Mayo Clinic Minute: Looking for clues to stop seizures

Note: *November is National Epilepsy Awareness Month.*

Using deep brain stimulation techniques, neuroscientists at Mayo Clinic are looking for early signals in the brain to help stop seizures. In their biomarker discovery initiative, a team of researchers is assessing how different stimulation patterns affect different parts of the brain. The goal, says Dr. Jonathon Parker, a Mayo Clinic neurosurgeon, is to personalize therapeutic brain stimulation settings for individual patients with epilepsy and other neurological disorders.

Video	Audio
	When there's a mystery, it's crucial to find a clue.
Jonathon Parker, M.D., Ph.D. Neurosurgery Mayo Clinic	"We're looking for that brain signal fingerprint, if you will, that, yes, these are the right stimulation settings that are pushing the brain toward a state where seizures are less likely."
	A seizure is like an electrical storm in the brain. Epilepsy is the most common cause of seizures.
	"Patients having multiple attacks, sometimes per day or per week, if we're able to dramatically reduce them, it allows them to live their life in a much more predictable fashion, easier for them to do the things that they like to do in life without having to live in fear of these uncontrolled neurological attacks."
	In their biomarker discovery initiative, Mayo Clinic researchers like Dr. Jonathon Parker are studying how different parts of the brain respond to different stimulation patterns.
	"What we'd like to do is dial in and understand for individual patients, for their brain, for their epilepsy, what is the best parameters, what is the best settings for them."
	The team's goal is to use deep brain stimulation to stop seizures and return control to patients' lives.
	For the Mayo Clinic News Network, I'm Joel Streed.