DBS safe but not beneficial in parkinson's dementia

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(HealthDay)—Low-frequency deep brain stimulation of the nucleus basalis of Meynert (NBM DBS) can be safely conducted in patients with Parkinson's disease dementia, but it does not result in significant improvements in primary cognitive outcomes, according to a study published online Dec. 18 in *JAMA Neurology*.

James Gratwicke, M.D., Ph.D., from University College London, and colleagues evaluated six patients with Parkinson's disease dementia who were treated with NBM DBS. After surgery, patients received either active stimulation (bilateral, low-frequency [20 Hz] NBM DBS) or sham stimulation for six weeks followed by the opposite condition for the next six weeks.

The researchers found that all patients tolerated surgery and stimulation well with no reports of serious adverse events. There were no consistent improvements in primary cognitive outcomes or in resting state functional magnetic resonance imaging results. NBM DBS patients saw an improvement in Neuropsychiatric Inventory scores versus sham stimulation (8.5 versus 12 points).

"Low-frequency NBM DBS was safely conducted in patients with Parkinson disease dementia; however, no improvements were observed in the primary cognitive outcomes," the authors write. "Further studies may be warranted to explore its potential to improve troublesome neuropsychiatric symptoms."

Several authors disclosed financial ties to the pharmaceutical and medical device industries.

More information: Abstract/Full Text
Editorial

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