## Mayo Clinic Minute: How vagus nerve stimulation can help some patients improve recovery from stroke

An ischemic stroke is a neurologic emergency that can be life-changing for those who survive. Many people may need speech, physical or occupational therapy to regain their abilities. Now, a device used to treat epilepsy, called a vagus nerve stimulator, also can help some patients who have had an ischemic stroke recover strength in their arms, even many months or years after their stroke.

JONATHON PARKER, M.D., PH.D.	"The standard of care after stroke, specifically ischemic
NEUROSURGERY	stroke, has really been intensive physical therapy and
Mayo Clinic	rehabilitation."
Narrator:	An advanced device called vagus nerve stimulator can
GRAPHIC:	be used to deliver stimulation at the moment the patient
Vagus Nerve Stimulation	is performing a rehabilitation exercise. Pairing this
	action can help patients recover lost strength from
	stroke and, in many cases, regain function in their
	hands and arms.
JONATHON PARKER, M.D., PH.D.	"We can stimulate the nervous system in a way that we
Neurosurgery	can then augment the body's ability to recover from
Mayo Clinic	something like a stroke."
Narrator:	The vagus nerve stimulation device, like a pacemaker,
	is surgically implanted under the skin on the chest and
	is connected to the left vagus nerve. When used in
	combination with in-clinic physical and occupational
	therapy, the stimulation with therapy has been shown

	in clinical studies to assist in recovery of hand and arm function for stroke survivors compared to physical therapy alone.
JONATHON PARKER, M.D., PH.D.	"What's so exciting about vagus nerve stimulation is that we study this therapy in patients who are already in that chronic phase of recovery from their stroke. Nearly half of those patients were able to have a very significant improvement in their motor strength.
Narrator:	For the Mayo Clinic News Network, I'm DeeDee Stiepan.