Study Adds Evidence -- Bad Teeth Equal Bad Heart

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WASHINGTON (Reuters) - People with more bacteria in their mouths also have more evidence of heart disease, researchers said on Monday in a study strengthening the evidence for a link between gum disease and heart disease.

The study of 657 people who had no history of stroke or heart attack showed that people with more bacteria that cause periodontal disease also had thicker carotid arteries -- a strong indicator of clogged blood vessels.

Writing in the American Heart Association's journal Circulation, the team at Columbia University in New York said the association held even when other heart risk factors were taken into account.

"This is the most direct evidence yet that gum disease may lead to stroke or cardiovascular disease," said Dr. Moise Desvarieux at Columbia University Medical Center, who led the study.

"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."

Researchers believe the bacteria that cause the gum disease may spread into the bloodstream and stimulate the immune system, causing inflammation that results in the clogging of arteries. Hardening of the arteries involves the inflammation process, and other studies have strongly linked heart disease with inflammation.

The researchers used ultrasound to measure the thickness of the carotid artery, which leads from the heart to the brain. They also made sure that they were measuring only levels of bacteria associated with both gum disease and heart disease.

These are Actinobacillus actinomycetemcomitans, Porphyromonas gingivalis, Tannerella forsythia, and Treponema denticola.

"Although more than 600 bacteria have been shown to colonize the mouth, each person tends to carry different proportions of these microbes," said Dr. Panos Papapanou, a periodontist who worked on the study.

Now they need to show which came first -- the bacteria or the heart disease.

"We will re-examine the participants in less than three years, and, at that point, we can better evaluate the progression of the atherosclerosis and, hopefully, begin to establish a time frame underlying the diseases," said Dr. Ralph Sacco, who also worked on the study.