

# Sleep-disordered breathing tied to brain changes

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(HealthDay)—Sleep-disordered breathing (SDB) is associated with

changes in the brain, including amyloid deposition in brain regions typically involved in Alzheimer disease, according to a study published online March 23 in *JAMA Neurology*.

Claire André, Ph.D., from Université de Caen in France, and colleagues used data from 127 community-dwelling older adults (mean age, 69.1 years; 63 percent women) participating in the Age-Well randomized clinical trial (2016 to 2018). The analysis included participants who underwent neuropsychological assessment, polysomnography, magnetic resonance imaging, and florbetapir and fluorodeoxyglucose positron emission tomography. The authors sought to determine whether the presence of SDB was associated with changes in amyloid deposition, gray matter volume, perfusion, and glucose metabolism.

The researchers found that participants with SDB showed greater amyloid burden, gray matter volume, perfusion, and metabolism, with overlap mainly occurring over the posterior cingulate cortex and precuneus. There were no associations observed between SDB-related brain changes and cognition, self-reported cognitive and sleep difficulties, or excessive daytime sleepiness symptoms.

"Sleep-disordered breathing-associated changes include [amyloid deposition](#) in [brain regions](#) typically involved in Alzheimer disease, which might explain why sleep-disordered breathing is associated with an [increased risk](#) for developing Alzheimer clinical syndrome at a younger age," the authors write.

**More information:** [Abstract/Full Text](#)

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