Evaluation of cause-related periodontal therapy and compliance with maintenance care recommendations

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Abstract. An evaluation of the long-term clinical effects of an intense period of cause-related periodontal therapy provided by dental hygiene students, was made in patients with moderately advanced periodontitis. By the evaluation, we also intended to gain information about compliance with given recommendations for periodontal health maintenance. The results after 3 years without supervision by the specialist team showed that achieved beneficial effects on the gingival conditions were maintained despite a significant increase in plaque prevalence. Recommendations as to the daily use of a variety of additional oral hygienic measures besides toothbrushing met with a considerable lack of compliance. Maintenance visits to the referring general practitioner were mostly made once a year and included regular dental care. Despite this, no further deterioration of periodontal status was observed. The results indicate that it may be possible to maintain successful effects of periodontal therapy in this patient category with less personal and professional effort than traditionally recommended.

It is well-established that the cause-related phase of periodontal therapy alone can result in very beneficial effects (Lövdal et al. 1961, Suomi et al. 1971, Tagge et al. 1975, Ramfjord et al. 1975, 1982, Hughes & Caffesse 1978, Listgarten et al. 1978, Helldén et al. 1979, Knowles et al. 1979, Morrison et al. 1980, Hill et al. 1981, Pihlstrom et al. 1981, Badersten et al. 1981, 1984, Lindhe et al. 1982, Caton et al. 1982, Cerneck et al. 1983, Magnusson et al. 1984). The results demonstrated in these studies have shown that progressive periodontal disease can be arrested and controlled provided that plaque and calculus retention factors are thoroughly eliminated. As a consequence, the concept has been established that the periodontally-treated patient should be incorporated into supportive programs of regular, often frequent, visits for maintenance therapy (e.g. Parr et al. 1974, Söderholm 1979, Ramfjord et al. 1982).

It appears, however, that our information concerning the relative importance of the personal and professional roles for achieving and maintaining periodontal health is incomplete (Glavind 1977, Glavind et al. 1981, 1983). Long-term results from periodontal prophylaxis at bi-weekly to 3-monthly intervals have primarily underlined the importance of the professional contribution to the therapeutic effect (Nyman et al. 1975, 1977, Axelsson & Lindhe 1981a, b, Ramfjord et al. 1982). However, there are reports which show that such routines for effective periodontal care are difficult to institute in general dental practice (Axelsson & Lindhe 1981b). When the services of specialists are limited, maintenance of the
periodontal health achieved after therapy may be hampered, which makes it necessary to depend on reliable cooperation of the patient and referring general practitioner (Ravald & Hamp 1981, Kristoffersen & Meyer 1983).

Accordingly, in addition to the clinical effects obtained, the compliance with measures for periodontal health maintenance recommended by the specialist team may be crucial for a long-lasting good result of routine periodontal therapy. The aim of the present investigation was (1) to study the long-term clinical effects of an intense period of cause-related periodontal therapy provided by dental hygiene students, and (2) to evaluate compliance with the maintenance care recommendations received during active therapy.

Material and Methods

Subjects
75 patients with moderately advanced periodontitis were randomly selected from 191 who were referred to the Department of Dental Hygiene, County School of Health Sciences in Östergötland, Linköping, Sweden in 1978, for cause-related (conservative, non-surgical) periodontal therapy. Due to the presence of a number of severe periodontal lesions, mainly advanced furcation involvements considered to need surgical intervention, 18 patients were excluded from the investigation. The drop-outs were 6 patients with a declared lack of interest in a 3-year re-examination, another 6 who had moved out of the area, and 1 patient due to illness. Thus, the material investigated comprised 44 patients, 23 females and 21 males. The average age was 44 years, ranging from 22 to 70 years.

Periodontal treatment and control
All patients were treated by 8 students, supervised by 2 instructors, as a part of their education and training to become dental hygienists. The treatment comprised the cause – related phase of periodontal therapy according to established routines. Each patient was instructed in the use of the most suitable oral hygiene aids which also included, besides multitufted soft toothbrushes, triangular toothpicks, interproximal and single-tufted brushes, dental floss and disclosing tablets. The daily use of a variety of these aids was recommended according to each individual patient’s needs. Disclosing tablets were used prior to the oral hygiene training. No more than 2 oral hygiene aids were introduced at each training session.

