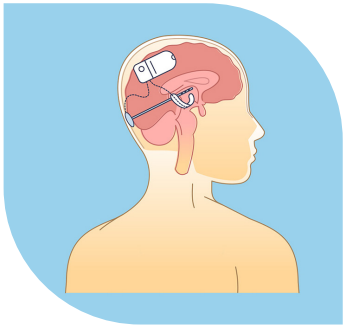
Responsive Neurostimulation

Responsive Neurostimulation (RNS) consists of a pulse and programmable stimulator with flexible electrodes that are placed into the skull.



The goal of RNS is to reduce the frequency and severity of the seizures by sending electrical stimulation to determined seizure focus or foci.

The right candidate for RNS is any epilepsy patient who has 1 to 2 identified seizure foci, who is refractory to medications and is not a candidate for resection surgery.

During the procedure, the surgeon will place thin and flexible wires (leads) in one or two areas on the brain where the seizures start. These wires will be connected to the simulator implanted in the patient's skull. Once all the parts are in place and working, the surgeon will close the cut on the scalp.

The programming will be done by the specialists during a follow up visit. The device records brain activity and when it notices that seizures are about to happen, the device delivers an electrical impulse to control them. The level of stimulation will be set according to the brain and seizure activity.

RNS has shown approximately 70 percent reduction of seizure activity and it is considered a safe procedure. However, like any type of surgery, there is risk of complications such as infections, bleeding in the brain, misplacement of the leads and seizures. Also, RNS can cause potential side effects including depression and memory difficulties.

Always discuss the benefits and risks of this procedure with the surgeon and other healthcare professionals in the team.

Learn more at
ItsYourEpilepsy.com

Frequently Asked Questions about Responsive Neurostimulation

Q. Do you feel the stimulation?
A. Generally, no.

Q. How is the recovery?
A. You will stay in the hospital for a couple of days, and light activities at home are recommended for a few weeks.

Q. Do you have to get it replaced?
A. The battery can last anywhere from 2 to 5 years, depending on use. A new battery requires surgery to be replaced.

Q. Do you have to recharge the stimulator?
A. No.

Q. Does my doctor receive notifications when seizures occur?
A. Not immediately. Because seizure activity is monitored, the data can be uploaded and reviewed.

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