

151 Riverside Drive
Binghamton, NY 13905
607-724-1389 • Fax 607-724-6468



609 East Main St.
Endicott, NY 13760
607-754-3080 • Fax 607-754-3083

Family, Cosmetic and Implant Dentistry
www.summitdentalarts.com

Association Between Gum Disease, Heart Attack Strong in Those Under 55, Regardless of Smoking Status, UB Study Finds

Smoking increases odds of heart attack in those 55 and older with gum disease

Smoking is known to increase the risk and severity of gum disease and gum disease appears to increase the risk of heart attack, so being a non-smoker would seem to lower the heart-attack risk in those with gum disease.

Not so, researchers at the University at Buffalo have found. A study reported today at the Society for Epidemiological Research showed that in those younger than 55, the association between gum disease and heart-attack risk was strong in both smokers and non-smokers.

Among participants 55 and older, however, smoking appeared to increase risk of having a heart attack in those with gum disease. There was no association between periodontal disease and risk of heart attack among non-smokers in this age group.

Results were reported by O. Mireille Andriankaja, D.D.S., Ph.D., postdoctoral researcher in Department of Social and Preventive Medicine in the UB School of Public Health and Health Professions.

The study involved 1,485 Caucasian men and women between the ages of 35 and 70; 589 had been discharged from a hospital after suffering a heart attack, while 896 randomly selected residents from Erie and Niagara counties in Western New York who had not had a heart attack served as controls.

All participants provided information on smoking habits and underwent a dental exam to assess three indicators of periodontal disease.

Results showed that participants under the age of 55 with markers of periodontal disease had two-to-four times the risk of having a heart attack, regardless of smoking status. The measure showing the strongest relationship between

periodontal disease and heart attack – probing pocket depth – was greater in non-smokers than smokers in this age group.

Among participants over 55, smokers showed an increase in risk of heart attack between 4 and 8 percent – depending on the periodontal disease measure – compared to non-smokers, results showed.

The association between oral health and risk of non-fatal heart attack was strong and independent of smoking status in those younger than 55, Andriankaja said. In the older group, where the association between gum disease and heart attack is weaker, smoking appeared to increase the risk.

"Future studies should consider factors such as smoking when assessing the association between oral disease and heart attacks," Andriankaja noted.

Additional researchers on the study were Robert J. Genco, D.D.S., Ph.D., SUNY Distinguished Professor of Oral Biology and UB interim provost; Maurizio Trevisan, M.D., interim dean of the School of Public Health and Health Professions; Joan Dorn, Ph.D., and Jacek Dmochowski, Ph.D., from the Department of Social and Preventive Medicine, School of Public Health and Health Professions, and Karen L. Falkner, Ph.D., and Sara Grossi, D.D.S., Department of Oral Biology, UB School of Dental Medicine.

This study was funded by the National Institute of Dental and Craniofacial Research.