The major part of the treatment efforts consisted of scaling and root planing, adjustment of ill-fitting restorations and professional cleaning of all teeth with a fluoride-containing prophylactic paste. In addition, the caries-preventive measures included rinsing with a 0.05% sodium fluoride solution at each session and a final topical application of a fluoride-containing varnish. All patients were given prescriptions for a 0.05% sodium fluoride solution for continuous daily mouth rinsing. Preventive information and oral hygiene instructions were reinforced according to the individuals’ needs. On an average, 8.8 treatment sessions per patient were arranged during the period of active therapy, which in no case exceeded 6 months.

Upon discontinuation of active therapy, each patient was returned to the referring dentist for restorative and periodontal maintenance therapy. The dentist was notified of the periodontal diagnosis and the treatment provided for the referred patient. He was informed what oral hygiene aids had been specified for individual daily use and that the professional part of the recommended maintenance care was to be carried out in his general practice. Supervision by the specialist team was not intended.

Examinations and interviews
None of the patients was under treatment by the referring dentist at the time of the baseline examination or at the 3-year re-examination, which were carried out by the students and
thoroughly checked by their instructors. The oral hygiene status was determined by assessing the number of tooth surfaces with a continuous band of plaque in the cervical region following staining with disclosing solution. The depth of each periodontal pocket was measured to the nearest mm on a graduated periodontal probe and the probing depth thereby assessed. The gingival condition was evaluated by assessing the number of pockets with bleeding provoked by the probing procedure. Also, full-mouth X-rays and intra-oral photos were taken.

At the re-examination, each patient answered, in a structured interview, 8 questions concerning their periodontal maintenance care during the 3-year period. In addition, the patients were asked to provide written answers to 4 questions about the cause and prevention of dental caries and periodontal disease.

**Results**

At baseline, the patients had on average 24.5 ± 4.8 teeth and after 3 years, 23.7 ± 5.3 (x; s.d.), 40% of the lost teeth were third molars; 30% (10 teeth) were extracted from 1 patient as part of full upper denture therapy. In 30 patients, no teeth were lost during the observation period.

**Table 1.** Mean values (x; SEM) for plaque and bleeding on probing prevalence (%) and mean number of deepened periodontal pockets per patient during the trial

*Mittelwerte (x; SEM) für das Vorkommen (%) von Plaque und Sonderungsblutungen während des Versuches, und mittlere Anzahl parodontaler Taschenvertiefungen pro Patient*

*Valeurs moyennes (x; erreur-type de la moyenne) concernant la prévalence (%) de la plaque et du saignement provoqué par sondage (bleeding) et nombre moyen de poches parodontales vestibulaires et linguales d’une part et proximales d’autre part, ayant une profondeur augmentée. La prévalence est calculée par patient à différentes périodes de l’étude: à l’origine (baseline), à la fin du traitement actif et à l’examen de rappel (re-examination)*

<table>
<thead>
<tr>
<th>Examination</th>
<th>Year</th>
<th>Plaque prevalence (%)</th>
<th>Bleeding prevalence (%)</th>
<th>No. of examined pockets</th>
<th>Buccal/Probing depth lingual ≥ 3 mm</th>
<th>Proximal ≥ 4 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>at baseline</td>
<td>1</td>
<td>50.9</td>
<td>50.5</td>
<td>98.1</td>
<td>13.0</td>
<td>21.7</td>
</tr>
<tr>
<td>at completed active therapy</td>
<td>1/2</td>
<td>12.8</td>
<td>15.0</td>
<td>98.1</td>
<td>5.8</td>
<td>8.7</td>
</tr>
<tr>
<td>at re-examination</td>
<td>3</td>
<td>32.6</td>
<td>17.6</td>
<td>94.8</td>
<td>3.6</td>
<td>9.3</td>
</tr>
</tbody>
</table>

*Oral hygiene status (Table 1). At baseline, plaque was scored on an average of 50.9% of the tooth surfaces. At the end of active therapy, the prevalence had been significantly reduced to 12.8% (P<0.001). After 3 years, the corresponding figure was 32.6%, and thus a significant increase in plaque prevalence had taken place compared to the previous recording (P<0.001). Approximately 3/4 of the surfaces harbouring plaque at the 3-year re-examination were approximal surfaces.*

*Gingival conditions (Table 1). At baseline, bleeding on probing was assessed at an average of 50.5% of the periodontal pockets. After active therapy, the prevalence was 15.0%, a significant improvement (P<0.001). Bleeding was present in 17.6% at the 3-year re-examination. Approximately 3/4 of the bleeding pockets were located interproximally.*

*Probing depth (Table 1). At baseline, on average, 13.0 pockets per patient equal to or deeper than 3 mm were probed buccally and lingually. After active therapy, this number was significantly reduced to 5.8 (P<0.001). At the 3-year re-examination a further reduction had taken place to 3.6 (P<0.05). At baseline, on average, 21.7 interproximal pockets per patient equal to or deeper than 4 mm were probed. After active therapy and at
the 3-year re-examination, the corresponding figures were 8.7 and 9.3, respectively ($P<0.001$).

