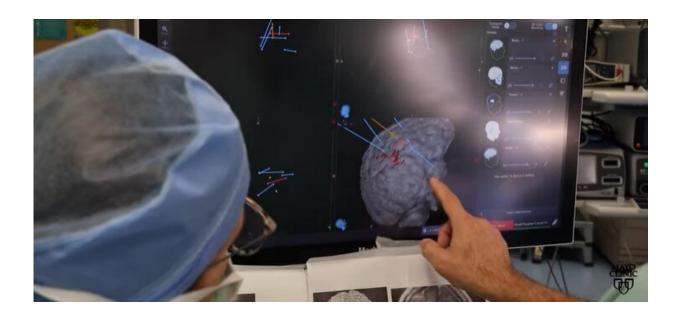


## A surgery option when epilepsy treatments don't work

February 7 2023, by Michael Clayton



Credit: Mayo Clinic News Network

For people living with epilepsy who have tried various epilepsy treatments to control their seizures with little success, there is another option. It's a surgery called resection of an epileptic focus, or resective surgery—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.

"Epilepsy fundamentally is a disorder of the electrical synapses in the



electrical fields that are in the <u>brain</u>. It's our job as neurosurgeons to understand where that seizure starts and where it propagates," says Dr. Parker.

For many people with <u>epilepsy</u>, seizures can be effectively controlled with medication, but some cases require surgery 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.

"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," Dr. Parker says.

During the <u>surgery</u>, the team uses advanced brain mapping for the utmost precision, so surgeons know what areas to remove and what areas to avoid.

"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 <u>computer screen</u> in real time and that allows us to do these surgeries safely," says Dr. Parker.

## Provided by Mayo Clinic

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