

People with gum disease are twice as likely to have precancerous abnormalities in their mouths, and have a more than four-fold risk of mouth cancer, new study findings show.

The study's lead author, Dr. Sara Grossi of the University of Buffalo in New York, said she believes these findings provide the first link between oral cancer and oral infection, and could offer a new strategy for identifying oral cancer in its early stages and perhaps preventing the disease. She reported the findings in San Antonio this week at the American Association of Dental Research's annual meeting.

Gum disease is a chronic bacterial infection of the gums that can eventually lead to tooth loss. Some studies have linked gum disease to a higher risk of heart disease and stroke.

Grossi and her colleagues analysed data from the Third National Health and Nutrition Examination Survey (NHANES III), which the U.S. Centers for Disease Control and Prevention conducted between 1988 and 1994. Specifically, the team looked at roughly 14,000 study participants who were 20 or older and had six or more natural teeth.

The researchers found that people with <http://www.reutershealth.com/wellconnected/doc24.html> periodontal disease had a 1.74-fold increased risk of precancerous mouth lesions, and a 4.23 times greater risk of mouth cancer.

"Survival from oral cancer, as with most cancers, depends on the stage of the disease at diagnosis," Grossi noted in a university statement. "If further studies demonstrate that periodontal disease is a significant risk and a warning sign, screening and oral examinations for oral cancer can be targeted in order to improve prevention and early detection of oral cancer."

Another Version of the Above Article

Patients with periodontal disease may be at significantly greater risk for oral cancer than those with healthy gums, according to dental researchers at the State University of New York at Buffalo School of Dental Medicine.

The finding is based on an analysis of data from the Third National Health and Nutrition Examination Survey (NHANES III), conducted by the US Centers for Disease Control and Prevention between 1988 and 1994, that found patients with serious periodontal disease were at double the risk of having a precancerous lesion and four times the risk of having an oral tumour of any kind, as compared to people with healthy gums.

"This is the first finding of a potential link between oral cancer and oral infection," said Dr. Sara Grossi, a co-author on the study, in a UB news release. "But there is evidence of an infection link in other cancers," she added, noting research showing an association between *H. pylori* and stomach cancer, human papillomavirus and cervical cancer, and cytomegalovirus and Kaposi's sarcoma.

For this study, researchers categorised 13,798 adults from the NHANES III database based on gingival attachment loss: one group showed an average loss of less than 1.5 millimeters for all teeth while the other exhibited a greater than 1.5 mm loss.

Controlling for oral cancer risk factors including tobacco and alcohol use, age, gender, race, education, occupation, diet and frequency of dental visits, oral tumours were found to be four times more prevalent in the subjects with more serious periodontal disease while precancerous lesions were twice as common. "These findings suggest strongly that infection is associated with oral cancer, but they don't prove that oral infection is causally related to oral cancer," Dr. Grossi said. "If clinical studies prove that to be true, the implications for public health would be tremendous. Additional research in this area could significantly improve oral cancer screening and early detection programs, and help reduce mortality from oral cancer."