

Researchers Caution that Tooth Loss May Increase Risk of Chronic Kidney Disease in U.S. Adults

Study published in the *Journal of Periodontology* suggests that the effects of untreated periodontal disease may be linked to chronic kidney disease.

CHICAGO—October 14, 2008—According to the National Kidney Foundation, one out of nine Americans suffers from chronic kidney disease (CKD), and millions more are at risk. A debilitating disease, CKD can affect blood pressure and bone health, and can eventually lead to heart disease or kidney failure. A recent study published in the *Journal of Periodontology (JOP)*, the official publication of the American Academy of Periodontology (AAP), suggests that edentulous, or toothless, adults may be more likely to have CKD than dentate adults. In the study, conducted at Case Western Reserve University, edentulism was found to be significantly associated with CKD, indicating that oral care may play a role in reducing the prevalence of chronic kidney disease in the U.S. population.

The study examined the kidney function and periodontal health indicators, including dentate status, of 4,053 U.S. adults 40 years of age and older. After adjusting for recognized risk factors of CKD such as age, race/ethnicity and smoking status, the results revealed that participants who lost all their teeth were more likely to have CKD than patients who had maintained their natural dentition. "The rationale for examining edentulous adults in this study is to observe the long-term effects of periodontal disease on the presence of chronic kidney disease", states study author Monica Fisher, PhD, DDS, MPH. "Periodontal disease is a leading cause of tooth loss in adults; therefore edentulism is considered to be a marker of past periodontal disease in the study's participants."

While additional research is needed to fully understand why tooth loss is associated with higher prevalence of CKD, the destructive nature of chronic inflammation may play a role. Both periodontal disease and chronic kidney disease are considered inflammatory conditions, and previous research has suggested that inflammation may be the common link between these diseases. Since untreated periodontal disease can ultimately lead to tooth loss, edentulous patients may have been exposed to chronic oral inflammation.

According to [David Cochran](#), DDS, President of the American Academy of Periodontology and Professor and Chair of the Department of Periodontics at the University of Texas Health Science Center at San Antonio, treating periodontal disease can do a lot more than save your natural teeth. "Researchers have long known that gum disease is related to other adverse health conditions and now we can consider chronic kidney disease to be one of them. It is exciting to think that by controlling periodontal disease and therefore helping to preserve natural dentition, the incidence and progression of CKD may be reduced."

Periodontists, the dentists specially trained in the prevention, diagnosis and treatment of gum disease, recommend regular brushing and flossing and routine visits to a dental professional in order to maintain comprehensive oral health. If gum disease develops, consulting a periodontist is an effective way to determine the most appropriate course of treatment.

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