Hygienic measures. All patients were advised to use a toothbrush twice a day. In addition, the daily use of toothpicks was recommended to 37 (84%) of the patients (Table 2). Daily use of dental floss and a single-tufted interspace brush was proposed for 17 (39%) and 35 (80%) of the patients, respectively.

After 3 years, approximately half of the patients complied with the recommendations concerning daily use of toothpicks; the remaining patients made only occasional or no use at all (Table 2). Less than half of the patients who had been recommended the daily use of interproximal brushes followed the recommendation; the majority of the remaining patients did not use this aid. Likewise, the use of dental floss was reduced, while the single-tufted interspace brush had been almost completely abandoned by the patients.

None of the patients who had been recommended daily use of 3 additional oral hygiene aids complied with this recommendation after 3 years (Table 3). Of 26 patients to whom it was proposed that they use 2 additional aids daily, only 7 followed the recommendation. The 3 patients recommended to use one additional aid daily did so after 3 years. Almost half of the patients had ceased to use any of the additional oral hygiene aids.

Maintenance visits. 32 (73%) of the patients visited their referring dentist once a year, 9 (20%) paid 2 visits a year. The majority, 29

Table 2. Frequency (%) of patients recommended daily use of various additional oral hygiene aids at completed active therapy and the patients' compliance 3 years later

<table>
<thead>
<tr>
<th>Year</th>
<th>Toothpick</th>
<th>Interproximal brush</th>
<th>Dental floss</th>
<th>Single-tufted brush</th>
</tr>
</thead>
<tbody>
<tr>
<td>recommeded daily use</td>
<td>1/2</td>
<td>84</td>
<td>25</td>
<td>39</td>
</tr>
<tr>
<td>practiced daily use</td>
<td>3</td>
<td>45</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>occasional use, ≤ once per week</td>
<td>3</td>
<td>16</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>no use</td>
<td>3</td>
<td>23</td>
<td>11</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 3. Number of patients with recommended daily use of additional oral hygiene aids at completed active therapy and their compliance after 3 years

<table>
<thead>
<tr>
<th>No. of additional oral hygiene aids</th>
<th>Recommended daily use</th>
<th>Compliance after 3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>6</td>
</tr>
</tbody>
</table>

(proposed daily use of 3 additional oral hygiene aids).
Table 4. Number of patients according to frequency of maintenance visits to the referring dentist and the patients’ plaque and bleeding on probing prevalence grouped at consecutive 20th percentiles

<table>
<thead>
<tr>
<th>Prevalence (%)</th>
<th>6 months plaque bleeding</th>
<th>Examination 12 months plaque bleeding</th>
<th>18 months plaque bleeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>7</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>20-39</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>40-59</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>60-79</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>80-100</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(66%), had a prevalence of bleeding on probing of less than 20%, regardless of the frequency of visits (Table 4).

23 (52%) of the patients stated that their dentist had made advisory comments on their oral hygiene status and gingival conditions in connection with the maintenance visits. 17 (39%) had received oral hygiene re-instruction by their dentist. Neither the plaque nor the bleeding on probing prevalence differed significantly between the patients who had received such comments or re-instructions, and those who had not (Table 5).

