

The American Academy of Periodontology

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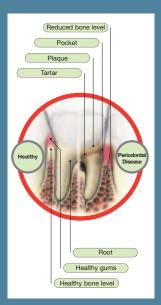
periodontal THERAPY

Where Do I Start?

You've recently been diagnosed with periodontal disease, and probably have some questions about where your treatment begins. questions - or have a friend or family member who is - today is your lucky day.

WHAT ARE PERIODONTAL DISEASES?

The word "periodontal" literally means "around the tooth." Periodontal diseases are chronic bacterial gum infections that destroy the attachment fibers and supporting bone that hold your teeth in your mouth. The main cause of these diseases is bacterial plaque, a sticky, colorless film that constantly forms on your



teeth, as well as your body's response to this plaque. Daily home oral care, including proper brushing and flossing, is a must to prevent plaque buildup.

If plaque is not removed, it can turn into a hard substance called calculus (tartar). Calculus is so hard it can only be removed during professional cleaning. If calculus develops below the gums onto the tooth root, it makes plaque removal impossible, leaving you at increased risk for periodontal diseases.

Toxins (or poisons) produced by the bacteria in plaque irritate the gums, causing infection. These toxins initiate the inflammatory process, which destroys the supporting tissues around the teeth, including the bone. Some patients have an overreaction to the bacteria, the body's immune response, which causes further damage. Bacteria and your immune response to the bacteria can cause the gums to separate from the teeth, forming pockets that fill with even more plaque and more infection. As the diseases progress, these pockets deepen, more gum tissue and bone are destroyed, and the teeth eventually become loose. If periodontal diseases are not treated, the teeth may need to be removed. In addition, accumulating research links periodontal diseases to general health conditions such as heart disease, diabetes, respiratory disease, and preterm low birthweight babies.

DOES TRADITIONAL THERAPY MEAN THAT I NEED SURGERY?

As you can see, good periodontal health may be a key component of a healthy body, so it's important to understand treatment options that can help you achieve this level of health and keep you smiling.

Some patients think of "traditional periodontal therapy" as surgery. Fact is, the American Academy of Periodontology treatment guidelines stress that periodontal health should be achieved in the least invasive and most cost-effective manner. You may not be aware that this is often accomplished through non-surgical treatments.

PERIODONTAL EXAMINATION

Periodontal diseases, as well as a patient's individual risk factors for the diseases, are often diagnosed through a comprehensive periodontal examination. During this exam, the periodontist will discuss your chief complaint, review your medical and dental histories, and perform a clinical examination and radiographic (x-ray) analysis. In some cases, microbiologic, genetic, biochemical, and other diagnostic tests may be performed. This is the time to discuss with your dental team other factors that might contribute to periodontal diseases, such as smoking/tobacco use, pregnancy and puberty, stress, medications, clenching or grinding your teeth, diabetes, poor nutrition, and other general health conditions.

ORAL HYGIENE INSTRUCTION

The first step toward periodontal health begins with oral hygiene. If you've been diagnosed with periodontal diseases, you may be more susceptible to the diseases. For this reason, you may need to keep your teeth cleaner than most people. Be sure to review your at-home oral hygiene routine – including toothbrushing and flossing techniques and the use of special oral hygiene aids – with your dental team. Good oral hygiene and professional cleanings can go a long way toward preventing certain forms of periodontal diseases, and reversing early stages of the diseases like gingivitis.

SCALING AND ROOT PLANING

Scaling and Root Planing (SRP) is a careful cleaning of the root surfaces to remove plaque and calculus from deep pockets and to smooth the tooth root to remove bacterial toxins. This cleaning is more in-depth than a routine prophylaxis, or polish, with which you may be familiar, and may require more than one appointment. For comfort, your periodontist may wish to numb the area prior to treatment. Research has consistently demonstrated that SRP reduces gingival inflammation







Illustrations 1-5

During scaling and root planing, harmful bacterial plaque and calculus are removed from the crown and root surfaces. This detailed treatment also smoothes root surfaces that may be particularly infected.





and probing depths, and shifts the bacteria composition living in these pockets from one associated with disease toward one associated with health. Thus, SRP is usually the first mode of treatment recommended for most patients. Most periodontists agree that after SRP and oral hygiene instruction, many patients do not

require any further active treatment, including surgical therapy.

