

# GENTLY DEFEAT THE HIDDEN DENTAL DESTROYER

Between fifty and seventy-five percent of Americans have some form of periodontal disease, and many of those individuals have no warning signs. Fortunately, thanks to dental laser treatment, it can now be comfortably treated, which can help stop the bacteria dead in their tracks.

**JOSEPH H. FARAG, DMD**

For years, Peggy Thorpe was experiencing bone loss.

“My teeth were becoming loose,” recalls the vice president of Commercial Maintenance Management Construction. “Twice while we lived up in New York, I had what they call *deep root cleanings*, where they go in and really scrape down underneath the gum, but the bone still seemed to be deteriorating.

“Then, when we moved down to Florida, I became a patient of Dr. Farag, and the results I’ve had with him are amazing.”

Joseph H. Farag, DMD, has a comprehensive dental practice in Port Charlotte.

“Periodontal disease is an infection of the tissues that support the teeth,” explains Dr. Farag. “It can be both a chronic and an acute problem.

“This disease is an inflammatory process. At its initial stage, called gingivitis, it affects only the gums. Patients may experience some red, swollen, tender gums that appear puffy and bleed easily, or they may experience no warning signs at all.”

Healthy gums adhere closely to the teeth, supporting them so they don’t become loose in the jawbone. As periodontal disease progresses, the bone is lost around the tooth and the pockets around the teeth get deeper. If left untreated, gingivitis may lead to a second, more serious stage which is called periodontitis.

“In its more destructive stage, bacteria and plaque migrate more deeply into the tissues on the root surfaces of their teeth,” informs Dr. Farag. “The gums pull away from the teeth, producing areas of periodontal pockets. This layer of tissue becomes chronically inflamed and when disturbed, may easily bleed.”

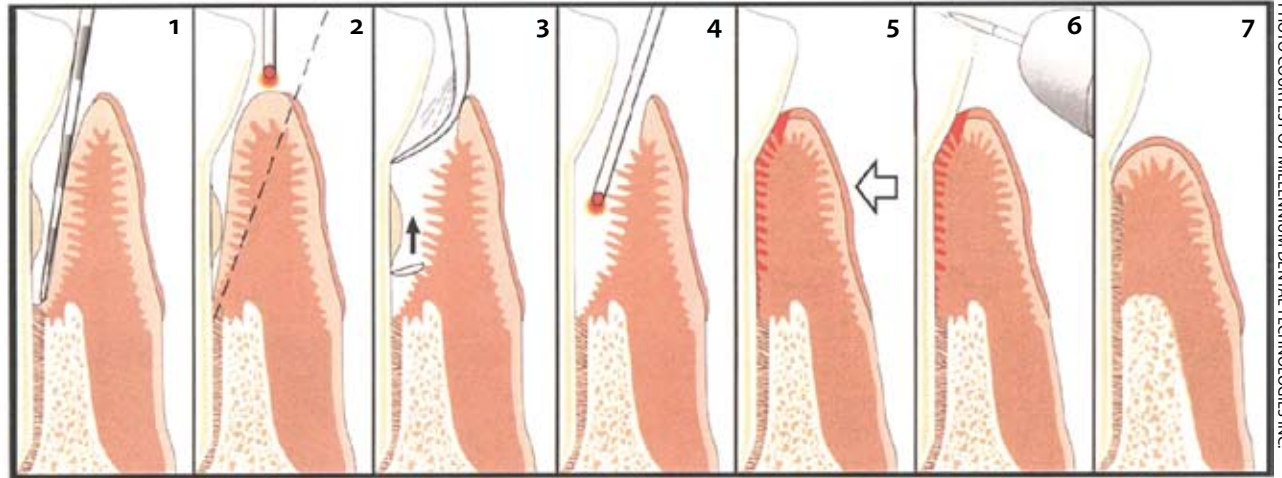
Neither floss nor the bristles on a toothbrush can reach more than two to three millimeters into the pocket of a periodontal patient, so beyond that, bacteria are multiplying, creating infection which will eventually make the tooth loose.

“The bacteria that are present, and the tartar in those pockets, are sensitive to oxygen, so they find that the deeper into the gums they grow, the better they thrive,” says Dr. Farag. “It is these bacteria that produce the toxins that irritate the body and destroy the bone. Over time, as the tooth becomes detached from the gum and becomes more coated with tartar, the body tries to eject it. The body gives up on it and the teeth may become loose.

“With the deep root cleaning that Peggy had, the attachment of the gum back to the tooth would be similar to a rubber band being wrapped around a post. It is a fairly tight seal, but the rubber band can be pulled away and things can be stuffed down there. While it is an effective treatment for some patients, others like Peggy require something more.”

In the past, traditional gum treatment involved cutting away the infected gum tissue and placing sutures to hold the reduced tissue in place during the healing process. This approach always results in *recession* of the gums – a lowering of the level of gum tissue. If the gum tissue recedes too far, it can leave the sensitive tooth roots exposed.

