

## **Oral/body inflammatory connection explained**

## July 9 2009

Is your head where your heart is? It may be now. A strong connection between periodontal disease and cardiovascular disease (CVD) has been suggested in recent clinical studies. As many as 75 percent of adults in the United States have been affected by periodontal disease and an estimated 80.7 million adults (1 out of every 3) have been a victim of CVD in 2006 according to the American Heart Association. From the 80.7 million adults in the United States, 38.2 million are less than 60 years of age, which is almost 50 percent.

According to Marvin J. Slepian, MD, and Neil R. Gottehrer, DDS, who will lead a discussion titled "Oral Body Inflammation Connection" during the 57th Annual Meeting of the Academy of General Dentistry (AGD), these findings strengthen their belief that oral infections contribute to CVD morbidity and connection of <u>chronic infections</u> and CVD. The AGD's Annual Meeting will take place in Baltimore, MD, July 8-12, 2009.

The discussion will be one of the first discussions held at the AGD's annual meeting that integrates both dentistry and medicine because the disease is common to both health management groups. "It is critical for all dentists and physicians to collaborate in helping patients reduce inflammation, which can become a target factor for cardiovascular disease," says Dr. Slepian. Both Drs. Slepian and Gottehrer, with the help of an expert doctoral panel that will include, Loren M. Golub, DMD, MSc, MD (honorary); Jack Martin, MD; Mel Blumenthal, MD; Jerry Mailis, MD; Daniel Fine, DMD; Dean Mersky, DDS; and Stephen



Gale, PhD, will discuss the correlation between periodontal disease and CVD. Information presented during this session will provide dentists with hands-on knowledge regarding how to communicate with physicians in order to collaborate and create more proactive management periodontal disease treatment plans (including non-surgical options), which can then improve periodontal and associated physical health by reducing CVD.

"This is a landmark course being presented and I am honored to be holding the discussion with my colleague, Dr. Slepian," says Dr. Gottehrer. "We hope to provide groundbreaking and useful information to attendees to help them improve the overall health of their patients and to build an increased awareness about the connection between periodontal disease and cardiovascular disease that many, if not most, patients are unaware of."

CVD has a wide range of categories, which affect adults in the United States every day including high blood pressure, coronary heart disease, stroke, and heart failure. A recent study that will be cited during the presentation explored the existence of bacteria known to cause periodontitis and the growth of blood vessel walls, which is a symptom of CVD. After examining the subjects used, the investigators found a positive connection between the growth of blood vessel walls and the existence of bacteria found in dental plaque, causing periodontitis.

Periodontal disease, more commonly known as gum disease, is a basic inflammation and infection of the gums and surrounding tissues in the mouth. As the main cause of gum disease, bacterial plaque (sticky, colorless film, which forms on the teeth) hardens into a rough porous substance, which then releases toxins produced by the bacteria in the plaque, which eventually lead to a breakdown of the fibers that hold the gums tightly to the teeth. As the disease progresses, toxins and bacteria make their way down the tooth until the bone that keeps the tooth in



place is broken down and the tooth eventually falls out.

Previous treatments for periodontal disease include a cleaning process called scaling and root planning, which removes plaque and tartar around the tooth, smoothing the root surface. Antibiotics are administered to diminish the effects of the treatment. In more severe cases, surgical treatment is required in the form of cutting the gums to remove hardened plaque build-up and refiguring the bone. Both Drs. Slepian and Gottehrer have used these previous treatments in order to incorporate the improvement of both oral and cardiovascular health.

In addition, a new screening diagnostic system called STAT-CK (developed by Dr. Gottehrer) which gives the dentist and the patient a simple solution to visualize and categorize the stages of periodontal disease using grades A - F (A being minor damage to gums, F being the most severe case of damage to the gums and bone, needing surgical attention). This diagnostic tool can be personalized for each patient and it allows all doctors to understand the patient's periodontal condition. "This tool can help improve the communication between the dentist and doctor, as well as the treatment and health of the patient," says Dr. Gottehrer.

Dr. Gottehrer also stresses the importance of brushing and flossing twice a day to reduce the risk of gum disease and to maintain a happy, healthy mouth. He suggests if abnormal occurrences are noticed, a person should contact a general dentist immediately in order to prevent possible further damage to teeth and gums and to also reduce the risk of CVD.

Alongside the panel of seven other doctors, both Drs. Gottehrer and Slepian will present the importance of addressing the oral/body inflammatory connection, identify the categories by grade of periodontal disease and the risks of disease to the patient, describe uniform treatment for all stages of both <u>periodontal disease</u> and CVD, as well as



suggest a successful hygiene program to improve dental care given to patients.

Source: Academy of General Dentistry (<u>news</u> : <u>web</u>)

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