

# Periodontal (Gum) Disease

Periodontal disease is one of the most common diseases of humans. According to statistics, as many as 75 per cent of adults over the age of 30 may suffer from some form of gum disease at some point in their life. Not only can gum disease cause oral pain, discomfort and tooth loss, it can also seriously affect a person's overall health. The connection between oral infections and other diseases in the body is becoming understood and accepted within the health-care community. Proper oral care and regular professional scaling (cleaning) by a dental hygienist are important for keeping mouth and body healthy.

## HOW GUM DISEASE DEVELOPS

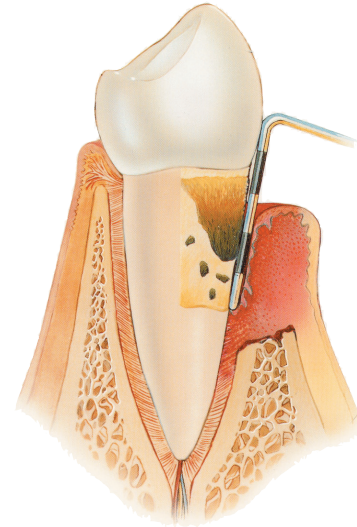
Periodontal disease is a contagious, chronic bacterial infection that affects the gum tissue, bone and attachment fibres that support the teeth and hold them in place. Gum disease starts slowly without any pain and may not be apparent until there are serious side effects.

Over time, a buildup of plaque bacteria (white, sticky substance) collects at the gum line, eventually hardening on the teeth into calcium deposits called calculus or tartar. Brushing and flossing cannot remove hardened plaque. If the tartar isn't removed with professional scaling by a dental hygienist, the bacteria can cause inflammation of the gums (gingivitis), penetrate the gum line and finally spread into the underlying bone (periodontitis).

If left untreated, gum disease can result in abscesses or the complete destruction of the tooth's supporting tissues and, ultimately, tooth loss.

## SIGNS AND SYMPTOMS

- Red, swollen or tender gums
- Gums that bleed when brushing or flossing
- Receding gums
- Deep pockets (the space between the gums and the teeth)
- Metallic taste
- Tooth sensitivity for no apparent reason
- Loose or shifting teeth
- Abscesses



- Pus around gums and teeth
- Chronic bad breath

## CAUSES AND RISK FACTORS

Smoking and using smokeless tobacco are significant risk factors for gum disease. It reduces blood flow to the gums, depriving them of oxygen and nutrients that help to keep gums healthy. Other risk factors include:

- Ineffective brushing and flossing
- Stress
- Poor nutrition
- Hormones

## THE IMPACT ON OVERALL HEALTH

Most people don't connect their mouths to the rest of their bodies. Some research studies strongly suggest a link between gum disease and a person's overall health. The bacteria from oral infections – triggered by simply brushing the teeth or chewing – can enter the blood stream or airways and travel to other parts of the body. These bacteria have the potential to worsen or increase the risk for other types of health problems such as heart disease, stroke and respiratory disorders. Gum infections can also make it difficult to control diabetes and may contribute to premature and/or low birth weight babies.

## The connection, according to ongoing studies:

**Heart disease and stroke** – Bacteria from diseased gums can contribute to the formation of artery-clogging plaques (fatty deposits) perhaps leading to a heart attack or stroke. Also, some oral bacteria may cause infective endocarditis, a condition in which the interior lining of the heart and heart valves becomes inflamed. Left untreated, this condition could cause permanent heart damage or death.

**Respiratory** – Bacterial respiratory infections are caused by inhaling germs from the mouth and throat into the lungs. When these germs reach the lower respiratory tract, they may cause an infection or worsen an existing lung infection such as pneumonia, bronchitis, emphysema and chronic obstructive pulmonary disease (COPD).

**Diabetes** – People with diabetes are prone to a variety of bacterial infections, including gum disease. Oral infections could make it difficult to control diabetes and cause complications, since the bacteria from severe gum disease may increase both blood sugar levels and the amount of time the body functions with high blood sugar.

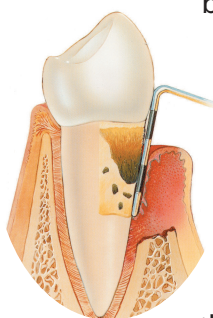
**Pregnancy** – Bacteria from gum disease may trigger an unnatural increase in certain biological fluids – present in a woman's body to help induce labour – and contribute to premature deliveries.

## TREATMENT

With regular, professional scalings, dental hygienists help control the bacteria that cause gum disease and tooth decay.

Dental hygiene treatment includes:

- Reviewing the client's medical history to make sure there are no medical conditions that could affect treatment



- Examining the head, neck and mouth including teeth, gums and tongue
- Using a dental hygiene instrument (periodontal probe) to measure pockets and documenting the findings
- Scaling (cleaning) teeth to remove plaque bacteria and hardened or calcified plaque buildup (tartar)
- Polishing teeth to remove stains, if required
- Applying fluoride or other agents to strengthen and desensitize teeth
- Providing information and counselling on diet, nutrition and smoking cessation
- Instructing clients on the most effective way to brush and floss
  - Giving advice on the various types of oral care products and how to use them
  - Helping to devise a treatment plan and developing a customized home care program

## PREVENTION AND HOME CARE

With regular and proper oral care, gum disease can be prevented, controlled or even reversed in the early stages. Between dental hygiene appointments, it is important to maintain good oral hygiene:

- Don't smoke or use smokeless tobacco
- Eat a nutritious, well-balanced diet
- Brush twice a day for two minutes using a soft toothbrush and fluoridated toothpaste
- Clean or floss between teeth and gums once a day to remove food and plaque
- Clean or scrape the tongue daily
- Use a mouth rinse, if recommended by a dental professional
- Never share toothbrushes
- Replace toothbrush every two to three months, or when bristles start to bend, and after a cold or flu
- Check gums/mouth regularly and report any changes or signs of gum disease to a dental hygienist

Illustration provided courtesy of Crest Oral-B – P&G Oral Health

*As professional health-care providers, dental hygienists are primarily concerned with promoting good oral health. Dental hygiene is among the largest of the regulated health-care professions in the province. In Ontario all dental hygienists are registered with the College of Dental Hygienists of Ontario, which regulates the profession to ensure the public receives safe and ongoing comprehensive oral care.*

VFS14.1

© The Ontario Dental Hygienists' Association