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ASIA EDITION

Scientists find a new way to slow the progression of Alzheimer's

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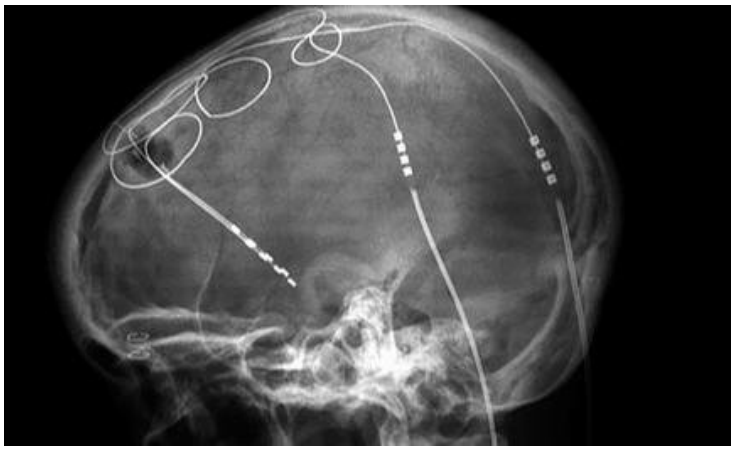

Researchers at Ohio University have found potential alternative i.e. deep brain stimulation for slowing the progression of Alzheimer's.

Deep brain stimulation works by continuously tickling neurons in the frontal lobe of the brain with electrodes. Over the course of two years, three patients who had these electrodes implanted maintained more of their mental faculties than a group of control patients, who started out at similar stages of the disease. One woman in the test group even started making meals for herself—an ability she had lost in 2013.

Deep brain stimulation has been used to treat hundreds of thousands of patients with Parkinson's, another kind of neurodegenerative disease. Researchers have also tried using it to treat Alzheimer's, but only to mixed success. Most of these studies have targeted brain regions associated with memory and spatial awareness—usually some of the first to be destroyed by amyloid and tau.

In the Ohio State study, the researchers chose a different target: the frontal lobe, which is an outer region of the brain, and tends to suffer the effects of Alzheimer's much later in the disease's progression. This is the region that we use to make plans, cook, run errands—essentially, the skills needed to live alone.

The work, which was published (paywall) Jan. 30 in the Journal of Alzheimer's Disease, isn't promising to reverse Alzheimer's-related brain damage, or stop its progression entirely. All three patients still worsened over the course of the study. But the level of independence they maintained—assessed through a Clinical Dementia Rating scale—was higher than those who did not receive this kind of stimulation. Notably, all of them chose to keep the stimulation going after the trial period ended because they liked its effects.