## Gum Disease and Heart Disease



As scientific researchers have collected and studied medical records for people with periodontal disease and heart disease, they have learned that there is a connection between the two.

If you have periodontal disease, the American Academy of Periodontology has said that you are almost two times more likely to suffer from some form of coronary heart disease as someone without periodontal disease. Another study found that the presence of common dental problems such as cavities, gingivitis, and missing teeth were as effective as knowing cholesterol levels when trying to determine whether someone has heart disease.

Heart disease is characterized by fatty proteins, or plaque, attaching themselves to the walls of the coronary arteries and gradually blocking blood flow. This condition is called atherosclerosis. Atherosclerosis is a term that is often used much the

same way as the term arteriosclerosis, but it is actually a specific kind of arteriosclerosis.

- Arteriosclerosis refers to the arteries hardening.
- ► Atherosclerosis refers to plaques building up on artery walls and restricting blood flow as a direct result.

Once the blood flow has been blocked, a person can experience either a heart attack or a stroke. During a heart attack, the heart is cut off from its supply of blood. During a stroke, the blood supply to the brain is cut off instead.

No one understands yet why there is a connection between periodontal disease and heart disease, but they are investigating the possibilities. Scientists currently have several theories to explain the connection between the two diseases.

- Perhaps bacteria from your mouth affects the heart when it enters your bloodstream and then attaches itself to the plaque that accumulates in the coronary arteries. The plaque, which is a different kind of plaque than the one that forms on the teeth, is what causes clots to form. When they do, they can partially or completely block normal blood flow, which in turn makes it hard or impossible for the heart or the brain to get the nutrients and oxygen that are needed to function correctly.
- Another theory that has been suggested is that periodontal disease causes inflammation, or swelling, throughout the body. When your body has an infection, inflammation is part of your body's response, but sometimes the response can hurt you. In this particular case, inflamed blood cells are swollen in comparison to regular blood cells; the result is the same as a narrowed artery and an increased risk for blood clots.

Unsurprisingly, scientific studies have also found a connection between periodontal disease and the likelihood of a stroke, which makes oral infection one of the risk factors for stroke. In particular, researchers found that people who had been diagnosed with acute cerebrovascular ischemia (that is, a stroke) were more likely to suffer from the oral infection that is typical for periodontal disease than was the case for people who were in the control group.

If you have a heart condition, periodontal disease can make it worse. If the dentist thinks you are at risk for infective endocarditis and you need an invasive dental procedure, your periodontist may require you to take antibiotics ahead of time as a preventive measure to protect your heart. This is a decision that your periodontist and cardiologist will probably make jointly after consulting together to consider the best way to protect your heart while also treating your periodontal disease.