

Lose your teeth, lose your mind

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(PhysOrg.com) -- Ever have a senior moment? Then you might be missing some teeth, too.

Researchers at Boston University Henry M. Goldman School of Dental Medicine (GSDM) link [tooth loss](#) and periodontal disease to cognitive decline in one of the largest and longest prospective studies on the topic to date, released in this month's issue of the [Journal of the American Geriatrics Society](#).

Dr. Elizabeth Krall Kaye looked for patterns in dental records from 1970 to 1973 to determine if periodontal disease and tooth loss predicted whether people did well or poorly on cognitive tests. She found that for each tooth lost per decade, the risk of doing poorly increased approximately eight to 10 percent.

More cavities usually meant lower cognition too. People with no tooth loss tended to do better on the tests.

Dr. Kaye says inflammation is a possible cause, noting that other studies found higher levels of inflammation markers in people with Alzheimer's. "Periodontal disease and caries are infectious diseases that introduce inflammatory proteins into the blood," she says. "There's a lot of circumstantial evidence that inflammation raises your risk of [cognitive decline](#) and it could be that gum inflammation is one of the sources."

The men studied—veterans living in the Boston metropolitan area—enrolled in the VA Dental Longitudinal Study in the late 1960s

and early 70s and came back for medical, dental, and cognitive exams, which started in 1993, every three years.

Participants took two cognitive tests. The first, the Mini-Mental State Examination, tests orientation, attention, calculation, recall, language, and motor skills. The second, a spatial copying test, asks participants to copy nine geometric designs ranging from easy to complex.

“The ability to copy is one of the things people lose as they lose cognitive ability,” Dr. Kaye says.

Physicians might want to think about the dental health of their patients who test poorly, according to Dr. Kaye. “The findings should also give dentists yet another reason to prevent tooth loss and [periodontal disease](#) and encourage patients to do as much as they can to prevent dental disease,” she says.

More information: The study, Tooth Loss and Periodontal Disease Predict Poor Cognitive Function in Older Men, is available online at [www3.interscience.wiley.com/cgi ... /123339485/HTMLSTART](http://www3.interscience.wiley.com/cgi-bin/jpages/123339485/HTMLSTART) .

Provided by Boston University

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