

Further Evidence Reveals the Association Between Periodontal Disease and Coronary Artery Disease

Chicago – October 26, 2004 – Research is racing to help healthcare professionals further understand how periodontal diseases are linked to cardiovascular disease. A study published in a recent issue of the *Journal of Periodontology* explains another reason why people with periodontal disease are at a significant risk for coronary artery disease.

The study looked at 108 patients with CAD with a mean age of 59.2 +/- 10.9 years and a group of 62 people without CAD with a similar mean age (57.7 +/- 8.7 years).

“The results of this study showed that periodontitis in cardiac patients was significantly more frequent than in non-cardiac patients.” Said Professor E.H. Rompen, Department of Periodontology – Dental Surgery, C.H.U. Liege, Belgium. “We found that 91% of patients with cardiovascular disease suffered from moderate to severe periodontitis, while this proportion was 66% in the non-cardiac patients.”

Periodontitis and its **bacterial** component seems to influence the occurrence and the severity of coronary artery disease and increases the risk of heart attack or stroke, and the study proposes two hypotheses for this occurrence. One hypothesis is that periodontal pathogens could enter the bloodstream, invade the blood vessel walls and ultimately cause atherosclerosis. (Atherosclerosis is a multistage process set in motion when cells lining the arteries are damaged as a result of high blood pressure, smoking, toxic substances, and other agents.)

Another hypothesis is based on several studies that have shown that periodontal infections can be correlated with increased plasma levels of inflammation such as fibrinogen (this creates blood clots), C-reactive protein, or several cytokines (hormone proteins).

“This study supports earlier findings, and even showed a significantly higher prevalence of periodontal diseases in cardiac patients. There is still much research to be done to understand the link between periodontal diseases and systemic diseases, such as cardiovascular and difficult-to-control diabetes,” said Dr. Michael P. Rethman, DDS, MS, and president of the American Academy of Periodontology. “The data in this study shows the importance of regular dental checkups to ensure a healthy, diseased-free mouth.”