



New Onset Seizure Clinic



Beth Israel Deaconess
Medical Center



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Comprehensive Epilepsy Center
330 Brookline Avenue
Shapiro Clinical Center, 8th floor

For appointments or more information, please call:
617-667-3170

Seizures and Epilepsy

Seizures are one of the most common neurological disorders. Nearly 11% of individuals will have at least one seizure in their lifetime. Approximately 1/3 of adults with a first seizure will go on to have additional seizures and be diagnosed with epilepsy.

Despite this, the initial diagnosis of seizures and epilepsy can be difficult. Many other disorders can be confused with epileptic seizures, including syncope, metabolic conditions, migraine, stroke and transient ischemic attacks, sleep disorders, movement disorders, and psychiatric conditions such as conversion disorders and panic attacks.

Treatment decisions can be complicated, and should take into account the risk for seizure recurrence and implications for safety. Some seizures are provoked by an acute medical or neurological illness and do not require long-term therapy with antiepileptic medications. In other cases, diagnostic testing reveals a high risk for recurrence and the need for effective antiepileptic treatments.

Choice of optimal antiepileptic medication should take into consideration the seizure type, epilepsy syndrome, co-medications, comorbidities, lifestyle factors, and preferences of the individual with seizures. Women of child-bearing age have unique challenges and needs which should be taken into account when initiating treatment. Since the initial decision regarding antiepileptic medications can impact the individual with epilepsy for many years, this decision should be made by experts in epilepsy care.

The new onset seizure clinic provides

- Rapid access to epilepsy specialists
- State-of-the-art diagnostic testing
- Accurate diagnosis and initiation of appropriate treatment
- Second opinions on diagnosis and treatment
- Comprehensive patient education

The initial evaluation aims to

- Determine if the event is a seizure and possible cause(s)
- Complete appropriate diagnostic tests and avoid unnecessary testing
- Determine risks for seizure recurrence and epilepsy
- Determine appropriate treatment options
- Counsel patients regarding safety and self-management

Comprehensive Epilepsy Center

The Comprehensive Epilepsy Center at Beth Israel Deaconess Medical Center is a Level 4 Epilepsy Center, the highest level designated by the National Association of Epilepsy Centers.

The center offers specialized New Onset Seizure Clinic for adolescents (16+ years) and adults who have had a first seizure or seizure-like episode.

Early effective treatment and patient education provides the best chance for complete seizure control, allowing individuals with epilepsy to lead full and unrestricted lives.

The New Onset Seizure Clinic accepts referrals from local primary care providers, neurologists, emergency medicine physicians, and other health care providers.

Patient and Family Education

A central goal of the New Onset Seizure Clinic is to educate patients and families so they can make informed decisions about their care, and can take charge of their medical condition. Our epilepsy nurses play an integral role in this process and ongoing education includes:

- Seizure types and epilepsy syndromes
- Prognosis of seizures and epilepsy
- Seizure safety, including driving
- First aid for seizures, seizure emergency plans
- Seizure triggers
- Medication adherence
- Medication interactions
- Potential medication side effects, including effects on memory, thinking, mood, and physical effects (weight, bone health)
- Counseling about women's health: hormones, contraception, and pregnancy
- Tools to manage seizures
- Other resources, including web sites and local affiliate of the Epilepsy Foundation



Our multidisciplinary team includes:

Epileptologists

Bernard Chang, MD

Frank Drislane, MD

Daniel Goldenholz, MD, PhD

Walter Heine, MD, PhD

Susan Herman, MD

Phillip Larimer, MD, PhD

Lu Lin, MD

Monica Makhija, MD

Trudy Pang, MD

Donald Schomer, MD

Mouhsin Shafi, MD, PhD

Volney Sheen, MD, PhD

Neurosurgeon

Jeffrey Arle, MD, PhD

- Epilepsy Center Administrator
- Epilepsy Nurses
- New Onset Seizure Clinic Coordinators
- Neuropsychologists
- Neurodiagnostic/ EEG Technologists
- Psychiatrists
- Social Workers

The Comprehensive Epilepsy Center at BIDMC is designated as a Level 4 Epilepsy Center by the National Association of Epilepsy Centers. We offer:

Full range of diagnostic testing

- Routine and sleep-deprived EEG (flexible schedule - early mornings and weekends)
- High density (256 channel) EEG with source localization
- Ambulatory EEG and video-EEG monitoring
- Inpatient video-EEG monitoring
- Continuous video-EEG monitoring in intensive care units
- 3T MRI
- PET (Positron Emission Tomography)
- SPECT (Single Photon Emission Tomography)
- Neuropsychological testing
- Wada test for localization of language and memory in presurgical candidates

Expertise in epilepsy management

- New Onset Seizure Clinic
- Women's health and epilepsy
- Vagal nerve stimulator
- Management of intractable epilepsy
- Epilepsy surgery
- Treatment of status epilepticus
- Evaluation/Management of mood and cognitive comorbidities
- Dietary therapies, including the Modified Atkins Diet
- Noninvasive brain stimulation
- Access to clinical trials of new anti-seizure medications and other therapies