

Periodontal Therapy among Patients with Cardiovascular Disease

Exploring a Pathway to Lower Medical Spending

EXECUTIVE SUMMARY

Cardiovascular (heart) disease and periodontal (gum) disease are both common long-term health conditions, and they share many of the same risk factors, such as smoking, diabetes, and chronic inflammation. Researchers have long suspected that poor oral health may be linked to heart problems, but less is known about how dental care relates to health care costs for people with cardiovascular disease.

A study published in the journal *Frontiers in Public Health* examined whether adults who have been diagnosed with cardiovascular disease and received periodontal disease treatment (for example, scaling and root planing [i.e., a “deep cleaning”]) had different medical costs than those who did not receive periodontal treatment. The analysis relied on commercial insurance claims data from more than 190,000 US adults ages 21 to 64 who were diagnosed with cardiovascular disease. Researchers compared health care costs in 2022 for people who received no periodontal treatment, one to three periodontal visits, or four or more periodontal visits during 2020–2021.

The study found that people who had four or more periodontal visits had lower overall medical costs and lower outpatient medical costs than those who received no periodontal care. People who had one to three periodontal visits had lower prescription drug costs, while those with four visits or more did not see any differences in prescription costs. These differences remained after accounting for factors such as age, sex, other health conditions, and place of residence. The largest cost savings were seen among people who received more frequent periodontal care (that is, four or more periodontal visits).

While many previous studies have looked at periodontal disease as a risk factor for cardiovascular disease, this study expands on the current science to demonstrate lower medical costs for individuals who already have cardiovascular disease and receive periodontal

treatment. Because those with more periodontal treatments had lower overall and outpatient medical costs, this study supports the idea that dentists should take a patient’s cardiovascular disease and other chronic disease diagnoses into account when planning treatment, rather than taking a “one-size-fits-all” approach to dental care where all patients receive the same treatments on the same schedule. This study uses the novel approach of analyzing combined medical, dental, and pharmacy claims data, in recognition of the importance of emphasizing medical-dental integration in research and clinical care.

The findings suggest that consistent periodontal treatment may be associated with lower medical spending among commercially insured adults with cardiovascular disease. One possible explanation is that treating gum disease may help reduce chronic inflammation, which can play a role in heart disease. Another possibility is that people who regularly receive periodontal care may also be more engaged in managing their overall health.

This study does not prove that periodontal treatment causes lower medical costs. It included only adults with commercial medical and dental insurance and did not capture important factors such as income, education, or health behaviors. Still, the results highlight the potential value of integrating oral health care into the management of chronic diseases like cardiovascular disease. The results also suggest that improving access to periodontal care may offer both health and economic benefits.

Suggested Citation:

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