The Results of Efforts To Improve Compliance with Supportive Periodontal Treatment in a Private Practice

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Patients who receive routine supportive periodontal treatment (SPT) tend to keep their teeth longer and enjoy greater periodontal health than those individuals who do not receive this therapy. Previous studies have found less than optimal compliance to suggested SPT. The study reported in this paper covered 5 years of patient data and measured the effects of efforts to improve compliance in a private periodontal practice. These efforts included attempts at simplifying compliance, maintaining records of compliance, informing patients of the consequences of noncompliance, and attempting to identify noncompliers before active periodontal therapy was initiated. The results were measured against a similar group studied in previous work within the same office published in 1984. The main finding of the present study was an increase in complete compliance from 16% in 1984 to 32% in 1991. This increase came largely at the expense of the noncompliant group. The reason for the increase in compliance is likely due to efforts to increase compliance carried out in the office. However, other factors such as change in the hygiene practice law, increased public awareness of dental needs, and economic depression may also have affected compliance. This information suggests that noncompliance can be reduced if the problem is recognized and efforts are made to increase compliance. J Periodontol 1993;64:311–314.

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As a group, patients who comply to suggested supportive periodontal treatment (SPT) enjoy better periodontal health and keep their teeth longer than those who do not comply or than those whose compliance is erratic.1-7 Therefore, it is important to know if our patients routinely keep these appointments. One study done in a private periodontal office showed a remarkably low degree of complete compliance to suggested SPT.8 Studies done by other groups followed and found large numbers of patients dropping out before they entered initial treatment9 or after they finished active care.10-11

In an attempt to improve compliance from the levels found in 1984, the pertinent literature was reviewed. This material revealed a number of possible approaches to improving patient compliance,12 and such changes were instituted starting in 1984 into the same private practice that originally reported low patient compliance. Some years later, a second survey was conducted to measure the effects on compliance brought about by these changes. Data for the second study were collected in 1991. The results of the 1991 survey and a comparison to the 1984 data are the subject of this paper.

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Materials and Methods
The populations for both the 1984 and 1991 studies were drawn from the same practice, but not the same patient pool. They include all the new patients examined during the years of each study and treated for periodontitis whose progress could be followed for at least 1 year after the end of active therapy.

A total of 604 patients were studied during the 5 years from which data were collected (versus 961 patients and 8 years for the 1984 data). The patients included in the 1991 study entered the practice between January 1, 1985 and August 1, 1990. Age at new patient examination ranged from 18 to 78 years (mean, 45.9). Patients alternating with their general dentist as well as patients who saw the periodontist exclusively for their SPT visits were included. All received active treatment comprising closed subgingival scaling and root planing alone or in combination with periodontal surgery. Patients were grouped by the following SPT intervals: 7 to 12 months, 5 to 6 months, 3 to 4 months, and 0 to 2 months. The longest suggested SPT interval for each patient was used when compliance was determined.

Compliance was defined in the same manner as in the 1984 paper.8 Therefore, compliance was complete if the patients in the 0 to 2 month interval returned 6 times per
year, the 3 to 4 month group, 3 times per year; the 5 to 6 month group, one visit every 6 months; the 7 to 12 month group, once a year. The majority of patients were scheduled to be seen 4 times per year. Those patients who complied to lesser degree were placed in the erratic group, while those who did not return were given the compliance status of none. It is important to note that any patient whose degree of compliance could not be ascertained from the record was excluded from data collection, otherwise all patients with periodontitis seen during the period of data collection were included. The degree of compliance was calculated by adding the total number of visits during the period of supportive periodontal treatment and dividing by the total number of years in SPT.

