

Periodontitis Increases Risk of Alzheimer's Disease According to New Study

[Periodontal disease, also known as gum disease, affects a whopping 50 percent of the adult population worldwide.](#) There are two forms of the condition: the milder form, gingivitis, and the advanced form, periodontitis.

Periodontitis, can take on many forms, each quite serious and demanding clinical attention.

While many types of periodontitis are related to other conditions, an aggressive form of periodontitis tends to occur in people who are otherwise healthy. With aggressive periodontitis, patients typically suffer rapid attachment loss, along with bone destruction and familial aggregation. For those with less aggressive forms, the ravages of periodontitis occur over years, rather than months.

As a result of a new study conducted among periodontists earlier this year, there's an even greater cause for alarm with a periodontitis diagnosis and even greater impetus for fast treatment. Researchers have discovered a potential link between *P. gingivalis*, the bacteria that lays the foundation for periodontal disease, and Alzheimer's disease. Studying a group of Alzheimer's patients, periodontists analyzed their brain tissue, spinal fluid, and saliva, finding evidence among many of the patients for the presence of *P. gingivalis*.

The study's findings, [published in the scientific journal *Science Advances*](#), revealed a shocking level of disease prevalence for *P. gingivalis* in the form of proxy data related to gingipains, the toxic enzyme related to the bacteria. The presence of gingipains was found in a full 96 percent of the 53 brain tissue samples of both living and recently deceased people. The research also found that the samples contained higher levels of the toxins when detected in those with the pathology and symptoms of Alzheimer's disease.

Alzheimer's disease is the sixth leading cause of death in the United States, with nearly six million people suffering from the condition, according to the Alzheimer's Association. Prevalence rates of periodontal disease have risen from 50 percent of the general population to around [70% in adults 65 and older](#). The disease prevalence of periodontal disease and Alzheimer's disease, and the prevalence where they intersect as comorbidities, is truly alarming.

Researchers also noted that the presence of *P. gingivalis* increased the production of amyloid beta, a component of the amyloid plaques whose accumulation contributes to Alzheimer's. Animal testing revealed that *P. gingivalis* can travel from the mouth to the brain and that the related gingipains destroy brain neurons.

While previous research has suggested links between periodontitis and dementia conditions, this latest study provides strong supporting evidence of this emerging thesis.

Now, periodontists are sounding the warning, advising their patients to ratchet up their hygiene practices to maintain better gum health and reduce their risk of Alzheimer's disease. At-risk individuals are encouraged to complete a regimen of routine brushing, daily flossing, and periodic visits to a periodontist to prevent flares.

This research puts the dental community at the forefront of Alzheimer's research, and dentists will continue to develop new treatments and procedures to both prevent and mitigate damages related to both Alzheimer's and periodontitis. To learn more about periodontal disease or to find a periodontist, visit perio.org.