

## Periodontal disease and cardiovascular disease

Periodontal disease (gum disease) is a common bacterial infection of the gums, bone and periodontal ligament (fibres that support the teeth and hold them in the jaw). It is a common disease in Australia. However the majority of people do not even realize they have it.

Because periodontal disease is a bacterial infection, periodontal bacteria can enter the blood stream and travel to major organs and begin new infections. The heart is one of the most susceptible organs.

Heart disease (or cardiovascular disease) affects more than 3.8 million Australians. It is the leading cause of death in Australia. Yet many of these deaths can be prevented.

Recent evidence suggests that having periodontal disease may increase your risk of developing heart disease with people with periodontal disease twice as likely to suffer from coronary artery disease as those without periodontal disease.

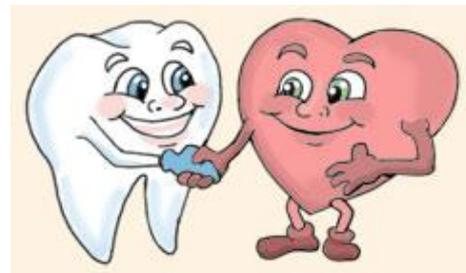
Several theories exist to explain the link between periodontal disease and heart disease. One theory is that oral bacteria can affect the heart when they enter the blood stream, attaching to fatty plaques in the coronary arteries (heart blood vessels) and contributing to clot formation. Coronary artery disease is characterised by a thickening of the walls of the coronary arteries due to the

buildup of fatty proteins. Blood clots can obstruct normal blood flow, restricting the amount of nutrients and oxygen required for the heart to function properly. This may lead to heart attacks.

Another way that periodontal disease affect the development of heart disease is through inflammation. The inflammation caused by periodontal disease in the mouth is free to travel to other organs via blood vessels. Inflammatory mediators can then attach to heart valves and line the inside of coronary arteries to contribute to an increased risk of heart attacks.

If you know that you have heart disease or currently receive treatment for a cardiovascular complication, it is especially important for you to have good periodontal health and attend frequently for periodontal maintenance. See a periodontist for a periodontal evaluation.

Some commonly prescribed medications for heart disease can cause dry mouth, increased plaque or enlarged gum tissue. These conditions frequently result in bacterial infections under the gum line, causing bleeding gums and bad breath. It is important to discuss these medications with your periodontist to find out what effects, if any, they could have on your periodontal health. Your periodontist will work with you and your doctor to minimise any negative side effects.



### What precautions should be taken before periodontal treatment in heart disease patients?

Some existing heart conditions or the presence of artificial heart valves can put people at risk for developing infective endocarditis. This condition is characterised by inflammation of the lining of the heart and heart valves.

It is extremely important to advise your periodontist if you suffer from any pre-existing heart problems. Sometimes, antibiotics may be required before an appointment to reduce the chances of developing infective endocarditis.

Your periodontist and cardiologist will be able to determine if your heart condition requires use of antibiotics prior to dental appointments by following the appropriate Therapeutic Guidelines

