**About epilepsy in 2017**

If you have been diagnosed with epilepsy, you will have many questions. One of the first will probably be, "How can my epilepsy be treated?" There is no single answer to this question. That is because doctors have identified hundreds of different epilepsy syndromes, which involve many different types of seizures.

Your epilepsy may be inherited, or it may not. One study has found that some people with epilepsy have inherited an abnormally active version of a gene that makes them resistant to drugs. This may explain why some people have a hard time controlling their seizures with medication.

Even though they may look very different, seizures all start in the same place: your brain. They are caused by sudden changes in the way brain cells send electrical signals back and forth. But just because they start in the same place does not mean they can be treated in the same way. Your doctor will want to obtain an accurate diagnosis of the exact type of epilepsy that you have. Only then can your doctor create the treatment plan that is right for you.(cure,venom)

Today, most epilepsy is treated with medication. Drugs do not cure epilepsy, but they can often seizures very well. About 80% of people with epilepsy today have their seizures controlled by medication at least some of the time. Of course, that means that 20% of people with epilepsy are not helped by medication. And others who do take medication say that it doesn't help enough. Your doctor will work with you to select the right kind of medication for your type of seizures. If you find that the medication does not control your seizures, your doctor can then talk with you about other treatment options.

There are more drugs available today to control seizures than ever before. In fact, there are more than 20 different medications now on the market to treat epilepsy. Older medications which are still used to treat epilepsy include:

Historically, epilepsy has been neglected, feared, and misunderstood. A veil of secrecy surrounding the disease has resulted in myths, superstitions, and a general lack of knowledge. This has impeded scientific progress toward finding answers to one of the oldest-known and most prevalent neurological diseases, leaving treatment and research efforts in the dark ages.

It is estimated that close to 1.5 of the 3 million Americans with epilepsy do not have complete seizure control, or only experience seizure control at the cost of debilitating side effects from medications. The need for a cure is clear.

Many of the patients are children, who can experience up to hundreds of seizures a day. The impact on the developing brain ranges from learning disabilities to retardation, and in a disturbingly large number of patients, even death.

There is an increasingly large incidence of new onset epilepsy in the aging population as a result of strokes, brain tumors, and Alzheimer's Disease. In addition, for many soldiers suffering traumatic brain injury on the battlefield, epilepsy will be a long-term consequence.

**What is a Seizure?**

In normal brain function, millions of tiny electrical charges pass from nerve cells in the brain to the rest of the body. A seizure occurs when the normal pattern is interrupted by sudden and unusually intense bursts of electrical energy which may cause strange sensations, emotions, behaviors or convulsions, muscle spasms, and loss of consciousness. These unusual bursts are called seizures.

**What is Epilepsy?**

When a person has had two or more seizures which have not been provoked by specific events such as trauma, infection, fever, or chemical change, he or she is considered to have epilepsy.

**What Causes Epilepsy?**

Epilepsy may develop because of an abnormality in brain wiring, an imbalance of nerve signaling chemicals (neurotransmitters), or a combination of these factors. Causes of epilepsy may include head injuries, brain tumors, lead poisoning, certain genetic diseases and some infectious diseases. However, in more than half the patients with epilepsy, the cause is still unknown.