



Periodontitis ("gum disease")

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Periodontitis is a disease in tooth-supporting tissues and is common in the population. It may progress without pain or other clear symptoms. The earlier periodontitis is diagnosed, the easier it is to treat. Untreated it results in tooth loss, thus affecting the entire dentition, and can also cause harm to general health.

Periodontitis is an inflammatory disease caused by bacteria. It destroys soft tissues and bone surrounding the teeth. If the inflammatory process continues, the affected tooth becomes mobile, and the process eventually leads to loss of the tooth. Periodontitis may be limited to one tooth only but can also cause damage in the whole dentition.

After periodontitis is diagnosed, the cornerstones of the treatment include a proper selfcare for plaque removal – daily tooth brushing and interdental cleaning – professional anti-infective treatment and, thereafter, regular maintenance care. Patients who smoke are encouraged and supported in smoking cessation. It is important to treat periodontitis before other dental treatment, especially regarding implant therapy, since periodontitis patients have an increased risk for similar infections around dental implants.

Predisposing factors

Risk for having periodontitis is individual. Poor oral hygiene and smoking especially, but also general diseases like diabetes and metabolic syndrome, increase the risk for periodontitis. In addition, stress or genetic factors may increase the susceptibility to periodontal disease.

Symptoms

Periodontitis initiates and progresses without notable symptoms, therefore, an individual may be unaware of having the disease. A clear sign of inflammation is gingival bleeding during tooth brushing. Often gums become purple red and swollen.

Advanced loss of tooth-supporting tissues is easy to recognize: teeth can be mobile, spaces between teeth become wider, and bad breath is common.

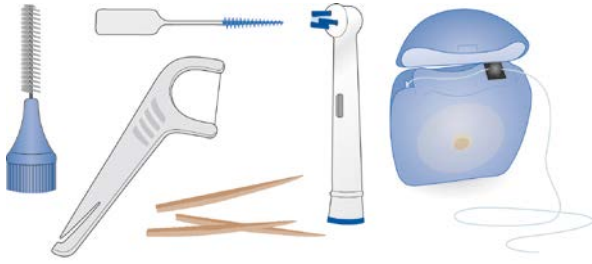
Inflammation in the soft tissues around a dental implant is called peri-implant mucositis, but when there is also loss of surrounding bone, the condition is called peri-implantitis. Besides bleeding, there can be pus coming out from gums surrounding the implant.

Brush your teeth in the mornings and evenings – don't forget to clean interdental spaces

Both periodontitis (a process destroying tooth-supporting bone) and gingivitis (bleeding gums without bone loss) can be prevented by carrying out good oral hygiene: tooth brushing is done twice a day. An electric toothbrush has been shown to be more effective than a manual toothbrush.

In addition to tooth brushing, interdental spaces need to be cleaned daily; periodontitis starts often between posterior teeth. There are several types of cleaning methods: interdental brushes, dental picks and flosses. Of those, the interdental brush is most effective for plaque removal.

See figure in the next page.



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It is important that the dentist or dental hygienist selects the most suitable means for cleaning – based on individual preferences and the size of interdental spaces – and guides how to use them.

If gums are heavily inflamed and bleed, an antiseptic mouthrinse preventing formation of bacterial plaque on tooth surfaces can be used for 1-4 weeks.

Good oral hygiene is essential for keeping the tissues surrounding dental implant(s) healthy.

Because smoking increases significantly the risk for periodontitis, smoking cessation is an important goal in periodontal treatment (see the Current Care Guideline patient version in Finnish [Tupakoiijasta tupakoimattomaksi, sauhuttelijasta savuttomaksi – otatko haasteen vastaan?](#)).

Periodontal examination with a periodontal probe gives information on oral health

Many factors can affect periodontitis and its treatment and, therefore, the patient's medical and dental history is taken: other diseases and their medications, smoking history, oral hygiene practices, and previous

dental care. Periodontal probing is an essential part of the oral health examination.

Periodontal probing reveals deepened pockets around teeth, gingival bleeding, and calculus below the gumline.

When the dentist finds signs of periodontitis, a radiographic examination of the mouth is indicated. It reveals bone tissue destruction, if present, around teeth. In case of severe periodontitis, microbiological testing may be useful.

When periodontal disease is diagnosed, the dentist makes a treatment plan and starts the treatment without delay.

Treatment

The primary goal of treatment is to stop the inflammatory process and prevent further tissue destruction. The treatment team is made up of the dentist, dental hygienist and the patient him-/herself. It is important that the patient is committed to a regular selfcare for dental plaque removal.

During treatment, bacterial deposits and factors for their retention, such as calculus, are removed in effective ways from tooth and root surfaces. When needed, this is done under local anesthesia. In addition, treatment of severe periodontitis may include adjunctive antibiotics, surgery, or both as well as rehabilitation of the occlusion.

After mechanical treatment, gums may be sore and teeth hurt for cold for some days. Occasionally, there can be transient mild fever or malaise, but usually these symptoms seldom need any care. Following treatment, gingival recessions are also possible.



Prognosis

If the treatment starts at early phase of periodontal disease, the outcome is stable without remarkable tissue destruction. By doing so, it is possible to avoid harms to the dentition caused by severe disease as well as threat to general health. Namely, untreated periodontitis maintains low-grade inflammation in the body, thus increasing the risk for cardiovascular diseases among others.

Maintenance care and its timing

Maintenance care (supportive care) is an essential part of periodontal treatment and long-standing treatment results. Maintenance care occurs with 3-12-month intervals, depending on the patient's risk for disease progression. Maintenance visits include periodontal screening with pocket measurements, control of oral hygiene and tools for cleaning, and the dentition is cleaned and polished.

How common is periodontitis?

Periodontitis is a common disease in the Finnish population: according to the [Health 2000 survey](#), 64% of the study participants had pocket teeth and 21% of Finnish adults had advanced pocket formation. Periodontal tissue destruction can be found already in adolescents, especially in those who smoke.

Prevalence of severe periodontitis increases drastically between the age of 20 to 40 years.

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