Efforts to improve compliance included accommodating patients' schedules; for example, appointments were offered early in the morning before normal working hours as well as on selected weekends. Training was provided to dental hygienists working with our referring dentists to insure continuity of SPT procedures. Thus, if the general dentist's office was more convenient for the patient, SPT visits could be offered there rather than our own office. A system was developed to help ensure patients participation. This included making the next appointment before he or she left the office and both telephone and post card reminders about of the next visit. Patients were also notified if they failed to keep an appointment. SPT compliance records were maintained and methods for recording patient compliance improved by educating the entire staff of the importance of SPT. In addition, attempts were made to inform patients of the importance of compliance and individual patient concerns sought out and, when possible, resolved. Many patients did not understand the need for maintenance and every effort was made to explain its importance. Attempts were made to identify and deal with potential non-compliers before active therapy began. This included questioning the patient about past compliance and gathering information from referring dentists. Those patients who had poor previous records of compliance were informed of the possible negative consequences of not attending SPT visits, as well as discussing the reasons for past non-compliance and dealing with them where possible. Positive reinforcement was given whenever possible, including showing the patient improvements in pocket probing depths and bleeding scores.

RESULTS

1991 Data
Of the 604 patients, 191 (32%) were found to be complete compliers, 292 (48%) were in the erratic category, and 121 (20%) were noncompliers. (Fig. 1).

A total of 296 (49%) of the patients received surgical therapy while the remaining 308 (51%) were treated with closed subgingival scaling and root planing alone (Fig. 2), 268 (44%) were men and 336 (56%) were women (Fig. 3).

The number of patients who were complete and erratic compliers rose as suggested SPT intervals lengthened, while non-compliance was highest in the 0 to 2 month group (Figs. 4A and 4B).
DISCUSSION
Supportive periodontal treatment appears to be an integral part of periodontal therapy and to have a profoundly positive effect on the average patient's long-term dental and periodontal health. The degree of noncompliance found in the 1984 paper was therefore distressing. Once it was learned that similar responses to long-term care were found throughout the medical and dental field, it was somewhat heartening that the problem was not isolated to one practice. This corroborative material on lack of long-term compliance to non-life threatening problems also provided suggestions aimed at improving patients' performance. These articles suggested that although improvements could be made, realistic goals should be established. Patients with chronic diseases that they do not consider to be particularly threatening in general comply completely about one third of the time. Another third comply less than completely, while the rest do not comply at all.  

While the details of how we improved compliance are important, the most important message may simply be that compliance can be improved. It is up to the individual member of the dental team to make the specific changes that lead to this change. In the present study, it is interesting to note that as compliance increased, more patients were brought into SPT.

The slight increase in the percentage of patients receiving surgical therapy (6%) represents a practice change in philosophy in delivering surgical care for some patients in the erratic and non-compliant groups. Because both of these groups tend to comply to post-operative follow-up (even several months in length), those members of the groups who comply to suggested oral hygiene procedures have occasionally been treated surgically. The rationale is to facilitate access for interproximal home care procedures, especially in posterior areas.  

Studies of compliance should include, as much as possible data on all patients entering therapy, not just those in active care, since in general, greater compliance equals better dental health. One study has shown on admirable degree of compliance to suggested periodontal treatment. Unfortunately, the data cannot be compared to the present study (or the 1984 work) because only active patients, defined as those who were seen more frequently than every 24 months, were included. Another recent work11 that used definitions of compliance similar our 1984 and 1991 data shows very similar complete compliance (36%).

While it seems that increased diligence on the part of the involved professionals contributed strongly to improved compliance, other factors were also at work. The practice reported in this study has been in the same location since its start, and the state of Texas (during the study periods) legislated that only two hygienists could be in the office at any one time. Therefore, the SPT schedule during the second study was more crowded than when the 1984 data were gathered. It may be that patients in the second study were prone to keep their appointment when they learned that it
would be several months before another could be scheduled. No doubt this had an effect. Additionally, increased public awareness resulting from the trend toward “wellness” may have also been beneficial. All of these positive factors, however, may have been offset by the severe economic recession in the area during three of the study years.

It is hoped that continued recognition of the problem of non-compliance, increased efforts on the part of professionals, and better methods for explaining to patients the importance of SPT will continue the improvements found during this study.

REFERENCES

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