

What is gum disease?

Gum disease or periodontal disease, a chronic inflammation and infection of the gums and surrounding tissue, is the major cause of about 70 percent of adult tooth loss, affecting three out of four persons at some point in their life.

What causes gum disease?

Bacterial plaque — a sticky, colorless film that constantly forms on the teeth — is recognized as the primary cause of gum disease. Specific periodontal diseases may be associated with specific bacterial types. If plaque isn't removed each day by brushing and flossing, it hardens into a rough, porous substance called calculus (also known as tartar). Toxins (poisons) produced and released by bacteria in plaque irritate the gums. These toxins cause the breakdown of the fibers that hold the gums tightly to the teeth, creating periodontal pockets which fill with even more toxins and bacteria. As the disease progresses, pockets extend deeper and the bacteria moves down until the bone that holds the tooth in place is destroyed. The tooth eventually will fall out or require extraction.

Are there other factors?

Yes. Genetics is also a factor, as are lifestyle choices. A diet low in nutrients can diminish the body's ability

to fight infection. Smokers and spit tobacco users have more irritation to gum tissues than non-tobacco users, while stress can also affect the ability to ward off disease. Diseases that interfere with the body's immune system, such as leukemia and AIDS, may worsen the condition of the gums. In patients with uncontrolled diabetes, where the body is more prone to infection, gum disease is more severe or harder to control.

What are the warning signs of gum disease?

Signs include red, swollen or tender gums, bleeding while brushing or flossing, gums that pull away from teeth, loose or separating teeth, puss between the gum and tooth, persistent bad breath, change in the way teeth fit together when the patient bites, and a change in the fit of partial dentures. While patients are advised to check for the warning signs, there might not be any discomfort until the disease has spread to a point where the tooth is unsalvageable. That's why patients are advised to get frequent dental exams.

What does periodontal treatment involve?

In the early stages, most treatment involves scaling and root planing—removing plaque and calculus around the tooth and smoothing the

root surfaces. Antibiotics or antimicrobials may be used to supplement the effects of scaling and root planing. In most cases of early gum disease, called gingivitis, scaling and root planing and proper daily cleaning achieve a satisfactory result. More advanced cases may require surgical treatment, which involves cutting the gums, and removing the hardened plaque build-up and recontouring the damaged bone. The procedure is also designed to smooth root surfaces and reposition the gum tissue so it will be easier to keep clean.

How do you prevent gum disease?

Removing plaque through daily brushing, flossing and professional cleaning is the best way to minimize your risk. Your dentist can design a personalized program of home oral care to meet your needs. If a dentist doesn't do a periodontal exam during a regular visit, the patient should request it. Children also should be examined.

What is the role of the general dentist?

The general dentist usually detects gum disease and treats it in the early stages. Some general dentists have acquired additional expertise to treat more advanced conditions of the disease. If the general dentist believes that the gum

disease requires treatment by a specialist, the patient will be referred to a periodontist. The dentist and periodontist will work together to formulate a treatment plan for the patient.

Is maintenance important?

Sticking to a regular oral hygiene regimen is crucial for patients who want to sustain the results of therapy. Patients should visit the dentist every 3-4 months (or more, depending on the patient) for spot scaling and root planing and an overall exam. In between visits, they should brush at least twice a day, floss daily, and brush their tongue. Manual soft nylon bristle brushes are the most dependable and least expensive. Electric brushes are also a good option, but don't reach any further into the pocket than manual brushes. Proxy brushes (small, narrow brushes) are the best way to clean in between the recesses in the teeth, and should be used once a day. Wooden tooth picks and rubber tips should only be used if recommended by your dentist.

Sources: The American Academy of Periodontology; Atrix Laboratories, Inc.; "Non-surgical Periodontal Therapy: Essential and Adjunctive Methods," by P.R. Greene, BDS, FDSRCPS, the British Dental Journal, 1995; "Four Steps to Soft Tissue Management," by S.N., Bhaskar, DDS, Dentistry Today, October, 1995;

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