

Kingston Health Sciences Centre First Seizure Clinic

The First Seizure Clinic at Kingston Health Sciences Centre (KHSC) run by Dr. Winston provides rapid neurological assessment of adult patients presenting with a first suspected seizure to determine if the event was a seizure or a mimic such as vasovagal syncope, and if it was a seizure to perform risk stratification and determine if treatment is recommended.

Referrals

Referrals are primarily from emergency departments or family physicians across southeastern Ontario. Given a common clinical presentation and large catchment area, only referrals meeting the criteria below will be seen as a priority. Other referrals will be redirected as appropriate to routine epilepsy or general neurology.

Note that patients require an EEG before they will be booked in the clinic. To book an EEG at KHSC, please see this [KHSC webpage](#).

Brain imaging should also be performed (at least a CT brain, but ideally also an MRI brain).

Criteria for Referral

Adult patient (18 years or over)	If younger than 18 years, refer to pediatric neurology or general pediatrics
First episode of suspected seizure	If recurrent events, then refer to epilepsy or general neurology; given wait times, consider discussing with on-call Neurology regarding starting treatment
Without access to a neurologist	If the patient has already been assessed by Neurology or has a neurologist, the request should be directed to that neurologist
Not provoked	The clinic does not review alcohol-withdrawal or drug-induced seizures
Not currently on or starting treatment	The aim of the clinic is to determine if treatment is required, so if a clear etiology requiring treatment is present (e.g. seizure from stroke) then refer to epilepsy after starting treatment

Referrals to the clinic can be directed to the central neurology intake fax at 613-548-6137.

Vasovagal Syncope

Historically, around a third of referrals have a diagnosis other than seizure. The most common is vasovagal syncope from cerebral hypoperfusion. A prodrome of lightheadedness, feeling hot or cold, diaphoresis, palpitation, closing in of vision or pallor with a brief loss of consciousness and rapid recovery are suggestive of this diagnosis. A few myoclonic jerks may occur but are not sustained. Evaluation should include postural BP and ECG.

Useful information and references to consider this diagnosis are available at:

<https://www.ncbi.nlm.nih.gov/books/NBK470277/>

<https://www.nursingcenter.com/ncblog/august-2019/syncope-or-seizure>