



## Questions and Answers about Gum Disease and Treatment Options

### What is Gum Disease?

Gum disease (clinical term: periodontal disease), including gingivitis and periodontitis, is a chronic bacterial infection that, if left untreated, can lead to tooth loss. Gums can become red, swollen and bleed easily or have no symptoms at all. If the condition worsens, gums and bone that support the teeth can become seriously damaged and the teeth can become loose, fall out or have to be removed. Gum disease is often a silent and painless condition and can go undetected or ignored until severe gum and bone destruction occurs.<sup>1</sup>

### How prevalent is gum disease in the United States?

One of the most common medical conditions in the U.S., the American Dental Association (ADA) conservatively estimates that three out of four adult Americans have some form of gum disease and about 25 million adults suffer from serious periodontal disease. According to Michael Newman, DDS, PhD, Adjunct Professor of Periodontics, UCLA School of Dentistry and former president of the American Academy of Periodontology, in an address at the 7th Annual Conference on Periodontal Surgery on November 8-9, 1996, more than 100,000,000 American adults have moderate to severe gum disease yet only about 3 percent receive conventional treatment in a given year.<sup>2</sup>

### What is the traditional treatment option for severe gum disease?

Traditionally, patients diagnosed with moderate to severe gum disease had to undergo scalpel and suture periodontal surgery. During the surgery, gums are cut in order to scrape tartar off the roots, and drills are used to reshape bone. The gums are repositioned to the tooth with stitches, sometimes along with placement of bone grafts to fill in the defects. Following surgery, gum and exposed roots can be sensitive, painful, and subject to cavities. The conventional surgical process involves procedures that can require from eight to ten appointments and is not a reversible procedure.

### What is Laser Periodontal Therapy™?

In 2004, the U.S. Food & Drug Administration (FDA) cleared a less invasive, alternative treatment to conventional scalpel/suture flap surgery for patients suffering from periodontal disease. The Laser Assisted New Attachment Procedure™ (LANAP™) allows a small laser device (PerioLase® MVP-7) that uses glass fibreoptics, the thickness of three human hairs, to gently pass between the gum and the tooth to specifically target and clear away disease tissue without cutting or stitching of the gums. Clinical data suggests that the laser further helps the gum to reattach to the tooth by forming a stable, durable blood clot between the gum and the tooth, which also reduces bleeding, swelling

<sup>1</sup> "Periodontal Gum Disease FAQ," American Dental Association:

[http://www.ada.org/public/topics/periodontal\\_diseases\\_faq.asp](http://www.ada.org/public/topics/periodontal_diseases_faq.asp)

<sup>2</sup> <http://www.dent.ucla.edu/bio/bio.asp?id=277>



and discomfort. This minimally invasive laser-based treatment technique was developed by Robert H. Gregg II, DDS and Delwin K. McCarthy, DDS, and is manufactured and distributed by Millennium Dental Technologies, Inc. Millennium Dental Technologies estimates that LANAP-licensed practitioners are currently treating over 14,000 patients nationwide, on an annual basis.

## **How is Laser Periodontal Therapy™ performed?**

The Laser Periodontal Therapy technique is typically performed in a dentist's office under local anesthesia to eliminate any possible discomfort. Prior to the procedure, the dentist does a periodontal charting and takes X-rays to make a definitive diagnosis and determine the extent of the infection. A tiny laser fiber (about the thickness of three hairs) is inserted between the tooth and the gum, and the infection is cleared away. The tooth roots are then thoroughly cleaned of tartar and plaque, and the laser is used again with a different setting to create a stable, firm blood clot. The procedure is fast, usually requiring just two 2-3 hour sessions. The dentist treats one half of the patient's mouth at each session and many patients are able to drive themselves back to work or home following the procedure. Dentists typically recommend a soft diet for several days, but in most cases, patients feel well enough to eat their typical diet soon after the procedure.

## **How effective is Laser Periodontal Therapy in treating gum disease?**

A recent, peer-reviewed manuscript published in *The International Journal of Periodontics & Restorative Dentistry*<sup>3</sup> (Volume 27, Number Six, December 2007 pp. 577-587) demonstrated uniformly positive histologic success in the treatment of moderate to severe gum disease (periodontal pockets) using LANAP. Led by Raymond A. Yukna, DMD, MS, now the Director of Advanced Periodontal Therapies, University of Colorado Dental School, the study documents consistently positive responses in humans treated with the LANAP. One hundred percent of LANAP-treated teeth showed new cementum and new connective tissue attachment (CTA), whereas effectively none of the control teeth had any evidence of new attachment or regeneration<sup>4</sup>.

## **What are the benefits of Laser Periodontal Therapy in the treatment of gum disease?**

- **Less post-operative pain**—The LANAP using the PerioLase® MVP-7 helps avoid cutting and stitching of the gums.
- **Performed in only two 2-3 hour sessions**— Laser Periodontal Therapy requires only two 2-3 hour visits to the dentist and two follow up visits. Traditional surgery generally requires several sessions, with subsequent visits for suture removal and additional check-ups.

<sup>3</sup> [http://www.quintpub.com/journals/prd/gp.php?journal\\_name=PRD&name\\_abbr=IJPRD](http://www.quintpub.com/journals/prd/gp.php?journal_name=PRD&name_abbr=IJPRD)

<sup>4</sup> [http://www.quintpub.com/journals/prd/gp.php?journal\\_name=PRD&name\\_abbr=IJPRD](http://www.quintpub.com/journals/prd/gp.php?journal_name=PRD&name_abbr=IJPRD)



- **Quicker recovery time**—Many patients are able to return to their regular daily activities immediately following the procedure, which generally requires less than a 24-hour recovery period. Following traditional surgery, recovery can take between 2-4 weeks during which patients can experience considerable pain and swelling, where they may be restricted to liquid or soft diets.

### **How many patients have been treated with Laser Periodontal Therapy™?**

Millennium Dental Technologies estimates that LANAP™-licensed practitioners are currently treating over 14,000 patients nationwide, on an annual basis.<sup>5</sup>

### **How many dentists are certified to perform the Laser Periodontal Therapy technique in the U.S.?**

Approximately 600 general practitioners in the U.S. are currently certified to treat patients suffering from gum disease with this laser-based technique<sup>6</sup>. This number continues to grow.

### **Who can perform the Laser Periodontal Therapy technique to treat patients with gum disease?**

Only dentists can perform LPT. LPT/LANAP is a doctor-dedicated surgical treatment protocol. As a requirement for shipment of the PerioLase® MVP-7, the MDT dentist customers must complete 3 days of lecture and live patient training with the Institute for Advanced Laser Dentistry (IALD). The IALD is an independent non-profit training corporation, contracted by MDT. This assures that doctors are skilled and competent to perform the LANAP protocol on live patients upon return to their clinical practice offices.

Included in the training package are 2 additional days of live patient treatment and instruction with IALD. This is done at 6 and 12 months following the initial 3 days of training. This continuing education further refines and adds to the skills and expertise of the MDT dentist customers. The IALD is an ADA CERP and AGD PACE recognized national CE provider.

### **Will insurance companies cover Laser Periodontal Therapy?**

Like with any disease condition, insurance companies usually have coverage for disease treatment. Periodontal disease treatment is covered by most insurance carriers.

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<sup>5</sup> Millennium Dental Technologies

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**How can patients and dentists find out more information about Laser Periodontal Therapy?**

Both patients and dentists can find out more about the Laser Periodontal Therapy technique, the LANAP, PerioLase MVP-7, research reports, and view video demonstrations of the procedure at [www.millenniumdental.com](http://www.millenniumdental.com).