

Periodontal Disease Contributes to Diabetes

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Chronic periodontal disease may contribute to diabetes, according to a review of recent research. While it has been established that people with diabetes are more prone to developing periodontal disease, new research is suggesting that periodontal disease may, in turn, be a risk factor for diabetes.

The research review was presented at an American Academy of Periodontology/National Institute of Dental and Craniofacial Research symposium on periodontal systemic connections held in April.

Periodontal disease can cause bacteria to enter the bloodstream and activate immune cells. These activated cells produce inflammatory biological signals (cytokines) that have a destructive effect throughout the entire body.

"In the pancreas, the cells responsible for insulin production can be damaged or destroyed by the chronic high levels of cytokines. Once this happens, it may induce Type 2 diabetes, even in otherwise healthy individuals with no other risk factors for diabetes," explains presenter Anthony Iacopino, DMD, PhD.

According to Iacopino, hyperlipidemia or high serum cholesterol, not impaired glucose tolerance, seems to be a significant risk factor for periodontal disease in diabetics.

"Therefore, lipid-lowering therapies such as low-fat diets, lipid-lowering drugs, and exercise - are vitally important for diabetics who want to improve their quality of life, as well as their oral health," he says. "The same approaches may also prove beneficial in non-diabetic patients with high cholesterol."

The next step to determine for sure whether periodontal disease can cause diabetes is to perform clinical studies and intervention trials.

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