update of medical and dental history, clinical examination, radiographic examination, assessment of disease status, assessment of oral hygiene status, treatment, communication and planning of next visit.<sup>[24]</sup>

#### **SUPPORTIVE PERIODONTAL THERAPY AND PATIENT COMPLIANCE:**

Compliance is defined as the extent to which the behavior of the patient (in terms of taking medications, following a recommended diet, or executing other lifestyle changes) adheres to the clinical prescription.<sup>[25]</sup> Several investigations have indicated that only a minority of periodontal patients complies with the prescribed supportive periodontal care. [26] Checchi et al. <sup>[27]</sup> demonstrated that patients who engaged in poor compliance with SPT were 5.6 times more likely to lose teeth than were regularly compliant patients.

Periodontal follow-up care varies greatly from therapist to therapist and from patient to patient; however, the typical maintenance appointment for patients with periodontal disease includes the following items:

Chart review and update of medical and dental history

- Extra-oral clinical examination
- Oral examination, including
- Mucosal examination
- Dental examination

Dental caries, restorative and prosthetic evaluation, tooth mobility, fremitus

- Periodontal examination
  - ✓ Probing depths
  - ✓ Gingival recession
  - ✓ Furcation involvement
  - ✓ Gingivitis, bleeding upon probing
  - ✓ Gingival exudation
  - ✓ Levels of plaque and calculus
  - ✓ Occlusal examination
- Radiographic evaluation
- Personal oral hygiene review
- Possibly microbiological monitoring
- Removal of supragingival deposits
- Removal of subgingival accretions

- Behavior modification
- Oral hygiene instruction
- Control of risk factors; e.g., cessation of smoking
- Communication and planning of future, patient appointments or referral

The typical maintenance appointment is 1 hour, and no more than 30-40 minutes is normally allocated to scaling and root planing. Presence of deep periodontal pockets and open furcation can require considerably longer treatment time.<sup>[28]</sup>

#### **PATIENT RISK ASSESSMENT:**

The patient's risk assessment for recurrence of periodontitis may be evaluated on the basis of a number of clinical conditions whereby no single parameter displays a more paramount role. The entire spectrum of risk factors and risk indicators ought to be evaluated.

#### **Genetic Influences:**

Not every individual is susceptible in the same way to the same amount of biofilm and/or bacteria. Experimental gingivitis studies from the 1970s found that even in the absence of oral hygiene for 21 days, some individuals did not develop gingivitis, while others had substantial inflammation within two weeks. The differences in gingivitis susceptibility were independent of both a quantitative difference in plaque accumulation and a qualitative difference in plaque content.<sup>[29]</sup>

## Smoking and Diabetes:

An environmental influence is an externally acquired aspect of health or behavior that increases the risk of disease. In periodontal disease, smoking and the presence of diabetes are two of the strongest and most well-established risk factors to date. Studies indicate that smokers are more likely to have deeper probing depths, greater attachment loss, more bone loss, and fewer teeth. There is often more calculus but less inflammation.

People who have diabetes are about three times more likely to have periodontal disease than people without diabetes.

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## CONCLUSION:

Furthermore, it has been established that treated periodontal patients who comply with regular periodontal maintenance appointments have a better prognosis than patients who do not comply.

Patient's compliance is the indicator for disease recurrence. Thus, this article concludes emphasizes the vital role of active patients' compliance with supportive periodontal therapy that patient compliance plays the major role in the success of periodic supportive periodontal therapy

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