



## The Use of a Diode Laser in Periodontics

"Laser" is an acronym for Light Amplification by Stimulated Emission of Radiation. Lasers are ubiquitous in the medical field, used routinely in ophthalmology (eye care), plastic surgery, ENT (ear, nose & throat) and gynecological surgery.

In dentistry, we specifically use the soft tissue Diode Laser in periodontics (gum treatment). Lasers have been shown in many studies to be bactericidal instruments. Since periodontal disease is a bacterial infection, the removal of the bacterial microorganisms would restore the tissue to health. Toxins that these bacteria emit are destroyed by laser energy. Laser assisted scaling and root planning (cleaning) has been shown to reduce pockets and restore the oral cavity to health.

Lasers can be used to clean and sterilize any surgical site. Procedures that used to require anesthesia, scalpels and sutures can now be performed bloodlessly, since lasers coagulate and cauterize ("seal" the wound) as they cut. The possibility of infections are more remote with lasers than with cold steel. Gingival (gum) tissue that has overgrown due to certain medications can be treated easily and without trauma using a soft tissue laser.

A summary of the benefits of laser use in periodontal therapies:

- 1) Lasers create a clear, dry field with no bleeding
- 2) Lasers decrease the possibility of infection
- 3) Lasers create less trauma to the area
- 4) Lasers have shown less post-operative swelling and scarring
- 5) Lasers have shown to create minimal post-operative pain
- 6) Laser use is extremely precise and allows a greater degree of finesse in surgical and soft tissue procedures
- 7) Laser procedures require less anesthetic
- 8) Laser therapy results in better post-operative patient experiences. The patients we have seen display a high acceptance of laser procedures.

