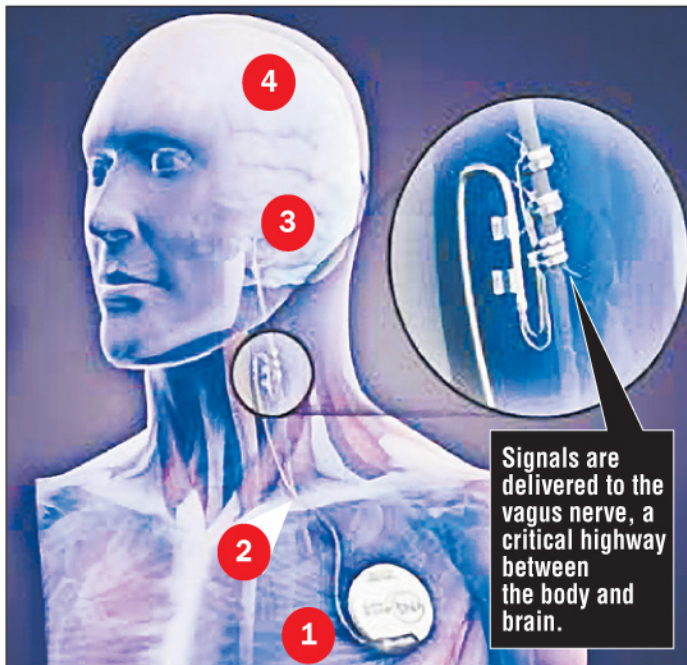


HOW NERVE STIMULATION WORKS

Experts say 30 percent of all patients who undergo vagus nerve stimulation recover completely – although they still may continue to use some antidepressant medications. Another third of patients experience some relief of depressive symptoms. And one third see no benefit from the treatment. Researchers don't know why some people are helped and others are not.



- 1 The pulse generator sends electrical pulses every few minutes. The frequency and strength of the pulse varies for each patient.
- 2 The signals travel up a thin, flexible wire.
- 3 The vagus nerve sends these signals to parts of the brain important in depression.
- 4 Imaging studies show the treatment turns down activity in the brain's emotional centers -- which are overactive in depression -- and turns up activity in the reasoning part of the brain, the frontal cortex -- which is underactive in depression.