Dental health knowledge. Less than one third of the patients gave fully correct answers to the questions about the cause of dental caries, i.e., sugar in diet and ineffective oral hygiene, and the beneficial effect of proper preventive habits in these aspects (Table 6). A majority answered partly correctly, with oral hygiene as the predominant answer. The questions about the etiology and prevention of periodontal disease

Table 5. Mean values (X; SEM) for plaque and bleeding on probing prevalence (%) after 3 years, related to the concern shown by the referring dentist for the patient’s oral hygiene skills during the observation period

<table>
<thead>
<tr>
<th>Oral hygiene status and gingival condition commented, n=23</th>
<th>Plaque prevalence (%)</th>
<th>Bleeding prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>oral hygiene status and gingival condition commented, n=23</td>
<td>32.7</td>
<td>14.9</td>
</tr>
<tr>
<td>oral hygiene status and gingival condition not commented, n=21</td>
<td>4.2</td>
<td>2.9</td>
</tr>
<tr>
<td>oral hygiene re-instruction given, n=17</td>
<td>32.5</td>
<td>20.7</td>
</tr>
<tr>
<td>oral hygiene re-instruction not given, n=27</td>
<td>4.5</td>
<td>3.6</td>
</tr>
<tr>
<td>oral hygiene re-instruction</td>
<td>29.6</td>
<td>14.1</td>
</tr>
<tr>
<td>oral hygiene re-instruction not given, n=27</td>
<td>4.1</td>
<td>3.4</td>
</tr>
<tr>
<td>oral hygiene re-instruction</td>
<td>34.5</td>
<td>19.9</td>
</tr>
<tr>
<td>oral hygiene re-instruction not given, n=27</td>
<td>4.2</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Table 6. Distribution of answers to the questions “What causes caries?” (A), “What can you do to prevent caries?” (B), “What causes periodontal disease?” (C) and “What can you do to prevent periodontal disease?” (D)

Die Verteilung der Antworten auf die Fragen: «Was verursacht die Zaharakies?» (A), «Was können Sie tun um der Karies vorzubeugen?» (B), «Was verursacht Parodontalkrankheiten?» (C), und «was können Sie selbst tun um parodontalen Krankheiten vorzubeugen?» (D)

Distribution des réponses aux questions posées sur la cause des caries dentaires (A), sur la prévention des caries (B), sur la cause des parodontites (C) et sur la prévention des parodontites (D). Le score donné pour l’réponse correcte est de 1, pour une réponse partiellement correcte sur l’influence de l’alimentation ou l’influence de l’hygiène buccodentaire, 1/2, et pour une réponse erronée, 0

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency of answers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>correct answer</td>
<td>1</td>
</tr>
<tr>
<td>partly correct answer</td>
<td></td>
</tr>
<tr>
<td>– diet influence</td>
<td>1/2</td>
</tr>
<tr>
<td>– oral hygiene influence</td>
<td>1/2</td>
</tr>
<tr>
<td>wrong answer</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 7. Scores for answers to questions about caries and periodontal disease related to mean values (X; SEM) for plaque and bleeding on probing prevalence (%) after 3 years

Beurteilungseinheiten der Antworten auf die Frage nach der Karies und der Parodontopathie in Bezug auf die Mittelwerte (X; SEM) des Vorkommens von Plaque und von Blutungen nach dem Sondieren (in %) nach 3 Jahren

Scores obtenus pour les réponses aux questions concernant le caries et les parodontites, suivant les valeurs moyennes (X; erreur-type de la moyenne) de la prévalence de la plaque et du saignement provoqué par sondage après 3 ans

<table>
<thead>
<tr>
<th>Score</th>
<th>No. of individuals</th>
<th>Plaque prevalence (%)</th>
<th>Bleeding prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>22</td>
<td>22.1</td>
</tr>
<tr>
<td>1.5</td>
<td>4</td>
<td>22</td>
<td>36.7</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>n.s.</td>
<td>4.5</td>
</tr>
<tr>
<td>2.5</td>
<td>4</td>
<td>22</td>
<td>3.8</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>28.5</td>
<td>13.1</td>
</tr>
<tr>
<td>3.5</td>
<td>7</td>
<td>4.0</td>
<td>2.3</td>
</tr>
</tbody>
</table>

P-value is given for groups of patients according to score intervals 0-2 and 2.5-3.5.

Der P-Wert wird für die Patientengruppen, den Beurteilungsintervallen 0-2 und 2.5-3.5 entsprechend, angegeben.

La valeur de P est donnée pour les groupes de patients dont les scores correspondent aux intervalles 0-2 et 2.5-3.5.

were correctly answered by almost 2/3 of the patients.

The total score of each individual for the dental health knowledge answers was related to the individual’s oral hygiene and gingival status (Table 7). There was a significant difference on the group level in bleeding on probing prevalence between patients with a low as compared with a high total knowledge score (P<0.05). No statistically significant difference in plaque prevalence was demonstrated between corresponding groups.

