

## Can electrically stimulating your brain make you too happy?

**Notes & Cues:****Article:**

In 2005, the American neurologist Helen Mayberg and the Canadian surgeon Andres Lozano published the first study of deep-brain stimulation for the treatment of severe chronic depression—the kind of depression that does not respond to anything. Yet six patients on whom everyone had given up suddenly got better.

Mayberg's first patient treated with deep-brain stimulation had her operation on May 13, 2003. The team began with their lowest-placed electrical contact. Nothing happened, even when they turned up the voltage. Then they went on to the next contact a half-millimeter higher in the tissue. Even though they were only at six volts, the patient suddenly spoke, telling Mayberg she was feeling "a sudden feeling of great, great calm ... like when it's been winter, and you have just had enough of the cold, and you go outside and discover the first little shoots and know that spring is finally coming."

Mayberg's patients "are aware I have not given them anything but have removed something that was bothering them," Mayberg said. "It's not my job as a neurologist to make people happy. I liberate my patients from pain and counteract the progress of disease. But there is something strangely naïve about wanting to stimulate the brain's reward system. Because our nervous system is set up to want more and to go beyond the boundaries we run into. Ask any expert on addiction. You will wind up with people who demand more and more current."

**Summary:**