- Dental care

Protect your smile — and your heart

Watchmen Daily Journal · 7 Aug 2025 · 4 · DR. JOSEPH D. LIM Dr. Joseph D. Lim, Ed. D., is the former Associate Dean of the College of Dentistry, University of the East; former

Chronic gum disease, for example, may cause the development of atherosclerosis which narrows arteries, raises blood pressure and increases the risk of heart attacks and strokes.

Another example is poor oral hygiene. It may increase the risk of infective endocarditis (IE), a serious infection of the heart's inner lining or valves. IE, a medical emergency requiring prolonged antibiotic treatment or, in some cases, surgery, occurs when oral bacteria — especially from the streptococcus viridans group — enter the bloodstream and colonize damaged areas of the heart.

People with pre-existing valve abnormalities, prosthetic valves or congenital heart defects are particularly vulnerable, says Dr. Steven W. Kerrigan, Professor of Precision Therapeutics, School of Pharmacy and Biomolecular Sciences, RCSI University of Medicine and Health Sciences. RCSI stands for the Royal College of Surgeons in Ireland, the largest medical school in Ireland.

"For patients with prosthetic valves or certain heart conditions, dentists may even recommend antibiotics before specific procedures to minimize the risk of infective endocarditis," Dr. Kerrigan writes in The Conversation.

Epidemiological studies support this oral-cardiac link, he says. "People with gum disease are significantly more likely to suffer from heart disease. While these studies can't always prove direct causation, the correlations are strong — even after accounting for shared risk factors like smoking, diabetes and poor diet."

Dr. Kerrigan cites one study which found that people with periodontitis or gum disease were up to twice as likely to develop coronary artery disease compared to those with healthy gums.

Other studies point to a "dose-response" effect: The more severe the gum disease, the greater the cardiovascular risk, he says.

Smoking, unhealthy diets, excessive alcohol consumption, and diabetes all contribute to both poor oral health and heart disease, Dr. Kerrigan continues. "Tobacco weakens gum tissue and suppresses immune function. Alcohol can dry out the mouth and disrupt the oral microbiome. And poorly controlled diabetes impairs circulation and slows healing, worsening both periodontal and cardiovascular conditions."

He says that emerging research also suggests that oral hygiene may influence heart health through changes in the body's microbiome. "A poorly maintained mouth allows harmful bacteria to overtake beneficial microbes, causing an imbalance known as dysbiosis. This can disrupt immune function and contribute to chronic inflammation and atherosclerosis."

Oral health is a simple, effective and often overlooked part of preventive health care, Dr. Kerrigan points out. Cardiologists are now being encouraged to ask about oral health, and dentists

are urged to consider cardiovascular risk factors during checkups.

“The mouth is far more than just the beginning of the digestive system — it plays a vital role in overall wellbeing,” Dr. Kerrigan says. “The connection between oral health and heart disease underscores the need to treat oral care as a foundational part of preventive medicine. By brushing up on good habits, individuals can protect not only their smile — but their heart, too.”

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