Gum Disease Awareness

What Is Periodontal (Gum) Disease?

The term "periodontal" means "around the tooth." Periodontal disease (also known as periodontitis and gum disease) is a common inflammatory condition that affects the supporting and surrounding soft tissues of the tooth, eventually affecting the jawbone itself in the disease's most advanced stages.

Periodontal disease is most often preceded by gingivitis, a bacterial infection of the gum tissue. A bacterial infection affects the gums when the toxins contained in plaque begin to irritate and inflame the gum tissues.

Once this bacterial infection colonizes in the gum pockets between the teeth, it becomes much more difficult to remove and treat. Periodontal disease is a progressive condition that eventually leads to the destruction of the connective tissue and jawbone. If left untreated, it can cause shifting teeth, loose teeth, and eventually tooth loss.

Periodontal disease is the leading cause of tooth loss among adults in the developed world and should always be promptly treated.

Types of Periodontal Disease

When left untreated, gingivitis (mild gum inflammation) can spread below the gum line. When the gums become irritated by the toxins contained in plaque, a chronic inflammatory response causes the body to break down and destroy its own bone and soft tissue. There may be little or no symptoms as periodontal disease causes the teeth to separate from the infected gum tissue. Deepening pockets between the gums and teeth are generally indicative that soft tissue and bone is being destroyed by periodontal disease.

Here are some of the most common types of periodontal disease:

- **Chronic periodontitis –** Inflammation within supporting tissues causes deep pockets and gum recession. It may appear the teeth are lengthening. Yet in actuality, the gums (gingiva) are receding. This is the most common form of periodontal disease and is characterized by progressive loss of attachment, interspersed with periods of rapid progression.

- **Aggressive periodontitis –** This form of gum disease occurs in an otherwise clinically healthy individual. It is characterized by rapid loss of gum attachment, chronic bone destruction, and familial aggregation.

- **Necrotizing periodontitis –** This form of periodontal disease most often occurs in individuals suffering from systemic conditions such as HIV, immunosuppression, and malnutrition. Necrosis (tissue death) occurs in the periodontal ligament, alveolar bone, and gingival tissues.

- **Periodontitis caused by systemic disease –** This form of gum disease often begins at an early age. Medical condition such as respiratory disease, diabetes, and heart disease are common cofactors.

Treatment for Periodontal Disease

There are many surgical and nonsurgical treatments the periodontist may choose to perform, depending on the exact condition of the teeth, gums, and jawbone. A complete periodontal exam of the mouth will be done before any treatment is performed or recommended.

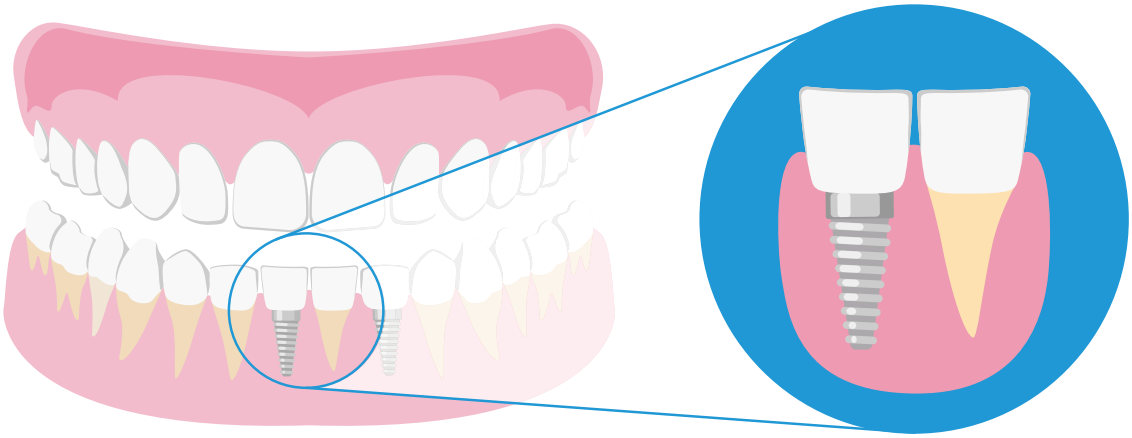
Here are some of the more common treatments for periodontal disease:

- **Scaling and root planing –** In order to preserve the health of the gum tissue, the bacteria and calculus (tartar) that initially caused the infection, must be removed. The gum pockets will be cleaned and treated with antibiotics as necessary to help alleviate the infection. A prescription mouthwash may be incorporated into daily cleaning routines.

- **Tissue regeneration –** When the bone and gum tissues have been destroyed, regrowth can be actively encouraged using grafting procedures. A membrane may be inserted into the affected areas to assist in the regeneration process.

