

The Effectiveness of Conservative, Contemporary, Nonsurgical Periodontal Treatment

The American Dental Association has estimated that 80% of American adults have periodontal disease, including gingivitis. According to the American Academy of Periodontology, more than one third of Americans over the age of 30 have periodontitis.

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■ In addition, recent research has offered a growing amount of compelling evidence showing direct links between periodontal health and systemic health. These links include the inflammatory effects of periodontal disease correlating with greater risks of heart attack, stroke, diabetes, lower birthweight babies, and premature births. Our office finds it disturbing that there is such a high prevalence of periodontal disease—almost to epidemic proportions—in a field that has experienced vast technological advances. It is the philosophy of our office to be patient-centered, and it is our mission to diagnose and treat periodontal disease, including gingivitis—its earliest form. The methodology to accomplish this is conservative, nonsurgical treatment, with active patient involvement. We use a systemic approach to patient care, and the model we have created is based on our standard of care. Since we use it daily on every patient, our model is continually tested and evaluated based on predictions of treatment outcome as well as direct observations of its effectiveness. Our evaluation includes the following:

- occlusal evaluation and anterior guidance
- TMJ examination and muscle palpitation
- head and neck exam and oral cancer screening
- charting existing restorations and missing teeth
- diagnosing areas of caries; taking a full-mouth series of periapical films, bitewings, and panoramic x-ray
- ascertaining the patient's concerns
- establishing goals for treatment
- considering patient motivating factors as well as personality profiles.

Our periodontal evaluation form also becomes an educational tool for each patient. We record 6-point pocket depths for each tooth, bleeding points, recession, furcations, mobility, tissue contour, tissue color, plaque scores, and calculus present. We explain to patients that this is the most efficient way to determine their progress and periodontal health at a glance. We also point out to the patient all of the etiological factors that affect periodontal health and may compromise treatment. These include genetics, general systemic health, hormonal changes, diet, oral hygiene, occlusion, tobacco use, and stress. It becomes evident to patients that they can de-

velop a “barometer” to measure their periodontal health and susceptibility to disease. All of the data and variables are used as course of treatment. This “map” is developed with patients' input based on their own treatment goals. They become actively involved in their treatment recommendations.

Conservative treatment

Co-diagnosis and treatment planning with the patient sets the stage for the next step—providing conservative treatment. This includes the number of therapy appointments to be scheduled, the sequence in scheduling, and the actual clinical modalities to be used. The ultimate goal of periodontal therapy (PT) is to stop disease progression and to stabilize and improve tooth attachment. Treatment includes the use of hand instruments for scaling and root planing. We use microultrasonics for debridement and irrigation. Microultrasonics refers to power scalers that utilize mechanical vibrations to burst calculus or plaque deposits off tooth surfaces. Microultrasonic devices utilize thinner tips that are comparable to the thickness of a periodontal probe. These tips give better access to deep, narrow pockets as well as furcations. In addition, the fluid lavage of microultrasonics flushes bacteria and bacterial toxins, and the cavitation effect of the water from the rapidly moving ultrasonic tip breaks the cell walls of bacteria. (The unit the authors use is Dual Select by DENTSPLY.) Dr. Reichwage uses a diode laser to remove diseased epithelium and for bacterial decontamination. Local antimicrobials such as Atridox (CollaGenex Pharmaceuticals) are used when pocket depths are 5 mm or greater. Lastly, Periostat (Colla-Genex Pharmaceuticals) is used at 3-, 6-, 9- or 12-month intervals, depending on the patient's progress. This subantimicrobial dose of doxycycline (20 mg), used twice daily, is FDA-approved for enzyme suppression to manage periodontitis. Regardless of the treatment modalities used, the purpose is to achieve a gradual healing process and continue treatment until the disease process is controlled. Co therapy by the patient is critical. Our recommendations for this include daily use