SYSTEMIC ANTIBIOTICS

In some cases, systemic antibiotics (antibiotics taken orally) are prescribed at the time of SRP procedures. Antibiotics are drugs that fight infections caused by bacteria. However, each time you take an antibiotic, you increase your chance of developing drug resistant bacteria. Therefore, it is really important to take antibiotics only when necessary. Systemic antibiotics are different from locally delivered antimicrobials or host modulators. Both of these treatments may be used without fear of resistance.

LOCAL DELIVERY ANTIMICROBIALS AND HOST MODULATORS

Damage from periodontal diseases is caused by bacteria and your body's response to these bacteria. New products are available that may be recommended as part of your periodontal therapy to help your body eliminate the infection or decrease its negative effects. These drugs are called either *local delivery antimicrobials* or *host modulators*. In general, these medications do not lead to antibiotic resistance.

Local delivery antimicrobials are medications that are delivered directly into periodontal pockets to suppress or eradicate periodontal bacteria. Local delivery antimicrobials may contain an antibiotic agent such as tetracycline, minocycline or metronidazole that's released into the pocket over time. They can be delivered directly to the pocket through several means, including a:

- Fiber that's placed and removed after 7 to 10 days.
- Gel or powder that is applied with special syringes and absorbed over time.
- Tiny "chip" that's pushed into the pocket and absorbed over time.

Host modulators are drugs that are taken orally for a period of time to offset the body's response to periodontal bacteria. They can be anti-inflammatory medications, such as Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), or what's called a sub-antimicrobial class of antibiotics, which means that the dose of antibiotics contained within the drug does not contain a high-enough concentration to fight the bacteria; rather, it may work by helping the body's response to the bacteria.

OCCLUSAL MODIFICATIONS

"Occlusal" means, "pertaining to the contacting surfaces of opposing teeth." When tooth surfaces are not in harmony between the upper and lower teeth, an "occlusal adjustment" may be necessary. That's because teeth that do not fit together properly can affect the rate of progression of periodontal diseases or contribute to other oral health problems. Perhaps your periodontist has recommended an occlusal adjustment because periodontal diseases have damaged your teeth's supporting structures and caused them to shift – or maybe you've recently had restorative work that has slightly changed the way your teeth fit together. These and other reasons – from genetics to teeth clenching or grinding – can require an occlusal adjustment to help you achieve occlusal harmony and create a bite that's functional and healthy.

During an occlusal adjustment, your periodontist may take a mold of your teeth or ask you to bite down on a tape-like substance called "articulating paper" to identify the areas of occlusal concern. Teeth with less than optimal contact will be reshaped. In addition, your periodontist might prescribe an "occlusal guard" or "night guard" to be worn at certain times during the day or night to minimize the effects of teeth grinding or other occlusal concerns.

REEVALUATION OF

Following adequate time to respond to your treatment, you will be asked to return to the periodontist's office for a reevaluation to determine if further active therapy is indicated.

If the answer is "yes," then your periodontist will develop a treatment plan to help restore your smile to a state of health. This may require surgical



Probing depth for moderate to advanced periodontitis.



Probing depth for mild periodontitis.

treatment to remove any remaining infection and decrease residual pocket depths to reduce your risk for disease in the future. (See Figures 1 and 2)

If the answer is "no," then you'll enter into a "maintenance" phase, or specialized treatment for patients who have already been diagnosed with and treated for periodontal diseases. These appointments tend to be more thorough than traditional six-month cleanings, can be more often, and will help protect the health of your teeth and gums.

Destruction

caused by periodontal diseases takes away a person's ability to speak, eat, and smile with comfort and confidence. The good news is that, when caught early, many options are available to treat the diseases and restore health. Surprise – your happy, healthy