

A Mirror of Health:

What your mouth says about your overall health



If the eyes are the mirror of the soul, then the mouth may be the mirror of the heart...and lungs, arteries, kidneys, and other parts of the body.

Dental professionals have long seen a correlation between the health of a patient's gums and life-threatening conditions that may later develop. But it was not until 10 years ago that the American Academy of Periodontology (AAP) began educating the public that a person's periodontal, or gum, health can be an indicator of systemic disease, health problems that can affect organs and tissues or the body as a whole.

Today research studies suggest links between periodontal disease and risks for heart disease, stroke, diabetes, premature birth, respiratory disease, and HIV. Studies about the effects of improved oral health on kidney disease are currently under way. According to the AAP, "Infections in the mouth can play havoc elsewhere in the body." This holds true even for healthy young adults who have no other symptoms of disease.

UT Graduate School of Medicine resident dentists and physicians are identifying better ways to recognize signs in the oral cavity that may indicate their patients have problems in other areas of the body. The main cause of periodontal disease is bacterial plaque, a sticky, colorless film that constantly forms on your teeth.

Gum diseases, including gingivitis and periodontitis, are serious infections that if left untreated can lead to tooth loss and even more serious health problems. For instance, oral plaque under the teeth can contain bacteria that release toxins that can destroy bones and circulate through the bloodstream. These toxins can cause atherosclerosis, an inflammatory response in the arteries that can lead to plaque buildup in the arteries.

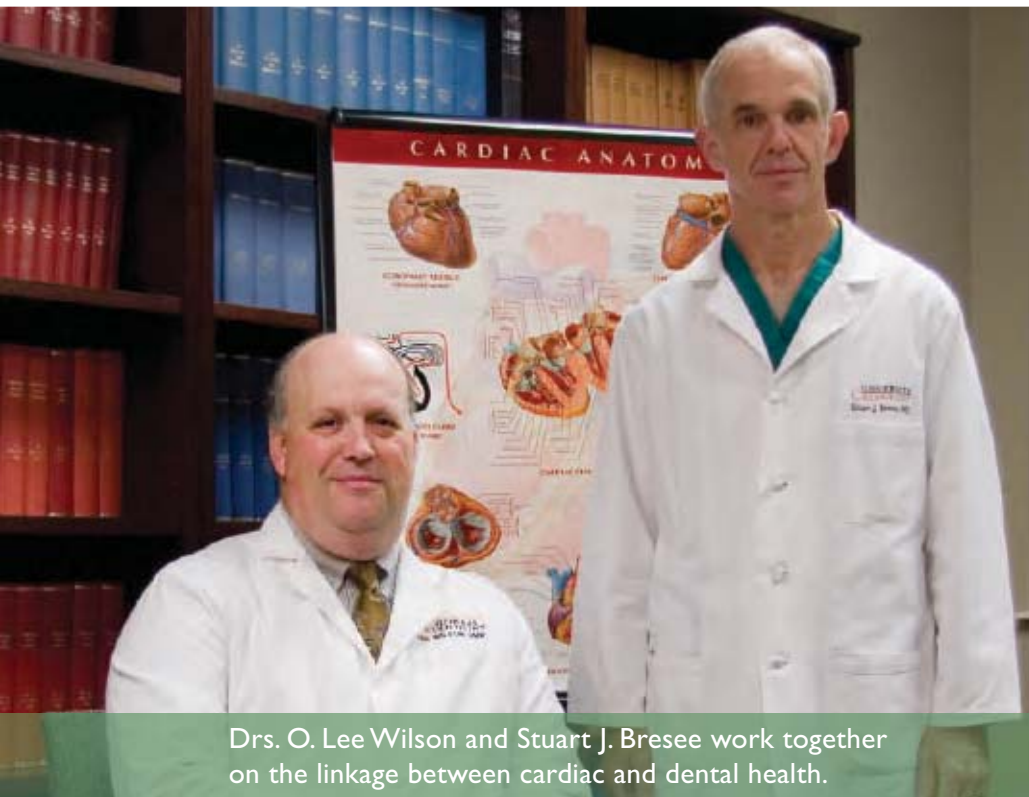
Associate professor O. Lee Wilson, DMD, director of the General Practice Residency Program in dentistry, says this new understanding places dentists on the front lines of disease detection. "Dentists have been able to see the impact of serious diseases, such as diabetes, based on the condition of a patient's gum health," he notes. "But researchers

follow-up. Now, equipped with knowledge of oral-cavity indicators signaling early organ disease, our dentists consider the possible systemic side effects and refer patients directly to the appropriate medical expert."

Stuart J. Bresee, MD, a UT Graduate School of Medicine clinical associate

heart attack. Chronic dental disease can contribute to this inflammation throughout the body and promote heart attacks that way."

Bresee and Wilson agree that understanding the relationship between periodontal condition and disease is important to good health care. "After all, there's a whole person underneath the mouth of the patient," says Wilson. "We are emphasizing to our resident dentists the importance of interacting and collaborating with the Medical Center physicians and other healthcare professionals to ensure the best, most proactive patient care we can provide. It's a team effort."



Drs. O. Lee Wilson and Stuart J. Bresee work together on the linkage between cardiac and dental health.

examining how these signs in the mouth relate to the progress of diseases in the body have helped us understand that some of the first outward signs of disease may appear in the gums early in the disease cycle. This can mean earlier detection of health problems and preventive care for our patients."

Armed with the latest research, the dentists are able to refer patients for follow-up with the appropriate medical expert. Wilson explains: "Previously, dentists using a blood-pressure cuff during our standard pre-examination might discover a patient with a high reading and suggest subsequent medical

professor and chief of the Department of Medicine's Cardiology Division, explains how studies may link chronic dental disease and inflammation with heart attacks. "We can measure systemic, or body-wide, inflammation using blood tests such as the high-sensitivity C-reactive protein, and we know that inflammation is definitely associated with heart attacks."

Bresee cautions that the correlation between dental disease and heart attacks needs further study. "But what we do know for certain," he says, "is that inflammation is one of the root causes of coronary events that lead to

Do You Have Gum Disease?

The link between gum disease and disease throughout the body is so strong that some health plan companies are promoting good dental hygiene by offering to cover additional preventive services for patients who have diabetes, are pregnant, suffer from heart disease, or are considered high risk.

Could you be one of the millions of people who have gum disease and don't know it? To find out, take the free online risk assessment designed by the American Academy of Periodontology at <http://www.perio.org/consumer/4a.html#>