## **QUESTION:**

# Whatever happened to treating periodontal disease?

By Robert A. Levine, DDS | Michael Rethman, DDS | Francis G. Serio, DMD, MS, MBA

#### Dr. Levine



As an educator in postgraduate programs, too often I observe the diagnosis leaning toward dental implants with no other viable treatment options to treat

the tooth/teeth. Surely implants are an option when dealing with a hopeless tooth that may be non-restorable, but if an infrabony defect or Class 2 furcation is present, can the tooth be saved with guided tissue regeneration (GTR), osseous crown lengthening, or orthodontic extrusion? We know that the bacteria associated with periodontal diseases are pathogenic and have been linked with inflammation and serious systemic diseases. These bacteria cannot differentiate between gingivitis and periodontitis and, thus, the systemic link starts in the earliest forms of periodontal disease. Any inflammation as noted by bleeding upon probing (BOP) should be controlled. Scaling and root planing (SRP) in early to moderate chronic periodontitis along with use of local subgingival antibiotics (Atridox®/ Arestin<sup>®</sup> in > 4-mm bleeding pockets) and 20 mg doxycyline (Periostat®) is a predictable three-pronged approach to gain inflammatory control. In moderate to early-advanced periodontitis (> 5-mm pockets) the additional use of short-term systemic antibiotics will further help inflammatory control. A thorough review of the patient's periodontal risk factors (eg, smoking, diabetes, compliance and plaque control, parafunctional habits, diabetes, genetic pre-disposition) is critical. Much of what the patient presents with is under their control by taking long-term action. However, a definitive diagnosis (chronic vs. aggressive periodontitis) and prognosis, as well as periodontal,

occlusal, and esthetic risk factors need to be discussed with the patient and appropriate evidence-based treatment options given, including periodontal surgical and/or regenerative therapy.

#### Dr. Rethman



Although limited research suggests that periodontally hopeless teeth can sometimes be maintained for many years, this approach is seldom useful for pa-

tients seeking a problem-free, fully functional, attractive, and pain-free oral complex.

Optimal periodontal therapy (OPT) aims to eliminate signs of inflammation by successfully treating periodontal infections and preventing recurrences. OPT necessitates halting tobacco use (a major risk factor), motivated selfcare, and expert professional care. OPT entails professional removal via SRP of subgingival biofilms, often protected by tightly adherent and hard-to-detect calculus. Pharmacotherapeutic adjuncts can be useful. Lifelong self-care and professional maintenance seek to prevent disease recurrence. OPT may also improve systemic health.

In healthy non-smokers, a reliable sign of inflammation is bleeding on probing (BOP). Studies confirm that sites which consistently display no BOP are unlikely to lose additional attachment. This makes achieving and maintaining the absence of BOP at every site a seminal clinical goal.

Typical periodontal tissue management programs (PTMPs) can helpfully facilitate meticulous self-care. However, PTMPs are sometimes mistakenly employed to supposedly address all subgingival etiologies. This misconception leads some patients and/or practitioners to mistake improved tissue characteristics at some or even most sites for overall treatment success. In contrast, OPT requires additional professional attention at every site where BOP persists. If pharmacotherapeutic adjuncts to SRP also founder, recalcitrant sites usually call for better access via surgery.

In fairness, patients' angst about periodontal surgery is not wholly unjustified. In light of contemporary alternatives, classic periodontal surgical procedures often seem needlessly aggressive. In recent decades, minimally invasive surgery (MIS), often facilitated by an endoscope, has become ubiquitous across medicine. Therefore, once a reliable periodontal endoscope (integrated with an ultrasonic scaler) becomes available, I trust that periodontists will use it regularly to reduce surgical needs. On the other hand, simplistic "miracle therapies" for periodontitis are repeatedly marketed to dentists—especially during economic recessions. Their promoters are savvy enough to cite studies to support their claims. However, many of these studies suffer from poor design and are highly prone to biases.

OPT is seldom simple. Practitioners should continually re-assess and modulate therapy on a site-by-site basis if OPT is to be attained.

### Dr. Serio



The term soft tissue management has been around for over 20 years and means different things to different people. For some, it is the systematic ap-

plication of the examination, diagnosis, and treatment protocols for the prevention and treatment of gingivitis and

periodontitis learned in dental school. For others, it is a way to create a "revenue center" for the practice's dental hygiene department. The standard of care for the diagnosis and treatment of the inflammatory gingival and periodontal diseases is the same no matter what it is called, what the fees are, and whether a dental hygienist, general dentist, or periodontist provides the treatment.

The focus should be on the prevention of inflammation and the patient's primary role in maintaining their oral health.

SRP must often be done with anesthesia to get apical to the calculus with patient comfort. Re-evaluation after 6 to 8 weeks to allow for connective tissue healing is critical. Adjunctive therapy with local or systemic antibiotics, povidone-iodine irrigation, chemotherapeutic agents, or other modalities may be necessary.

Patients and therapists need to understand that referral for regenerative or resective periodontal surgery may be necessary after STM therapy. Maintenance at the appropriate interval is key to controlling periodontal inflammation. Bleeding on probing, brushing, or flossing is bad. Bleeding is still the best indicator for the presence or absence of disease.

As the influence of oral chronic inflammation on systemic chronic inflammatory diseases is better understood, the importance of minimizing or eliminating oral inflammation is increasing. If the general dentist or hygienist does not have the necessary skills to complete STM effectively, either get further training or refer patients after diagnosis.

"Watching" that 5-mm pocket progress to a 7-mm pocket does no one any good.

#### ABOUT THE AUTHORS

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