Perio & Diabetes

People with periodontitis are likely to develop diabetes mellitus – and vice versa

Diabetes mellitus

Diabetes mellitus is defined by **hyperglycaemia** and has two major forms.

Type I diabetes mellitus results from a lack of insulin because of an **autoimmune reaction in the pancreas**, whereas **type 2 diabetes mellitus** occurs as a consequence of **insulin resistance associated with chronically high blood-sugar levels**.

Periodontitis

Periodontitis is a common chronic inflammatory disease in humans, and it is defined by the **damage of tooth-supporting structures caused by inflammation** eventually leading to tooth loss.

Periodontitis is initiated by the **pathogenic dental-plaque biofilm** above and below the gum margin.

Patients with diabetes mellitus show a high prevalence of periodontitis.

Patients with periodontitis are more likely to develop type 2 diabetes mellitus.

Periodontitis and **diabetes mellitus** are **both widespread conditions** among the **world's population**

Diabetes mellitus

Approx. 415 million people

Prevalence: constantly **rising**

Periodontitis

Western countries, more than 50% of the population

750

Prevalence: 750 million people around the world with **severe forms**

Periodontitis and diabetes mellitus, a **two-way relationship**

What happens when you have **periodontitis** and **diabetes at the same time**

Diabetes mellitus increases **prevalence, progression, and severity** of periodontitis

Periodontitis

Increased **risk**

Diabetes mellitus

Periodontitis **influences blood-sugar control** in diabetes mellitus

Complications of diabetes

Stroke
Higher rate of cerebrovascular complications.

Retinopathy
Increased risk for larger retinal venular diameter and general diabetes-associated retinopathy.

Cardiovascular complications
Increased risk for coronary heart disease and dying from a heart attack (22% in 10 years.).

Kidney faliure and **macroalbuminuria**
Increased all-cause mortality risk (41% in 10 years).

Periodontitis & diabetes mellitus **general facts**

1. Diabetes and periodontitis are **chronic non-communicable diseases**, whose prevalence increases with age.
2. There is a **bidirectional (two-way) relationship** between periodontitis and diabetes.
3. If untreated, periodontitis causes **tooth loss**.
4. Periodontitis **is easily diagnosed** and **clinically controlled**. With regular high-quality supportive treatment, clinical results can be maintained.
5. People with sub-optimally controlled diabetes (both type1 and 2) suffer from increased periodontal **inflammation/destruction/ breakdown**.
6. People with periodontitis **have an elevated risk** of pre-diabetes or developing type 2 diabetes.
7. People with both diabetes and periodontitis have a **greater likelihood of more severe medical complications** (affecting eyes and kidneys) **and even death** than people with diabetes alone.
8. Periodontal treatment in people with diabetes **results in a significant reduction in glycated haemoglobin (HbA1c) levels** three months after periodontal therapy, with emerging evidence available also for six months.
9. **Early diagnosis, prevention and co-management (dentists and physicians)** of both diabetes and periodontitis is of utmost importance.
10. Successful periodontal treatment has a **clinically significant effect on general health** and should have a place in the treatment of people with diabetes.

Take care of **your gums**, control **diabetes**.

- **visit your doctor regularly**
- **visit your dentist regularly**
- **control your diabetes**
- **clean your teeth twice a day**
- **watch your weight**
- **eat healthy foods, do not smoke**

EFP European Federation of Periodontology

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