Mayo Clinic Minute: New surgical options for epilepsy Resection of an epileptic focus

For people living with epilepsy who have tried various treatments to control their seizures with little success, there is hope. It's a surgery called "section of an epileptic focus," where surgeons remove or disconnect the area in the brain that is no longer properly functioning and is generating seizures. Dr. Jonathon Parker, a Mayo Clinic neurosurgeon, explains how this surgery works.

JONATHON PARKER, M.D., PH.D. NEUROSURGERY Mayo Clinic	"Epilepsy fundamentally is a disorder of the electrical synapses in the electrical fields that are in the brain. It's our job as neurosurgeons is to understand where that seizure starts and where it propagates."
Narrator:	For many people with eplipsy, seizures can be effectively controlled with medication, but some cases require surgery. One type of surgery is called a resection of an epileptic focus, where surgeons remove or disconnect the area in the brain that is no longer properly functioning and is generating seizures.
JONATHON PARKER, M.D., PH.D. NEUROSURGERY Mayo Clinic	This means that we use all of the surgical adjuncts that we have to design a tailored surgical resection to a patient's specific epilepsy.
Narrator:	During the surgery, the team uses advanced brain mapping for the utmost precision, so surgeons know what areas to remove and what areas to avoid.
JONATHON PARKER, M.D., PH.D. NEUROSURGERY Mayo Clinic	When we're stimulating the brain, we can actually see this muscle on the face is activating, this muscle on the leg is activating. And we can see this in the computer screen in real time, and that allows us to do these surgeries safely.
Narrator:	For the Mayo Clinic News Network, I'm Marty Valasco Hames.