- **Pocket elimination surgery –** Pocket elimination surgery (also known as flap surgery) is a surgical treatment that can be performed to reduce the pocket size between the teeth and gums. Surgery on the jawbone is another option which serves to eliminate indentations in the bone which foster the colonization of bacteria.

- **Dental implants –** When teeth have been lost due to periodontal disease, the aesthetics and functionality of the mouth can be restored by implanting prosthetic teeth into the jawbone. Tissue regeneration procedures may be required prior to the placement of a dental implant in order to strengthen the bone.



Diagnosis

Periodontal disease is diagnosed by your dentist or dental hygienist during a periodontal examination. This type of exam should always be part of your regular dental checkup.

A periodontal probe (a small dental instrument) is gently used to measure the sulcus (pocket or space) between the tooth and the gums. The depth of a healthy sulcus measures three millimeters or less and does not bleed. The periodontal probe helps indicate if pockets are deeper than three millimeters. As periodontal disease progresses, the pockets usually get deeper.

Your dentist or hygienist will use pocket depths, amount of bleeding, inflammation, tooth mobility, etc., to make a diagnosis that will fall into a category below:

Gingivitis
Gingivitis is the first stage of periodontal disease. Plaque and its toxin by-products irritate the gums, making them tender, inflamed, and likely to bleed.

Periodontitis
Plaque hardens into calculus (tartar). As calculus and plaque continue to build up, the gums begin to recede from the teeth. Deeper pockets form between the gums and teeth and become filled with bacteria and pus. The gums become very irritated, inflamed, and bleed easily. Slight to moderate bone loss may be present.

Advanced Periodontitis
The teeth lose more support as the gums, bone, and periodontal ligament continue to be destroyed. Unless treated, the affected teeth will become very loose and may be lost. Generalized moderate to severe bone loss may be present.

Treatment

Periodontal treatment methods depend on the type and severity of the disease. Your dentist and dental hygienist will evaluate for periodontal disease and recommend the appropriate treatment.

Periodontal disease progresses as the sulcus (pocket or space) between the tooth and gums gets filled with bacteria, plaque, and tartar, causing irritation to the surrounding tissues. When these irritants remain in the pocket space, they can cause damage to the gums and eventually, the bone that supports the teeth!

If the disease is caught in the early stages of gingivitis, and no damage has been done, one to two regular cleanings will be recommended. You will also be given instructions on improving your daily oral hygiene habits and having regular dental cleanings.

If the disease has progressed to more advanced stages, a special periodontal cleaning called scaling and root planing (deep cleaning) will be recommended. It is usually done one quadrant of the mouth at a time while the area is numb. In this procedure, tartar, plaque, and toxins are removed from above and below the gum line (scaling) and rough spots on root surfaces are made smooth (planing). This procedure helps gum tissue to heal and pockets to shrink. Medications, special medicated mouth rinses, and an electric toothbrush may be recommended to help control infection and healing.

If the pockets do not heal after scaling and root planing, periodontal surgery may be needed to reduce pocket depths, making teeth easier to clean. Your dentist may also recommend that you see a periodontist (specialist of the gums and supporting bone).

Maintenance

It only takes 24 hours for plaque that is not removed from your teeth to turn into calculus (tartar)! Daily home cleaning helps control plaque and tartar formation, but those hard-to-reach areas will always need special attention.

Once your periodontal treatment has been completed, your dentist and dental hygienist will recommend that you have regular maintenance cleanings (periodontal cleanings), usually four times a year. At these cleaning appointments, the pocket depths will be carefully checked to ensure that they are healthy. Plaque and calculus that are difficult for you to remove on a daily basis will be removed from above and below the gum line.

In addition to your periodontal cleaning and evaluation, your appointment will usually include:

- **Examination of diagnostic x-rays (radiographs):** Essential for detection of decay, tumors, cysts, and bone loss, X-rays also help determine tooth and root positions.
- **Examination of existing restorations:** Check current fillings, crowns, etc.
- **Examination of tooth decay:** Check all tooth surfaces for decay.
- **Oral cancer screening:** Check the face, neck, lips, tongue, throat, cheek tissues, and gums for any signs of oral cancer.
- **Oral hygiene recommendations:** Review and recommend oral hygiene aids as needed. (electric toothbrushes, special periodontal brushes, fluorides, rinses, etc.)
- **Teeth polishing**: Remove stain and plaque that is not otherwise removed during tooth brushing and scaling.

Good oral hygiene practices and periodontal cleanings are essential in maintaining dental health and keeping periodontal disease under control!