

Scaling and root planing

Periodontal disease (also known as gum disease) are infections of the gum and bone that hold teeth in place.

If periodontal problems are not treated, they can become severe and may eventually lead to tooth loss. Periodontal diseases are often painless and you may not be aware that you have a problem until your gums and the supporting bone are seriously damaged. The good news is that periodontal diseases often can be treated in the early stages with a treatment to clean your teeth called scaling and root planing.

Treatment has a huge benefit. You'll increase the chances of keeping your natural teeth.

What causes Periodontal Disease?

Plaque includes a film of bacteria that attaches to teeth gums. The bacteria in plaque cause irritation of the tissues that support your teeth. This irritation can lead to chronic inflammation, bleeding, and infection that can destroy your gum and bone tissue.

Plaque that is not completely removed may harden (calcify) into a rough, porous deposit called tartar, or calculus. Tartar by itself does not cause disease, but it typically allows more plaque to form and makes it more difficult to remove plaque that can thrive on, in or near that tartar. The only way to remove tartar is to have your teeth cleaned at the dental office. Importantly, plaque is always forming even as you sleep. Thus, regular visits to the dentist are necessary to remove plaque and calculus in hard to remove places.

How do periodontal diseases develop?

Gingivitis is the initial stage of periodontal disease. Affected gum areas become increasingly red. They may appear swollen and may bleed easily especially when you brush or floss your teeth. The condition is reversible at this stage with regular brushing, flossing and visits to the dentist. If it is not treated, however, gingivitis may lead to a more serious condition called periodontitis.

Periodontitis can irreversibly damage the gums, bones and other structures that support the teeth and it can lead to tooth loss. However, treatment can help. At more advanced stages, the disease may require more complex treatment to prevent tooth loss. In the worst case, teeth can become loose and need to be removed by the dentist. How periodontitis is treated often depends on how far the condition has progressed and how well your body responds to therapy over time.

Progression of Periodontal Disease

Healthy gingiva (gum tissue) and bone teeth are firmly in place. Gingivitis develops as bacterial by-products irritate the gums, making them red, tender, swollen and likely to bleed.

Periodontitis occurs when inflammation caused by plaque by-products destroys the tissues that anchor teeth in bone. As the disease progresses pockets form, which allow more plaque and calculus to collect below the gum line. Unless treated, the affected teeth may become loose and even require removal by dentist.

How are periodontal diseases diagnosed?

If you schedule regular dental checkups, your dentist can detect developing periodontal diseases before the gums and the bone supporting your teeth are irreversibly damaged. Periodontal diseases are most often progressive—left untreated, the condition often becomes worse.

During a checkup, the dentist examines your gums for periodontal problems. An instrument called a periodontal probe is used to gently measure the depth of the spaces between your teeth and gums at the very edge of the gum line. Healthy gum tissue forms a very shallow, v-shaped groove (also known as a sulcus) between the tooth and gums. The normal depth of the sulcus should be three millimeters or less. When periodontal disease is present, this normally shallow sulcus develops into a deeper pocket that bleeds, collects more plaque bacteria and is difficult to keep clean.

Dental X-rays also may be taken to evaluate the condition of bone supporting the teeth and to detect other problems not visible during the clinical examination.

If gum disease is diagnosed, your dentist may provide treatment or you may be referred to a periodontist, a dentist who specializes in diagnosis, prevention and treatment of periodontal.

How are periodontal diseases treated?

The first non-surgical step usually involves a special cleaning, called scaling and root planning. This is sometimes referred to as “periodontal” or “deep” cleaning. Scaling and root planning is a method of treating periodontal disease when pockets are greater than 3mm. Scaling is used to remove plaque and tartar beneath the gum line. A local anesthetic may be given to reduce any discomfort. Using an instrument called a small scaler or an ultrasonic cleaner, plaque and tartar are carefully removed down to the bottom of each periodontal pocket. The tooth’s root surfaces are then smoothed or planed. This procedure helps gum tissue to heal and periodontal pockets to shrink, the procedure also makes it more difficult for plaque to accumulate along the root surfaces.

Depending on the extent of disease, your dentist may recommend that one or more sections (quadrants) of the mouth be treated with scaling and root planning. Treatment requires one or more visits. You’ll be given instructions on how to care for your healing teeth and gums.

Your dentist also may recommend medications to help control infection and pain, or to aid healing. These medications could include a pill, a mouth rinse, or a substance that the dentist places directly in the periodontal pocket after scaling and root planing. If you

smoke or chew tobacco products, it is important to quit. Your dentist may also advise you to talk to your physician about any other health problems that may be affecting your oral health.

Once the scaling and root planing treatment is complete, another appointment will be made within a few weeks. At this appointment, the dentist will examine your gums to see how they have healed and how the periodontal pockets have decreased. Many patients do not require any further active treatment, only preventive care.

Maintaining good oral hygiene at home and continued follow-up by your dentist is essential to help prevent periodontal disease from becoming more serious or recurring.

Periodontitis will not go away by itself. Left untreated, surgery may be needed to save affected teeth. Preventing and treating the disease in the early stages are the best ways to keep your smile healthy.

Can periodontal diseases be prevented?

Prevention is your first line of defense. This includes a good daily oral hygiene routine at home. Brushing twice a day with fluoride toothpaste and cleaning between teeth once a day with floss or another inter-dental cleaner help prevent tartar from forming. The dental office staff may provide instructions on additional cleaning methods or may recommend oral hygiene products to use at home. Look for products that display the American dental Association's (ADA) Seal of Acceptance sign that a product has met the ADA's criteria for safety and effectiveness.

Eat a balanced diet for good general health and limit snacks.

Regular dental checkups and cleanings are important in preventing periodontal diseases. If these measures are not taken, the likelihood of disease increases. In some cases, even with these measures, a certain percentage of patients experience some form of periodontal disease that must be treated. Systemic diseases, such as diabetes, blood cell disorders, HIV infections and AIDS can lower the body's resistance to infection, placing an individual at greater risk for more severe forms of periodontal diseases. Tobacco use can also affect the health of your gums. Talk to your dentist about how to quit.

Regular dental checkups and cleanings are important in preventing periodontal diseases.

Warning Signs

See your dentist if you notice any of the following warning signs:

- Gums that bleed easily
- Red, swollen or tender gums
- Gums that have pulled away from the teeth
- Pus between the teeth and gums when the gums are pressed
- Persistent bad breath or bad taste

- Permanent teeth that are loose, separating or changing position.
- Any change in the way your teeth fit together when you bite
- Any changes in the fit of partial dentures
- Exposed tooth roots

Periodontal diseases are often progressive----left untreated, the condition often worsens. If you schedule regular dental checkups, your dentist can detect developing periodontal problems before the gums and the bone supporting your teeth are irreversibly damaged