EPILEPSY

helping children and adults with epilepsy and seizure disorders
Epilepsy comes from a Greek word meaning to “seize.” For many years, people believed that epilepsy was rare, and that those who had it were influenced by a spiritual force.

Although Hippocrates, the father of medicine, recognized epilepsy as a medical condition over 2,400 years ago, epilepsy is still often misunderstood.
Epilepsy is not a rare condition, and can affect almost anyone. In fact, most people know someone with epilepsy. Numerous famous people have had epilepsy, from Julius Caesar, the ruler of the Roman Empire to Danny Glover, an actor who has starred in many popular action movies and Marion Clignet, a silver medal Olympic cyclist.

In this brochure, our hope is that you will learn more about epilepsy and seizure disorders, and the treatment options that are available at Bayfront Medical St. Petersburg.
What are Seizures and Epilepsy?

Our brain is made up of billions of nerve cells that normally communicate with each other through electrical and chemical signals. Epileptic seizures, on the other hand, are brought on by an abnormal electrical and chemical communication between small groups of these nerve cells.

Epilepsy is a disorder where a person has more than one epileptic seizure. Although epileptic seizures are a symptom of epilepsy, not all people who have seizures have epilepsy. Some people have a single epileptic seizure, and never develop epilepsy. In fact, if you live to age 80, there is a one in ten chance that you will have one epileptic seizure.

What Causes Epilepsy?

There are many possible causes of epilepsy, including a severe head injury, stroke, brain tumors, an abnormal collection of blood vessels in the brain, birth trauma, brain infection, and malformed regions of the brain. A high-resolution brain MRI that is specially designed for epilepsy patients is available at Bayfront Medical Center. In many cases, this MRI can identify the cause of epilepsy.
What are the Symptoms of Seizures and Epilepsy?

The most easily recognized seizure type is a generalized tonic-clonic seizure (convulsion). However, seizures can take a variety of forms, such as a feeling of fear, a rising sensation in the stomach, a brief stare, a lapse of memory or a loss of muscle tone that lasts seconds to a few minutes.

These forms of seizures can go unrecognized for months to years. Frequently, patients seek medical attention only after a convulsion, motor vehicle accident or unexplained lapses in memory. Epilepsy can be difficult to diagnose, especially when symptoms are subtle. Patients and their families may find it hard to accurately describe the seizures. Some patients who live alone may not even be aware of their seizures.

How Common is Epilepsy?

More than 2.5 million people in the United States -- some 160,000 people in Florida alone -- have epilepsy. Epilepsy is as common as type 1 diabetes, and is more common than Parkinson’s disease and Multiple Sclerosis combined. Over a lifetime, approximately three percent of people will develop epilepsy. Yearly, 100,000 new cases of epilepsy are diagnosed in the United States.

![CASES IN THE UNITED STATES](chart)
Conditions that Mimic Seizures and Epilepsy?

An incorrect diagnosis of an epileptic seizure or epilepsy can delay the diagnosis of another treatable condition. This delay can lead to social, educational, or employment-related challenges. A number of conditions can mimic epileptic seizures or epilepsy. These disorders, like seizures, can cause a change in one’s level of consciousness or behavior, and include sleep disorders, cardiac conditions, movement disorders, and psychiatric conditions. Most of these conditions can only be distinguished from epileptic seizures at a specialized center that performs video-EEG monitoring, such as Bayfront Medical Center.

Good News for Patients with Epilepsy

Advances in diagnosis and treatment make it possible for many people with this condition to live full and active lives. Children and adults on Florida’s west coast can access the finest care at the Comprehensive Epilepsy Program at Bayfront Medical Center, a regional referral center for the evaluation, diagnosis and treatment of epilepsy and seizure disorders. It is the only program of its kind in Pinellas County, and one of only five level IV epilepsy centers in the state.
About the Program

The comprehensive program at Bayfront offers state-of-the-art evaluation and diagnosis, medical intervention, surgical treatment and support. We evaluate and treat a broad spectrum of seizure and epilepsy patients, including patients with:

- New onset seizure(s)
- Well-controlled epilepsy
- Epileptic seizures that have not responded to medical treatments
- Medical conditions that mimic epileptic seizures
- Non-epileptic seizures

We also sub-specialize in many areas of epilepsy, including:

- Anti-epileptic drugs
- Surgical treatment
- Sleep disorders
- Advanced neuro-imaging
- Women’s issues
- Malformations of brain development

Bayfront’s Diagnostic Technology

Advanced diagnostic technology gives physicians a detailed record of seizure activity. Our unique medical equipment can help pinpoint the area of the brain involved, and allow physicians to classify and determine the cause of the seizure or epilepsy. Bayfront offers:

- Digital long-term video-EEG monitoring and a dedicated in-hospital unit for around-the-clock evaluation.
- Epilepsy protocol high-resolution MRI (magnetic resonance imaging)
- 24-hour ambulatory EEG monitoring
- Positron Emission Tomography
Dr. Erasmo Passaro, Medical Director

The program is led by Erasmo A. Passaro, M.D., who is nationally recognized for his work and experience in epilepsy. Dr. Passaro completed his medical training at the Robert Wood Johnson Medical School and at the UCLA Reed Neurologic Institute, one of the first comprehensive epilepsy centers in the U.S. He was director of the Adult Epilepsy Laboratory and Medical Director for the Image-guided Epilepsy and Brain Tumor Surgery program at the University of Michigan Medical Center, Ann Arbor. Dr. Passaro has been involved in more than 250 epilepsy surgery procedures and has conducted video EEG monitoring on over 1,000 patients. He has published and presented his research in peer-reviewed journals and at national meetings.

