



# Periodontal Disease

## INFORMATION SHEET

### Periodontal disease

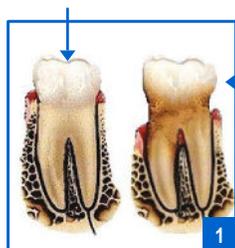
Periodontal diseases and pathological conditions affect the tissue supporting the teeth, specifically, the bone supporting the teeth plus the gums.

The main periodontal diseases are gingivitis and periodontitis. Gingivitis refers to inflammation of the gum around the teeth; it is reversible when treated. Periodontitis is a severe condition that damages the gum and bone supporting the teeth.

Periodontal diseases are infections caused by the accumulation of pathogenic bacteria and their toxins in the gingival sulcus, a small ridge measuring 1-3 mm where the tooth meets the gum. Certain factors may make these diseases worse, such as tartar build-up, smoking, genetic factors, stress, a disease such as diabetes and the use of certain medications.

The most effective ways to prevent these diseases involve meticulous oral hygiene, including flossing, not smoking and frequent dental appointments for cleaning.

Healthy periodontium



Healthy periodontium and periodontium with periodontitis

Periodontium with periodontitis: bone loss, tooth recession and tartar on the root

Periodontitis is characterized by loss of the tooth's bone support and by the gum detaching around the teeth, leading to the formation of "periodontal pockets" (Fig. 1). Often, periodontitis causes no symptoms. However,

the main signs reported by patients are bleeding gums, swelling, recession, tooth movement and sometimes bad breath (Fig. 2). When the disease worsens, the teeth become loose. Untreated periodontitis may lead to loss of teeth. Screening for periodontal disease is carried out during follow-up appointments at the dentist using an exam called "PSR" (Periodontal Screening and Recording). The dentist performs this quick and easy test to detect periodontal damage. Your dentist will provide appropriate recommendations based on the test results. When periodontal damage is confirmed, the dentist will perform more in-depth exam of your periodontium

to assess its shape, colour, texture and gum quantity/quality. The depth of pockets and recession is measured. X-rays are required to complete assessment of the bony periodontium. This overall assessment helps to make a diagnosis, identify underlying



Severe periodontitis

factors and ultimately establish a treatment plan appropriate for your gums to help improve your oral health.

### What steps are involved in periodontal treatment?

Generally, treatments start with a phase called "periodontal health". This consists of getting rid of irritation factors - bacterial plaque and tartar - and correcting all factors that contribute to build-up. Lifestyle habits which could make the disease worse need to be changed. Treatment, called scaling and root planing, consists of cleaning the periodontal pockets. It is usually done with local anesthetic using manual and ultrasonic instruments. In some circumstances, backup antibiotic therapy may be recommended. In the days following treatment, the patient may feel more sensitivity when chewing and brushing and with temperature changes.

Once the gum inflammation has resolved, the gum will contract and firm up, which may lead to additional exposure of the roots and give the impression of longer teeth. Particular attention will be paid to the quality of daily oral hygiene to prevent root cavities, since roots are less resistant to cavities than tooth enamel is. To treat increased tooth sensitivity to thermal stimuli (hot or cold), the dentist may prescribe a toothpaste designed to reduce sensitivity and, if necessary, apply a desensitizer.

Generally, this phase of treatment stops disease progression, and reduces gum inflammation and the depth of periodontal pockets. In the following weeks, periodontal condition will be re-assessed to measure the improvement achieved.

After the periodontal health phase, some teeth may require surgery. The goal of surgery is for the dentist to access roots which have deep periodontal pockets and perform complete debridement, consisting of removing infected tissue. This procedure will return the gum and bone to a more natural contour, which further reduces the depth of periodontal pockets, thereby making oral hygiene easier. Regeneration techniques may be attempted, if appropriate. These procedures use different materials that promote bone reformation to partially replace losses caused by periodontal disease. These techniques require specific clinical conditions; your dentist can recommend them if they are right for you.

Surgical procedures provide significant benefits for treatment; however, they do involve a healing period.

Please note that there is also a risk that periodontal disease will recur or worsen despite all the treatments carried out.

**Gum grafts**

Tooth recession may be caused by several factors, including too vigorous brushing or periodontal disease. Teeth which naturally have a very thin gum are at higher risk of gum recession. This can lead to loss of gum and bone with the resulting exposure of the tooth's root (Fig. 3). When there is recession, it is very important to identify and correct the causes. Then, a gum graft may be indicated, to stop the recession process and prevent any further gum and bone loss.



Gum recession

Gum grafts are used to recreate the strip of gum that was lost to recession. In some specific cases, the exposed root can be partially or totally re-covered. This procedure is usually performed with a flap of skin from your palate.

**Crown lengthening**

There are situations where there is excess gum. A “gummy smile” exposing a lot of gum may be caused by excess gum covering an abnormal amount of the surface of your teeth, making your teeth look too short (Fig. 4).



Short-looking crowns

Other situations, such as a deep cavity, a broken tooth under the gum line or the dental structure not being tall enough for a restoration such as a crown or bridge, may compromise restoration of the tooth.

This situation may be corrected by a procedure called “crown lengthening”. This surgery adjusts the gum and bone level to expose more tooth surface and make its length look normal or make it possible to restore it properly (Fig. 5).



The same crowns after crown lengthening

**Risks and potential complications of periodontal surgery**

- Pain
- Surgical site bruising and swelling
- Infection
- Post-operative bleeding
- Adverse reactions to medications
- Temporary loss of feeling at the surgical site
- Teeth that look longer
- Tooth sensitivity to heat and cold
- Loss of interdental papillae (triangle of gum between teeth)
- Loss of graft

**How can you keep gums healthy?**

Periodontal disease can recur if its cause re-occurs. That is why it is very important to adopt good habits and go to the dentist at their recommended intervals. It is also crucial to maintain high oral hygiene standards. Your dentist and dental hygienist can recommend an individualized care program including proper brushing technique and daily flossing. By controlling the amount of plaque and tartar in your mouth, you are taking a big step towards reducing the risk of disease recurrence.

Having said that, it is important that any treatment needed to stop periodontal disease be performed by a qualified practitioner such as a general dentist or a specialized periodontal dentist.

I gave this information sheet to patient (name): \_\_\_\_\_

Date: \_\_\_\_\_

Dentist’s signature: \_\_\_\_\_