Periodontal Disease or Periodontitis (Gum Disease) & Gingivitis

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What is Periodontal Disease (PD) or Periodontitis?

Periodontitis is an inflammation and infection of the periodontium. The periodontium includes your gums, periodontal ligaments, tooth roots and bone. When a dentist diagnoses you with periodontal disease, it is very serious, because this means you have an infection all over your mouth that is destroying your gums and bone. Prolonged effects of this disease include: jaw bone loss resulting in losing teeth, fever, discomfort, pain, bleeding gums, and bad breath.

What is Gingivitis?

Gingivitis is a form of periodontal disease. Symptoms include bleeding and itching gums that appear red and purple. The gums become tender to the touch, making it painful to brush and floss.
What causes gingivitis and periodontal disease?

Gum disease is a result of the long-term effects of plaque deposits on your teeth. Plaque is a sticky material made of bacteria, mucus, and food debris that develops on the exposed parts of the teeth. It is a major cause of tooth decay.

If you do not remove plaque, it turns into a hard deposit called tartar (or calculus) that becomes trapped at the base of the tooth. Plaque and tartar irritate and inflame the gums. Bacteria and the toxins they produce cause the gums to become infected, swollen, and tender.

My favorite example of tartar is a coral reef. Think of a coral reef, hard and porous, and inside those pores lives the fish and other marine life. Well, just like a coral reef, tartar is full of tiny pores and little microorganisms live in these pores. They like this environment because it keeps them away from light and oxygen. Some types of bacteria that thrive in a light-free and oxygen-free (anaerobes) environment are very unhealthy for your mouth and whole body for that matter. In a new study, researchers found that some of these strains of bacteria, once they infect your mouth, can actually send out signals to the other healthy bacteria that live in your mouth to begin destroying your body tissues, whereas before they would not.

This tartar, with bacteria living in it, starts destroying your gum tissue and bone; causing you to have deep pockets and loss of tissue attachment to your teeth. To better understand this, it is like your bone and gums are melting away from your teeth.

The following raises your risk for gingivitis & periodontal disease:

- Malnourishment and vitamin deficiencies caused by Crohn’s, Celiac disease, anorexia or bulimia
- Smoking
- Certain infections and body-wide (systemic) diseases
- Poor dental hygiene
- Pregnancy (hormonal changes increase the sensitivity of the gums)
- Uncontrolled diabetes
- Misaligned teeth, rough edges of fillings, and ill-fitting or unclean mouth appliances (such as braces, dentures, bridges, and crowns) Use of certain medications, including phenytoin, bismuth, and some birth control pills.
Can PD affect my overall health?

Yes! People with periodontal disease have a greater chance of having heart disease than people with healthy gums, and the link between periodontal disease and heart disease exists separately from other risk factors, such as cigarette smoking, diabetes, or obesity, the AAPHD noted in a press release.

A protein involved in cellular inflammation may increase the risk of plaque-containing blood vessels associated with periodontal disease, according to research presented April 18 at the American Heart Association’s Arteriosclerosis, Thrombosis, and Vascular Biology 2012 Scientific Sessions in Chicago.

This study found that “More fatty plaque accumulation occurred in the blood vessels of the animals that were infected with periodontal disease, the researchers reported. In the animals with the deleted CD36 gene, however, vessels remained free of new plaque even when oral inflammation occurred.”
How is Periodontal Disease treated and prevented?

Periodontitis is treated by the following:

- Scaling and root planning or a deep cleaning - a careful cleaning of the root surfaces to remove plaque and calculus [tartar] from deep periodontal pockets and to smooth the tooth root to remove bacterial toxins.
- Followed by adjunctive therapy, including antibiotics, antibacterial mouthrinses and more frequent cleanings.
- Sometimes, if the deep cleaning does not resolve the disease then the treatment of a specialist doctor called a Periodontist may be necessary; involving gum surgery and bone grafts.

Periodontitis is prevented by the following:

- Good oral hygiene including brushing twice a day and flossing once a day
- Getting a professional cleaning at your dentist’s office every 6 months
- Quitting smoking or non-smoking
- Take a multivitamin and eat a healthy diet rich in fruit and vegetables. Reduce the frequency and quantity of sugar consumption. Deficiency of vitamin B complex, vitamin C, vitamin D, calcium, and magnesium has been associated with periodontal disease.
- Drink lots of water, 7-8 glasses a day – dehydration can reduce your saliva flow, resulting in a lowered immune system in your mouth.