

Researchers link periodontal bacteria to atherosclerosis

February 14, 2005 -- Patients with periodontal disease are more likely to suffer from atherosclerosis — a narrowing of the arteries that can lead to stroke or heart attack — than their counterparts with healthy gums, researchers from Columbia University Medical Center report.

While past research has pointed to a link between periodontal and vascular diseases, the Columbia study is the first of its kind to examine the microbiology of periodontal disease to show its connection to heart ailments, according to a Feb. 2 Columbia news release.

The Columbia researchers measured bacteria levels in the mouths of 657 people with no history of stroke or myocardial infarction and also gauged the thickness of the subjects' carotid arteries, an indicator of atherosclerosis.

They report that subjects with higher levels of a specific bacteria associated with periodontal disease also had an increased carotid artery thickness, even after accounting for other cardiovascular risk factors. They also confirmed that atherosclerosis is associated specifically with the type of bacteria that causes periodontal disease and not with other oral microbes.

One possible explanation for the connection is that the bacteria that cause periodontal disease can migrate throughout the body via the bloodstream and stimulate the immune system, causing inflammation that results in the build up of deposits in the arteries, the researchers said.

"This is the most direct evidence yet that gum disease may lead to stroke or cardiovascular disease," said Dr. Moise Desvarieux, assistant professor of epidemiology at Columbia University Medical Center's Mailman School of Public Health. "And because gum infections are preventable and treatable, taking care of your oral health could very well have a significant impact on your cardiovascular health."

The research is part of the National Institutes of Health-funded INVEST (Oral Infections and Vascular Disease Epidemiology Study) at Columbia, the University of Minnesota and the National Institute of Neurological Disorders and Stroke-funded Northern Manhattan Study.

The above information from the American Dental Association site is found at:
<http://www.ada.org/prof/resources/pubs/adanews/adanewsarticle.asp?articleid=1267>