Use of fluorides. 32 of the patients had utilized their fluoride prescription; however, only 2 had rinsed daily with the 0.05% sodium fluoride solution during the 3-year period. 23 of the patients stated that they used a fluoride toothpaste regularly, 15 did not know whether their toothpaste contained fluoride, and 6 did not use a fluoride toothpaste at all.

Discussion

The results of the present study confirm earlier observations that successful clinical results are likely when carefully conducted cause-related (conservative, non-surgical) treatment of
moderate periodontitis is carried out. Further, the study indicates that beneficial effects can be achieved also in the long-term, despite the fact that the level of compliance with given maintenance care recommendations may be lower than professionally demanded. When evaluated 3 years after active periodontal therapy, the patients' periodontal status showed no further deterioration and periodontal health was maintained with considerably less personal and professional effort than recommended.

When discussing the results, attention should be paid to the specific routines used for the periodontal therapy. It may be argued that ideal prerequisites for professional periodontal therapy were not established by utilizing dental hygiene students for the various sequences of treatment. However, the good or excellent clinical results accomplished on discontinuation of active therapy do not support this view. On the contrary, they are in accord with other reports demonstrating successful results of cause-related periodontal therapy by using paraprofessional personnel (Söderholm 1979, Hetland et al. 1982). The numerous visits to the dental hygiene students, a consequence of the educational and training program, are to be considered as an ordinary expenditure and in accordance with other studies using dental hygienists and/or dentists for cause-related therapeutic endeavors (Pihlstrom et al. 1981, Lindhe et al. 1982). There is no disagreement, that successful periodontal therapy presupposes frequent visits for a comprehensive program of information and instruction in the use of a variety of oral hygiene measures, thorough scaling and root planing, recontouring of ill-fitting restorations, and detailed advice concerning individual maintenance care (Rylander et al. 1983).

It is well-recognized that scaling and root planing procedures are difficult and time-consuming if the objective is to obtain complete removal of plaque and calculus (Waerhaug 1978). A majority of the time spent in the dental chair was therefore utilized for debridement prophylaxis, but reinforcement of oral hygiene skills was continuously provided according to the patients' needs. In the teaching of plaque control, no more than 2 oral hygiene aids at a time were introduced, an approach which has been widely recommended in order to avoid patient confusion because of an initially too extensive dental health education. The students were also made aware that repetition of dental health education, in particular reinforcement of oral hygiene instructions, might have a dampening effect on motivation both for the patient and the therapist and so reduce the effect of the preventive education (Hamp & Johansson 1982, Glavind et al. 1983). Also, there may be a risk of an undesirable dependency of the patient on the therapist, undermining the preventive behavior of the patient (Sheiham 1983). These shortcomings need not become obvious during active therapy but may appear at subsequent maintenance visits.

The limited access to specialist teams in Scandinavia also necessitates the cooperation in maintenance therapy with the patient's referring dentist. Kristoffersen & Meyer (1983) recently stated that "the responsibility for periodontal maintenance rests primarily with the patient's general dental practitioner. The patient obviously has a responsibility, but it rests with the dentist to supervise the patient's endeavours to meet the requirements for proper tooth cleaning". With this approach, insufficient continuing education in periodontics of the general practitioner may lead to unsuccessful traditional dental care of the patient, while an appropriately arranged continuing education may create adequate prerequisites for a good prognosis for active therapy (Hamp et al. 1975, Hugoson 1981, Axelsson & Lindhe 1981a). In this study, a majority of the referring dentists had undergone a comprehensive continuing education program in periodontics and were, it is hoped, sufficiently prepared for their professional contribution to individual maintenance care (Hamp et al. 1975).

With these professional prerequisites, and
despite a low level of patient compliance, an achieved periodontal health could be maintained in this patient category with remarkably less personal and professional effort than traditionally recommended. Certainly, this is a striking finding which may direct attention to a statement made by Sheiham (1982) that "the methods of persuading patients to improve their oral cleanliness... are more appropriate to acute diseases which ensure a higher rate of short-term compliance than to chronic diseases which require long-term behavioral change". In this context it is interesting that the obvious lack of compliance with given recommendations about daily use of a variety of additional oral hygienic measures besides toothbrushing seems to have had little bearing on the gingival and periodontal conditions of the patients. Fewer aids and, also, less frequent use of these aids were sufficient for the maintenance of achieved periodontal health, although a further improvement of the interproximal hygiene was desirable. Perhaps the less than perfect control of the interproximal oral hygiene would have been improved if less emphasis had been placed on seemingly irrelevant aids and measures.

