Brain Stimulation Might Help Stroke Patients With Swallowing Problems

Small, preliminary study found electrical therapy led to improved function in patients

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FRIDAY, March 25 (HealthDay News) -- Electrical stimulation of the brain could help stroke patients avoid potentially dangerous problems with swallowing, preliminary research indicates.

The treatment has only been tested in a small number of patients and needs further exploration. Still, the findings published online March 24 in the journal *Stroke* are "encouraging," said Dr. Larry B. Goldstein, director of the Duke Stroke Center at Duke University Medical Center.

An estimated 795,000 people suffer a stroke each year in the United States, and most of them survive, according to the U.S. Centers for Disease Control and Prevention. But many lose some of their ability to swallow, a problem known as dysphagia.

"Post-stroke swallowing difficulty is an important problem. Up to half of stroke patients studied have dysfunctional swallowing, and up to a third of these patients aspirate, swallowing material that enters the windpipe rather than going into the stomach," Goldstein explained. "This can cause pneumonia, which can prolong hospitalization, interfere with recovery or increase the chances of dying."

In the new study, researchers mildly stimulated the brains of patients through electrodes placed on the scalp. The idea is to boost activity in certain parts of the brain.

Patients who received the treatment had an easier time swallowing than patients who didn't. Eighty-six percent of patients who received the treatment improved their swallowing by at least two points on a seven-point scale, while only 43 percent of other patients did.

The 14 patients in the study had all suffered strokes between one and seven days earlier, and were being treated at Beth Israel Deaconess Medical Center in Boston.

"Further studies are warranted to refine this promising intervention by exploring effects of stimulation parameters, frequency of stimulation, and timing of the intervention in improving swallowing functions," the researchers wrote.

More information

For more about dysphagia, visit the U.S. National Institute on Deafness and Other Communication Disorders.