

Epilepsy is one of the most common and serious neurologic conditions affecting an estimated 2.7 million people in the United States. It is characterized by the occurrence of unprovoked seizures, which are caused by sudden, brief changes in the electrical activity of the brain. When networks of brain cells fire abnormally, individuals may experience a change in behavior such as loss of consciousness, abnormal movements or abnormal sensations. These sudden unpredictable behavioral changes are called seizures and typically last from seconds to several minutes.

Symptoms

Signs of epilepsy and seizures may include the following:

- Repetitive abnormal movements
- Recurrent abnormal sensations
- Confusional spells lasting minutes to hours
- Staring spells
- Unexplained episodes of loss of consciousness
- Hallucinations
- Unusual movements in sleep

Diagnosis

Doctors at the LifeBridge Health Brain & Spine Institute's Epilepsy Center rely on a comprehensive medical history, examination and testing to diagnose epilepsy. Doctors will perform a physical examination, especially of the nervous system. Information about what the seizures looked like and what happened just before and after the seizure is vital to an accurate diagnosis. The patient's prior medical history and family history can also provide important clues.

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the head, may show certain characteristic changes in people with epileptic seizures. Imaging methods like computerized tomography (CT) or magnetic resonance imaging (MRI) scans may be used to search for abnormalities like strokes, tumors, scars or other physical conditions in the brain that may be causing the seizures. Specialized techniques like PET and SPECT scans are sometimes used.

Treatment

The goal of all epilepsy treatment is to prevent further seizures, minimize side effects from medications and make it possible for people to lead active lives.

When a neurologist at the Epilepsy Center makes a diagnosis of seizures or epilepsy, the next step is to select the best form of treatment. Most often this starts with medical therapy. There are many medications available for the treatment of epilepsy. And, with proper treatment, as many as 70 percent of patients may become free of seizures. In cases where medical therapy is not successful, other treatment methods may be recommended, including surgery or vagus nerve stimulation (VNS), or dietary changes.

The staff of the Epilepsy Center consists of highly skilled experts in neurological health and provides comprehensive neurological and neurophysiology services, including routine and video EEG for outpatients, ambulatory EEG, evoked potentials, intraoperative monitoring, and inpatient video EEG.

Several types of testing are often used in the diagnosis of epilepsy. Usually an electroencephalogram (EEG) is performed. Brain waves, recorded by small electrodes applied to

For more information about the services available at the LifeBridge Health Brain & Spine Institute, call 1-888-747-8899.