“But today,” observes Dr. Farag, “we can offer patients like Peggy laser-assisted new attachment procedure, or LANAP.”



1. Perio probe indicates excessive pocket depth.
2. Laser light kills bacteria and diseased tissue.
3. Ultrasonic scaler and special hand instruments are used to remove root tartar.
4. Laser finishes cleaning and sterilizing pocket which aids in sealing the pocket closed so new germs cannot enter.
5. Reattachment of connective tissue to the clean root surface, with a stable fibrin clot and gingival crest to create “a closed system.”
6. Bite trauma is adjusted.
7. New attachment is regenerated. New bone and new ligament is formed and healing occurs.



Peggy says her teeth were saved with no discomfort at all.

## LANAP

“LANAP is a therapy that uses regeneration rather than resection,” points out Dr. Farag. “As well as preventing cases from digressing, the laser is helpful in killing the bacteria colonies and reducing the amount of bacteria exposure to the body. It can stop gum recession right in its tracks and will regenerate attachment beneath it.\*

“Also, rather than producing a rubber-band-like attachment between the tooth and the gum, the goal of LANAP is to produce something more comparable to a Velcro or zipper attachment that is much stronger and less accessible. With this laser treatment, we can actually zip the tissues back up the side of the root, preventing more accumulation of tartar into those pockets. We can reduce the pockets to about half their depth and, in cases like Peggy’s, allow the body to regenerate bone.”

Dr. Farag describes how this is accomplished: “This is a three-step process which begins with the dental laser.

This laser is equipped with a very thin fiber – about three hairs thick in diameter. We place the fiber between the tooth and gum, enabling the laser energy to selectively reach the depth of the pocket. During the first laser pass, three goals are accomplished. First, the energy vaporizes the diseased lining. Second, it dehydrates the tartar on the tooth, making it very brittle and easy to remove from the tooth. Third, it kills the bacteria on contact.

“During the second step, I use an ultrasonic instrument. Its fine tip will vibrate and remove the tarter, breaking it away from the tooth, while we flush with an antimicrobial substance that stops the growth of new bacteria. In this step, we affect the bone around the tooth and remove the diseased lining of the tissue.

“The third step involves another pass with the laser at a different setting. This last pass stops any bleeding and creates the best antimicrobial seal possible, preventing re-infection and releasing growth factors from the blood cells to regenerate the attachment.”

In conjunction with the laser therapy, Dr. Farag adjusts his patients’ bites.

“We adjust the occlusion, or the way the teeth meet, so that only vertical forces are applied to the teeth,” says Dr. Farag. “We then give our patients a bite splint to wear at night which helps those patients with any nighttime grinding they might otherwise experience.

“And you’ve heard the expression *strength in numbers*?

“I can’t imagine putting a price on the value of saving your own teeth.”

*Peggy Thorpe*

## Amazing success

Dr. Farag performed LANAP for Peggy in the summer of 2008.

“There was no discomfort at all,” remembers Peggy. “In fact, compared to the way they used to do it with the deep root cleanings and Novocain, this was much better.

“Trust me, dentists are not always our favorite people,” she teases, “and right from the start, I warned Dr. Farag that when I saw the needle coming, I might grab his arm; I don’t mean to, but sometimes I can’t control it.

“But with Dr. Farag, it was different. He is very good. There was no discomfort at all, and within four months, I could actually see on the x-rays where bone was growing back and the deep pockets were filling in.

“I’m amazed. From what I’ve been through with these teeth, and now these incredible results, it’s just amazing.

“I can’t imagine putting a price on the value of saving your own teeth.” **FHCN**—Kris Kline

\*While patients who smoke will definitely benefit from the procedure, cigarette smoking will prohibit maximum improvement.

## Risk factors for periodontal disease

- Lack of oral hygiene
- Poorly contoured restorations
- Crowded or crooked teeth
- Hormonal changes (Pregnancy, Menopause)
- Smoking and nicotine
- Systemic diseases (Diabetes, Osteoporosis)

## Have a beautiful smile

Dr. Farag looks forward to hearing from readers of **Florida Health Care News**. For more information or to schedule an appointment, please phone **(941) 764-9555** for his location at **3441 Conway Blvd.** in Port Charlotte.



**Joseph H. Farag, DMD**, earned his Doctor of Dental Medicine degree from the University of Florida College of Dentistry, Gainesville, FL after completing his undergraduate degree at Florida Atlantic University, Boca Raton, FL. Dr. Farag served an implant residency at the Misch Institute and is trained in advanced laser dentistry. He is a member of the American Dental Association, American Association of

Dental Practitioners, American Academy of Operative Dentistry, the International Association of Dental Researchers, and a fellow of the International Congress of Oral Implantologists.

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