



INTRODUCTION TO LASER PERIODONTAL TREATMENT

The newest technology for periodontal patient care is now available at our office. After much research into the world of laser periodontal treatment, Dr. Murray Rabalais has acquired and has been extensively trained on the latest generation of Nd:YAG laser. The Millennium PerioLase was developed specifically to treat periodontal disease using LANAP (Laser Assisted New Attachment Procedure). Like LASIK surgery for the eyes, this patented and FDA-approved laser therapy allows us to treat periodontal patients with a minimally invasive, breakthrough procedure, which in many cases eliminates the need for conventional blade and suture surgery.

Meet Our New Laser

The PerioLase from Millennium Dental Technologies is the first and only laser designed with the needs of the periodontal patient in mind. This Nd:YAG laser is equipped with all the unique features necessary to perform Laser Periodontal Therapy. It has a full complement of new soft tissue laser treatment options. Manufactured by Millennium Dental Technologies, the PerioLase is not only the first laser in dentistry to utilize digital technology for enhanced performance and reliability, but is also built on the world's most widely used dental laser platform. While early dental lasers were very limited in what they could do, The PerioLase can now be used effectively to reach down into the pockets to help eliminate inflamed tissue and destroy pathogenic bacteria.

LANAP (Laser Assisted New Attachment Procedure) Laser Periodontal Therapy

The FDA-Approved and patented LANAP laser therapy is a pocket reduction procedure that reduces pockets by establishing a new connective tissue attachment to the tooth at a coronal level. The LANAP procedure provides the ideal situation in which new bone, cementum, and periodontal ligament can form on root surfaces that were diseased before treatment began. This is a minimally invasive periodontal procedure like no other. In most instances, treatment with the LANAP laser eliminates the need for conventional cut and suture periodontal surgery, also referred to as flap and osseous surgery. Approved by the Food and Drug Administration in 2004, this pulsing laser can distinguish between healthy and diseased gums by color. The infected tissue, which has a darker pigment

than healthy tissue, and bacteria are “zapped” away by the laser, leaving behind only healthy gum tissue. LANAP then helps connective tissue and bone form between the gums and teeth, according to a study in the December 2007 issue of the International Journal of Periodontics and Restorative Dentistry. The laser’s heat also seals the gums with a “thermal blood clot” which creates a physical barrier, blocking any bacteria or tissue that could recreate a gum pocket.

How do patients benefit from LANAP Laser Therapy?

Laser surgery provides another option for patients who have already undergone a scaling and root planing procedure without sufficient results. Normally traditional blade surgery would be indicated for such a patient; however, with the addition of the PerioLase to our treatment armamentarium, patients have available to them a realistic alternative with comparable results. The benefits of LANAP include less pain, less gum recession, decreased bleeding, swelling and root sensitivity, and maybe the most important benefit, less downtime after treatment. An added benefit of laser surgery is the antibacterial effect that helps disinfect the periodontal pockets.

Laser treatment is also beneficial for patients who have medical problems requiring medications such as aspirin, Plavix, and Coumadin. Since LANAP causes much less bleeding than traditional surgeries; patients do not have to discontinue using these life-saving medications prior to surgery.

The LANAP Process

The PerioLase’s fiber optic tip vaporizes diseased tissue and kills bacteria in the periodontal pockets while leaving healthy tissue relatively untouched. Ultrasonic scalers and/or hand instruments are employed to remove calculus deposits that were loosened by the laser’s first pass. A second pass is made with the laser using a different setting to kill bacteria in the bottom of the pockets and on the bone. Formation of a sticky fibrin clot is also stimulated by the second pass of the PerioLase. This clot seals off the pockets, allowing bone and other soft tissue an ideal environment for regeneration.

The LANAP Process can be broken down into seven simple steps.

1. A perio probe identifies excessive pocket depths.
2. The initial pass with the laser removes bacteria and diseased tissue.
3. An ultrasonic scaler and/or special hand instruments remove root surface tartar that was loosened by the initial laser pass.
4. With a second pass of the laser, blood clot stimulation occurs in the pocket to keep the epithelium from growing back into those areas.
5. Reattachment of soft tissue and bone to the clean root surfaces is initiated.
6. The patient’s bite is adjusted to eliminate bite trauma.
7. New connective tissue attachment and bone growth occur.

LASER PERIODONTAL THERAPY: A life changing treatment

For patients who are concerned about traditional cut and suture surgery to treat periodontal disease, the new laser treatment can be a life-changing event! Teeth can be saved, natural smiles can be preserved and some potentially life-threatening systemic

effects of bacteria from gum disease left untreated can be avoided. Laser treatment gives patients a new option. If you would like to find out more about using laser therapy to treat periodontal disease and to save your teeth and smile, please call our office.