

Study details how gum disease treatment can prevent heart disease

April 14 2015

A new study from the Forsyth Institute is helping to shed more light on the important connection between the mouth and heart. According to research recently published online by the American Heart Association, scientists at Forsyth and Boston University have demonstrated that using an oral topical remedy to reduce inflammation associated with periodontitis, more commonly known as gum disease, also results in the prevention of vascular inflammation and can lower the risk of heart attack.

This study is the first time researchers anywhere have demonstrated the ability of an oral treatment for gum disease to also reduce inflammation in the artery wall. The active ingredient is an inflammation resolving molecule, known as Resolvin E1. This discovery further underscores the increasing body of evidence showcasing how problems in the mouth - and how they are treated - can have life changing influences on other key systems in the body, such as the heart in this case.

"Our research is helping to underscore the very real link between [oral health](#) and heart disease," said Lead Investigator Hatice Hasturk, DDS, PhD, an associate member of Forsyth's Department of Applied Oral Sciences and director of Forsyth's Center for Clinical and Translational Research. "The general public understands the connection between heart health and overall wellness, and often takes appropriate steps to prevent heart disease. More education is needed to elevate oral wellness into the same category in light of proven connections to major health conditions."

According to the CDC, heart disease accounts for one in four deaths in the United States, and the rate continues to rise. Forsyth's findings suggest a need to expand the public's understanding of risk factors beyond cholesterol, smoking, hypertension and diabetes to include a focus on oral health. With support from the scientific community, Forsyth aims to generate greater awareness of [gum disease](#) (affecting 64.7 million American adults according to the CDC) as a critical risk factor for heart disease, independent from diet and lifestyle.

The study, titled, "Resolvin E1 Prevents Atheromatous Plaque Formation," will be published in print in the May issue of *Arteriosclerosis, Thrombosis, and Vascular Biology* (ATVB), a journal of the American Heart Association. It is the first paper to show a rabbit model of accelerated [heart disease](#), demonstrating a range of atherosclerotic plaque stages that more closely resemble those in humans without genetic modification of the animal. This research is authored by Hatice Hasturk, Rima Abdallah, Alpdogan Kantarci, Daniel Nguyen, Nicholas Giordano, James Hamilton and Thomas E. Van Dyke.

Provided by Forsyth Institute

Citation: Study details how gum disease treatment can prevent heart disease (2015, April 14) retrieved 6 May 2024 from

<https://medicalxpress.com/news/2015-04-gum-disease-treatment-heart.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--