

TECHNOLOGY HIGHLIGHT: LASER Periodontal Therapy

What is Laser Periodontal Therapy™?

Laser Periodontal Therapy™ is a laser based technique for the treatment of periodontal disease using the Millennium Dental Technologies, Inc., PerioLase Laser. This revolutionary technique to treat gum disease eliminates use of scalpel blades and stitches that is used with the older traditional periodontal surgery techniques. As a result, laser therapy has rapidly become one of the most popular treatment modalities, offering a safe and effective alternative to traditional surgery. In addition, there is generally greater patient comfort and less sensitivity and pain compared to traditional surgery.

Our office proudly offers the technology of Laser Periodontal Therapy™ for the treatment of gum disease (gingivitis and periodontitis). The following are commonly asked questions about this technology:

How does it work?

1. A small amount of light energy from the laser is directed through a tiny fiber, which is gently placed between the gum and tooth. This light energy removes a tiny amount of diseased tissue and aids in eliminating the bacteria associated with the disease.
2. Plaque and tartar, associated with inflamed and bleeding gums, are removed from the root surface of the tooth using an ultrasonic scaler and small instruments, just like with a traditional cleaning.
3. Next, the laser is used again. This time, it is used to stimulate a natural clot, or seal, to form around the teeth, to promote re-attachment of the gum tissue to the teeth. This seal will allow for optimal healing by preventing bacteria from re-entering the area.
4. The laser has two purposes: 1. Remove diseased tissue and harmful bacteria, and 2. Promote healing by stimulating a natural clot to form.
5. The final step for the laser protocol is occlusal adjustment. Occlusal adjustment involves the doctor adjusting the patients bite, by gently and conservatively grinding down selective biting surfaces of various teeth. This creates an even, ideal bite where all of the biting forces are evenly distributed among all of the patients teeth. This allows for optimal healing of the gum tissue and supporting bone. This is a crucial step that allows healing by eliminating trauma from heavy uneven biting.
6. Afterward, the doctor may suggest or recommend a bite guard for the patient to wear at night time during sleep, to protect the teeth and underlying bone and gums from the heavy forces of teeth grinding and clenching.

As you can see, the laser protocol is a truly comprehensive method to predictably treat gum disease.

Does it hurt?

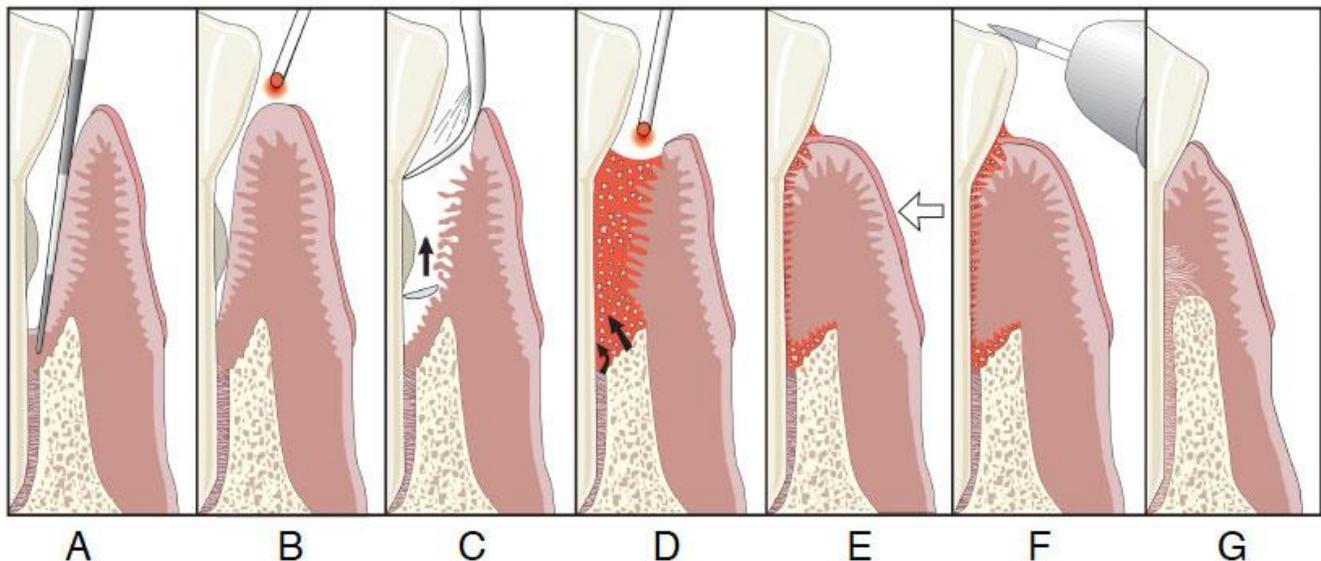
Although there will be minimal discomfort with the procedure itself, we anesthetize the area for the patient's maximum comfort. In this way we can precisely direct the laser for optimum treatment. Post-procedure discomfort is typically minimal and of short duration. There will be prescription medications that the doctor will prescribe.

How long does it take?

The laser portion of the treatment is in two stages; the first stage (or pass) is focused on removing the diseased tissue and eliminating the bacteria. After that the tartar is removed with the ultrasonic scaler and then the laser is used to form the seal around the teeth to protect the area from contamination.

The laser portion of the treatment normally only takes a few minutes. Depending on the severity of the patient's periodontal disease, treatment may be accomplished in one office visit or in multiple visits. The estimated treatment time is reviewed with patients when we discuss their treatment plan.

LASER Assisted New Attachment Procedure (LANAP): Steps



- A. Perio probe indicates excessive pocket depth and bone loss.
- B. LASER radiation vaporizes bacteria, diseased tissue, pathologic proteins, and alerts the practitioner to the presence of tartar.
- C. Ultrasonic scaler and specialized hand instruments are used to remove root surface accretions.
- D. LASER finishes debriding and disinfecting pocket, and aids in hemostasis (clot, "band-aid" formation)
- E. Pressure placed on gum tissue against the root surface to allow fibrin clot stabilization and promote re-attachment of gum tissue to the root surface.
- F. Occlusal trauma is eliminated with bite adjustment.
- G. New, healthy gum attachment achieved, with reduction of gum pockets.

I have reviewed this “Technology Highlight” document and have had any questions answered satisfactorily by the doctor.

Patient (Print/Sign)

Date

Witness

Doctor