The Team

Patients benefit from a multi-disciplinary team of specialists, including a neurologist specializing in epilepsy, a neurosurgeon, a neuropsychologist, EEG technologists, neuroscience nurses, speech pathologists and social workers. Our treatment team also involves pharmacists, a neuroradiologist, a pathologist and a nuclear medicine specialist. The Bayfront Epilepsy Team works together to provide seamless care and personalized treatment.
The Bayfront Approach

Our goal at Bayfront is to accurately diagnose and classify the seizure or epilepsy type. We want to make the patient and family feel comfortable, and to teach them about their condition. Because epilepsy can affect every aspect of a person’s life – physical, emotional, social and psychological – we also address the non-medical needs of the patient and family. In addition to exploring the patient's symptoms, it is necessary to address their concern about the long-term use of anti-epileptic drugs and the effects of a chronic disorder. Counseling and education are important facets of our high quality care.

Patient and Family Centered Epilepsy Care

A patient’s history is carefully reviewed in detail with them and their family. Diagnostic studies are also used to classify the seizure or epilepsy type.

At Bayfront, we feel that the care of patients with epilepsy should reflect the perspective of the patient. We encourage patients and their families to play an active role in selecting and implementing a treatment plan. Once an accurate diagnosis is made, we can offer a variety of treatment options.
Treatment Options

Medical Intervention

For approximately 70 percent of people with epilepsy, medications alone can control seizures. In the last decade, several new anti-epileptic medications have been developed, giving persons with epilepsy more treatment options with fewer side effects. Bayfront’s epilepsy program provides direction on how to use these new medications and how to combine them when necessary to improve their effectiveness.

Bayfront also offers patients the opportunity to participate in investigational drug trials of new epilepsy medications, giving them the chance to be among the very first to benefit from advancements in the field.

Surgery

If two seizure medications fail to control a patient’s epilepsy (refractory epilepsy), the success rate for becoming seizure-free with a new medication is only five to 10 percent. Approximately 30-35 percent of patients with epilepsy do not become seizure free with medicines. These patients are at greater risk for reduced quality of life, injury and sudden unexplained death.

Epilepsy surgery is a highly effective, safe and accepted method of treatment for patients with refractory epilepsy. The New England Journal of Medicine reported that epilepsy surgery is more effective than medications in making refractory temporal lobe epilepsy patients seizure free. In well-selected candidates, approximately 70-80 percent of patients can become seizure-free or have their seizures significantly reduced. As a level IV epilepsy center, Bayfront is qualified to offer epilepsy surgery, and is one of only a few hospitals nationwide qualified to perform such procedures. A comprehensive evaluation will determine if epilepsy surgery is an option.
Vagal Nerve Stimulation

For patients who are not candidates for surgery, vagal nerve stimulation is a treatment option. A small device similar to a pacemaker is implanted to electrically simulate the left vagus nerve in the neck to help prevent seizures. The device operates automatically, but the patient can also activate the device on their own when they feel a seizure coming on.

When to Seek Treatment

The Comprehensive Epilepsy Program at Bayfront Health St. Petersburg is designed to serve all patients with epilepsy and seizure disorders. If you are experiencing new onset of seizures or “spells,” we can evaluate you to provide answers. If you have uncontrolled epilepsy that is not responsive to medical treatment, we can offer new options. If you have well-controlled epilepsy, we can work with you to help you continue to successfully manage your condition.

To schedule a consultation with Dr. Erasmo A. Passaro, please call (727) 553-7923. Or for more information, visit us at www.bayfront.com, click on “Medical Services” and then choose “Neurosciences.”
Hospital Directions

From the New Port Richey area:
Proceed southbound on US 19 heading to Downtown St. Petersburg
Turn left onto Central Avenue
Turn right onto 6th Street South
Turn right onto 6th Avenue South
Turn left onto 7th Street South
Bayfront is located on the left

From the Tampa area:
Proceed southbound on I-275 to I-175
Downtown St. Petersburg
Take 8th or 9th Street Exit
Continue 2 blocks
Turn right onto 7th Street South
Continue to West Entrance of Bayfront

From the Sarasota area:
Proceed northbound on I-275 to I-175
Downtown St. Petersburg
Take 8th/9th Street Exit
Continue 2 blocks
Turn right onto 7th Street South
Continue to West Entrance of Bayfront