The findings of the present study indicate a professionally demanding, unrealistically high level of patient compliance. It may well be that the lack of compliance also reflects that the students have failed to get the oral hygiene message across in an appropriate way. Observations made in the medical field, that patients remember best what they are told first and what they consider most important, should be correspondingly valid in the dental field (Ley 1977, Sheiham 1980). Our findings also support Söderholm & Egelberg (1982) and Söderholm et al. (1982), who, in an analysis of various programs for teaching plaque control, stated that "comprehensive programs may not be necessary and may not increase the effect of basic plaque control instruction". To this should be added the view by Glavind et al. (1981) that "maintenance of a high level of oral hygiene in adult patients participating in a preventive program can be ascribed to psychological and feedback mechanisms rather than to professional prophylaxis and instruction per se". In the striving for optimal periodontal health of the individual patient, further research into factors affecting compliance seems urgent (Rayant & Sheiham 1980, Mindus 1982).

The optimal frequency of maintenance visits has not yet been established, and recommendations for recall prophylaxis seem to be based mainly on empirical clinical decisions (Caton et al. 1982). The findings of the present study indicate that, under the discussed prerequisites, a routine for frequent maintenance visits for periodontal check-ups following active therapy may not need to be established. This conclusion does not rule out the need for patients with recurrent periodontal disease to receive renewed intense periodontal treatment. Recent results based on clinical and microbiological data indicate that progress in the diagnosis of varying disease activity and susceptibility among individual patients should facilitate advances in the selection and individualization of the periodontal therapy (Listgarten & Schiffter 1982, Slots & Rosling 1983), particularly since solely clinical parameters have not yet been demonstrated to be useful as predictors of disease activity at individual sites (Haffajee et al. 1983). In addition, the findings of the present study support the need for a better recognition of what constitutes healthy behavior (Lalonde 1974, Kickbusch 1981, Sheiham 1983).

Acknowledgements

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Zusammenfassung

Die Auswertung ursachenbezogener Parodontalthera pie, sowie von Empfehlungen zur Nachsorge
Die klinischen Langzeitfolgen einer intensiven, von
Studierenden der Dentalhygiene vorgenommenen, ursachenbezogenen Parodontaltherapie, wurden bei Patienten mit mässig fortgeschrittener Parodontitis ausgewertet. Weiterhin beabsichtigte man, die Be- folgung mitgeteilter Empfehlungen zur Erhaltung der erreichten parodontalen Gesundheit zu überprüfen. Nach 3-jähriger Beobachtung durch ein Fach-Team zeigten die Resultate, dass trotz signifikanter Zunahme des Plaquevorkommens, der durch die vor- gehende Therapie erreichte günstige Effekt auf die Gesundheit des Zahnfleisches beibehalten werden konnte.


Résumé

Evaluation de la thérapeutique causale des parodontites et de la mesure dans laquelle les patients se conforment aux recommandations données pour les soins de maintien

Chez des patients atteints de parodontites à un stade modérément avancé, on a cherché à évaluer les effets cliniques à long terme d’une période de thérapeutique causale intensive, assurée par des étudiants en hygiène dentaire. L’évaluation visait aussi à donner des informations sur la mesure dans laquelle les patients se conforment aux recommandations reçues pour les soins destinés au maintien de la santé parodontale. Après 3 mois sans la surveillance de l’équipe spécialisée, les observations montraient que l’amélioration de l’état gingival obtenue par le traitement se maintenait, bien que la prévalence de la plaque ait augmenté significativement. Les recommandations concernant l’usage quotidien de divers accessoires complémentaires d’hygiène bucco-dentaire en plus du brossage des dents ont été remarquablement suivies. Les visites pour soins de maintien chez le praticien ayant adressé les patients à l’institut dentaire n’avaient dans la plupart des cas lieu qu’une fois par an, et comprenaient les soins dentaires habituels. Malgré cela, on n’a pas observé d’aggravation ultérieure de l’état parodontal. Ces observations indiquent qu’il semble possible d’assurer le maintien de l’amélioration obtenue par le traitement parodontal dans cette catégorie de patients avec moins d’effort personnel et professionnel qu’on ne le recommande habituelle-ment.

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