

#### PHARMACORESISTANT EPILEPSY

In most cases, seizures and epilepsy can be fully controlled with the use of anticonvulsant medications (also known as antiepileptic medications). The goal of epilepsy therapy is for patients to be free of seizures and medication side effects. Recent studies have shown that complete seizure control is associated with the greatest improvements in quality of life. This is, in part, why it is so important for patients who experience uncontrolled seizures to be referred to physicians and epilepsy centers with expertise in the field of epilepsy. Special investigations may be necessary to confirm the diagnosis of epilepsy and explore other treatment options.

#### WHAT IS PHARMACORESISTANT EPILEPSY?

The International League Against Epilepsy (ILAE) defines pharmacoresistant epilepsy as the failure of a patient's seizures to respond to at least two antiepileptic medications that are appropriately chosen and used for an adequate period.

Why drug resistance happens is not well understood. Investigators worldwide are tirelessly conducting experiments to help better understand and one day overcome the problem of pharmacoresistance. Today, however, despite the availability of newer anticonvulsant medications and a promising pipeline of future

medications, currently available drug therapies have limited success in patients with an established diagnosis of pharmacoresistant epilepsy.

## WHAT IS THE IMPACT OF PHARMACORESISTANT EPILEPSY ON PATIENTS' HEALTH?

Pharmacoresistant epilepsy (also known as medically intractable or refractory epilepsy) is often a chronic, lifelong problem and is associated with significant disease-related costs (both treatment and societal). Uncontrolled seizures may have debilitating psychosocial consequences and carry a significant risk of injury and/or death. It is not uncommon for patients with pharmacoresistant epilepsy to also experience feelings of significant depression and/or anxiety.

# WHAT TREATMENT OPTIONS ARE AVAILABLE FOR PATIENTS WITH PHARMACORESISTANT EPILEPSY?

If anticonvulsant medications have failed to control your epilepsy or you experience intolerable side effects from anticonvulsants, you may be a candidate for epilepsy surgery. Approximately half of the patients with a diagnosis of pharmacoresistant epilepsy are potential candidates for epilepsy surgery. Successful epilepsy surgery may substantially reduce or eliminate disability. Unfortunately, only a small percentage of potential candidates for epilepsy surgery are currently referred to well-equipped, multi-disciplinary epilepsy surgery centers.



### Pharmacoresistant Epilepsy



# ARE THERE OTHER TREATMENT OPTIONS BESIDES SURGERY?

In some cases, surgery is not possible. Seizures may come from multiple areas of the brain or the risk of surgery to brain function may be too high. In these situations, other options are available. New medical and non-medical treatments for epilepsy are continually being developed, and it may be possible to participate in an experimental trial of a new drug or other therapy.

The Vagus Nerve Stimulator is yet another option for patients with pharmacoresistant epilepsy who are not candidates for epilepsy surgery. The Vagus Nerve Stimulator is an FDA-approved treatment for epilepsy and involves minor surgery to implant a pacemaker-like device under your skin near your collarbone. The device produces a weak electrical signal that travels along the vagus nerve in your neck to your brain. The signals help prevent the electrical brain bursts that cause seizures. Ask your doctor about this and other alternative treatments.

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