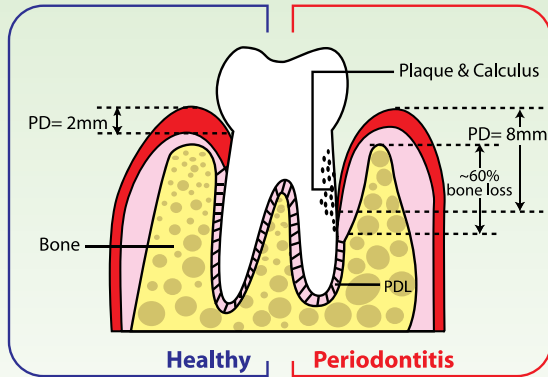


Healthy gums consist of the following characteristics: (1) pocket depth = 2-3mm, (2) pink tissue appearance, and (3) no bleeding.



What is Periodontal (gum) Disease?

When patients stop brushing and flossing for a short period of time, bacteria will accumulate and eventually form dental plaque. The plaque is attached to the root surface inside the gum pocket, causing constant irritation to the adjacent gum. The presence of bacteria will initiate body immune responses. One of the responses is an increase number of blood vessels within gum tissue, and this increase brings numerous immune cells (white blood cells) to fight bacteria. Due to the increase in the number of blood vessels, the gum becomes swollen, appears slightly to moderately red, and can cause frequent bleeding. When the gums reach this stage, it is called *gingivitis*.

If the patients do not establish the habit of brushing and flossing, especially after they have been diagnosed with gingivitis, the bone will begin to resorb in order to avoid bacteria. Once the bone begins to resorb, we call this stage of gum disease *Periodontitis*. Eventually, the teeth become loose and can fall out if sufficient bone loss occurs.

Periodontal disease can be treated with proper maintenance

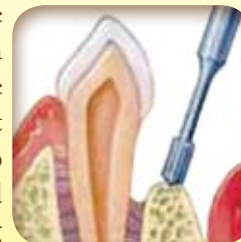
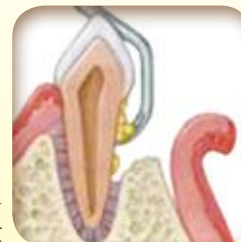
Our oral cavity is always filled with bacteria. Therefore, plaque is formed continuously throughout our lifetime. Periodontal therapy, either done surgically or non-surgically, can stop the disease process. In order to maintain the treatment outcome and prevent future breakdown, patients need to thoroughly remove plaque by brushing and flossing everyday. Furthermore, patients need to receive regular dental cleanings every 3 - 4 months at a dental office and a yearly follow-up with a periodontist.

Traditional Periodontal Surgery (osseous/pocket reduction surgery)

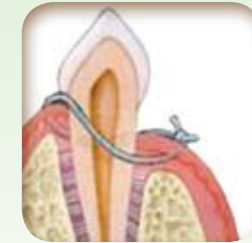


But when pocket depth is greater or equal to 5mm, non surgical treatment (deep cleaning) is no longer effective. Cleaning instruments can not reach the bottom of the pocket to completely remove plaque and calculus on the root surface. In this situation, periodontal surgery is necessary.

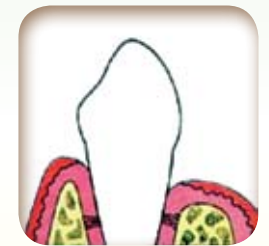
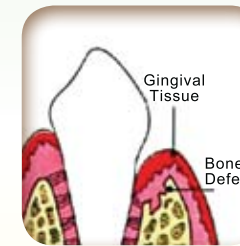
Traditional periodontal surgery consists of cutting the gum and pulling the gum away from the teeth and the bone so that the periodontist has a direct view of and access to the diseased bone and the root surface. Having



the direct view also allows the periodontist to thoroughly remove plaque and calculus from the root surfaces. In certain circumstances, bone particles can be placed into the bony defects, which will induce bone regeneration.



The gum will then be purposely sutured back at a position lower than the presurgical level. Unfortunately, due to this gum placement, the teeth will appear longer and the roots will be exposed. Furthermore, patients may experience sensitivity to cold and hot.



Pre-Surgery gum level Post-surgery gum level

Laser Periodontal Therapy (LANAP – Laser Assisted New Attachment Procedure)

Most patients associate pain with traditional periodontal surgery. To eliminate this anxiety, Dr. Wang actively seeks innovative techniques that can replace traditional periodontal surgery.

There are many dental laser systems available in the market. After extensive research, Dr. Wang believes that the *PERIOLASE* laser system with its *patented* and *FDA approved* *LANAP* procedure can provide a better result than the traditional periodontal surgery.

The advantages of Periolas vs. other laser systems are the following:

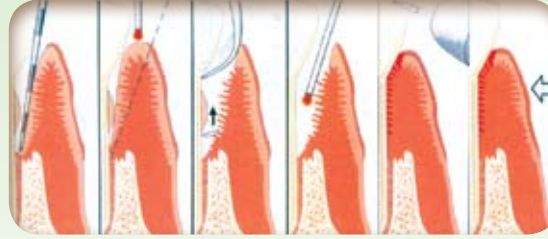
- You may not know that most laser systems have not undergone clinical studies evaluating their performance. Periolas is the only laser system which treatment results are *confirmed* and *verified* by clinical and histology studies (microscopic examination). Furthermore, on-going comparison studies in several *U.S. dental schools* have been done to establish long-term results from this system vs. the traditional surgery;
- Clinicians are mandated to attend a *four day training course* before the equipment is delivered to their offices; and
- the inventors of this equipment are two dentists. They have treated and documented thousands of patients for the last ten to fifteen years with this system. Patients have received remarkable results.

Laser periodontal therapy (LANAP) requires no cutting and no sewing. To patients this means: *less pain, less bleeding, less swelling, less tissue removal, and less recovery time.*

The advantages of Laser Periodontal Therapy vs. traditional surgery are:

- 1) *No cutting and no sewing;*
- 2) The laser periodontal therapy removes **ONLY** the disease tissue;
- 3) Minimal gum shrinkage after surgery results in less root exposure. As a result, teeth do not appear longer; and
- 4) Little or no increase in sensitivity to cold and hot due to less root exposure.

The Laser Periodontal Therapy procedures (LANAP) are as following:



- A. Perio probe indicates excessive pocket depth.
- B. Laser light (via small fiber optic rod) enters the periodontal pocket and sweeps the pocket. Laser energy *kills bacteria and removes disease tissue (epithelium) and leaves the healthy tissue untouched.*
- C. Special hand and machine instruments remove the plaque and calculus on the root surface.
- D. Laser light enters the periodontal pocket for the second time to induce blood clot within the pocket and seal the pocket to prevent more bacteria.
- E. Bite trauma is adjusted.
- F. Gums attach to the clean root surface at the pre-surgical level resulting in *minimum post-surgery gum recession.* The laser therapy can also induce *bone regeneration.*

Please contact Dr. Wang's office for further information.



Vincent W. H. Wang, D.D.S., M.S.
Periodontics and Dental Implants

Laser Periodontal Therapy

L.A.N.A.P.
Laser Assisted New Attachment Procedure



572 E. Green St., Suite 205,
Pasadena, CA 91101
Tel: (626) 796-2800

www.pasadenaperio.com