

What is Gum Disease?

Gum disease begins when a film called plaque accumulates on the teeth. Certain strains of bacteria that live in this plaque feed on gum tissue and bone. Your body tries to fight this infection with an inflammatory assault, sending white blood cells to the area to destroy the bacteria. This inflammation causes the tissue to bleed easily when you brush or floss. This stage of the condition is called *gingivitis*.

If the infection and inflammation persist, what results is a chronic inflammatory condition in which the gums and bone around the teeth are slowly destroyed, many times with no awareness or symptoms. At this stage, it is called *periodontitis*.

The biggest risk factors are ineffective home care and smoking. Periodontitis has been linked to an increased risk for heart disease, diabetes, and other serious medical conditions. In short, healthy gums are the gateway to a healthier body.

Options and Alternatives

Gingivitis can be reversed with regular professional cleanings, and excellent home care including *daily flossing!* It is also important to eat healthy foods such as fresh fruits and vegetables. These types of foods have important anti-oxidants and phytonutrients your body needs to remain healthy.

Once your condition has progressed to periodontitis, surgical intervention is usually necessary to eliminate the deep pockets that develop between the teeth and gums. If these pockets persist, they become excellent "privileged sites" for bacteria to organize colonies.

Traditional surgery involves cutting away some of the gum tissue, and reshaping the bone underneath. LANAP is a progressive technique using a specialized laser to destroy the bacteria that cause disease, and alter the tissue so that it has the opportunity to heal. The use of the laser is less invasive than traditional scalpel surgery and results in a much faster and less painful recovery.

How LANAP Works

- A. Depth of pocket is measured
- B. Laser selectively removes pocket lining
- C. Ultrasonic instruments clean root surfaces
- D. Laser disinfects pocket and seals the wound
- E. Tissue is compressed against the tooth
- F. Bite is adjusted through selective grinding
- G. Healing results in new attachment

Your Surgical Visits

Usually, we treat one half of the mouth at a time. The surgical visits are usually made **two to four weeks apart**, and take about **two hours each** on average.

The mouth is numbed, just like if you were having a filling or crown done. Sedation is available if you prefer. The pockets are then measured while you are numb, so that more accurate measurements can be made without causing discomfort.

A first pass is made with the laser, giving the doctor access to the pockets and allowing better visualization of the roots of the teeth. Then the teeth are cleaned very thoroughly using ultrasonic instruments, which have tips that vibrate very quickly, loosening up any deposits on the teeth and flushing them away with an irrigating solution.

A second pass is made with the laser, disinfecting the pockets and sealing them up through the formation of a stable blood clot. The bite is then adjusted so that clenching forces on the teeth are minimized.

The First Few Days

Most people experience some mild soreness of the treated areas for the first few days. The tissue will appear discolored around the teeth, similar to what a scab looks like when you go in the pool. It is very important NOT to brush or pick this away, as this fibrin barrier is what allows the gums underneath to get a head start creating a new attachment.

Your bite will feel different, as if the teeth don't touch together as heavily on the treated side. This can feel imbalanced at first, but the teeth will quickly adapt and after both sides have been treated, your bite should feel stronger and more stable than ever.

Continuing Follow-Up Care

As the gums heal, the teeth will shift, and will need to be adjusted several times over the first few weeks, even for the first year and beyond. Although it seems counter-intuitive, inadequate adjustment is what is usually responsible for soreness or sensitivity following LANAP.

Three to six weeks after your surgery, impressions will be made of your teeth, and occlusal guards will be fabricated to stabilize and immobilize the teeth while you sleep for the next six months. It is important to wear these occlusal guards, as we humans have a tendency to periodically clench our teeth and jaws during sleep. This clenching can produce extremely damaging forces that can delay or prevent healing.

Professional cleaning is recommended every three months for the first year, and re-evaluation of your condition will be done at the twelve-month visit. Most people with gum disease remain at risk for the rest of their lives, and would benefit from having their teeth cleaned every three-months indefinitely.