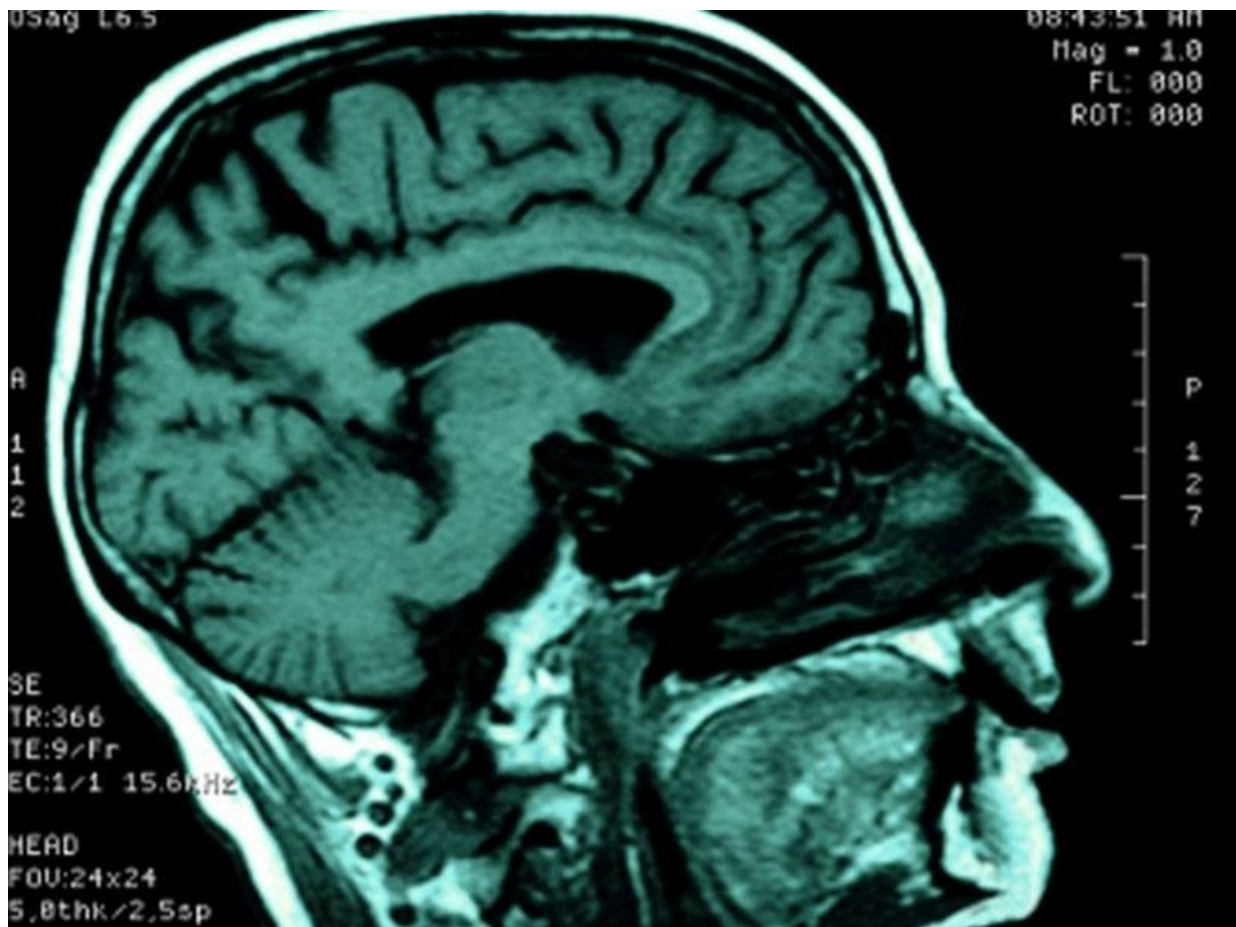


Impaired white matter integrity for depression in Parkinson's

December 7 2017



(HealthDay)—Parkinson's disease (PD) patients with depression have

impaired white matter integrity, especially in the long contact fibers in the left hemisphere, according to a study published online Nov. 10 in *CNS Neuroscience & Therapeutics*.

Jia-Yong Wu, from Nanjing Medical University in China, and colleagues examined whole brain white matter integrity in 31 PD patients with depression and 37 without depression using [diffusion tensor imaging](#).

The groups did not differ in age, gender, age of onset, disease duration, Hoehn-Yahr scale, Unified Parkinson's Disease Rating Scale scores-III, or Mini-Mental State Examination scores; only the Hamilton Depression Rating Scale (HDRS) differed between the groups. The researchers observed reduced fractional anisotropy values in the left anterior corona radiata, left posterior thalamic radiation, left cingulum, left superior longitudinal fasciculus, left sagittal stratum (including inferior longitudinal fasciculus and inferior fronto-occipital fasciculus), and left uncinate fasciculus among PD patients with depression. There was a negative correlation for the HDRS and the fractional anisotropy value in the left cingulum and left superior longitudinal fasciculus among patients with depression ($P = 0.032$ and 0.025 , respectively).

"These findings may be helpful for further understanding the potential mechanisms underlying [depression](#) in PD," the authors write.

More information: [Abstract](#)
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