

## Did you know

Older age is the most common time in life to develop epilepsy

Up to 70% of seizures in the elderly are FOCAL onset



Elderly people with epilepsy have 2-3 times higher mortality than the general population

# Could it be Epilepsy?

## A brief guide for health professionals

This guide has been developed by Epilepsy Queensland Inc. (EQI) as part of a suite of resources focused on increasing awareness and understanding of the needs of Queenslanders in later life living with epilepsy. For the purposes of this resource, this is typically for people aged over 60yrs, or 55yrs for Indigenous Australians.

## What is Epilepsy?

Epilepsy is a tendency to have recurring and unprovoked seizures. There are many different types of seizures, each resulting from sudden, abnormal and increased electrical activity within the brain.

Many people will have one seizure at some stage in their lives, but this is not necessarily epilepsy, as there may be a low risk of recurrence. These isolated incidents may be the result of a provoking factor, such as illness, electrolyte imbalance, injury etc.

If seizures persist, a diagnosis of epilepsy may be given.

### Epilepsy Diagnosis

Clinical presentation of seizures in the elderly can resemble other conditions.



Stroke/TIA



Alzheimer's disease / dementia



Cardiovascular disease



Vasovagal event



Brain injury/ tumour etc.

Therefore, a thorough clinical history, including witness statements - where possible, is paramount for diagnosing epilepsy.

## What information is needed for diagnosis?

full clinical history



description of the events



physical and neurological examination



EEG, CT or MRI scan



### Seizures are:



episodic



with symptom appearing suddenly



often, with no obvious provoking factor



and resolve quickly, with patients returning to their baseline between episodes...

strange sensations (e.g. smell, taste, feeling etc.)

uncharacteristic / odd behaviours

confusion, behavioural change or 'absence' without other explanation

strong emotions

altered thought processes

## Possible Seizure Presentations

convulsions/ spasms

loss of bodily control - incl. incontinence

changes in level of consciousness: full awareness, impaired awareness or loss of consciousness

falls, after which the person cannot recall or explain the event

## Consider epilepsy diagnosis if:

- Events occur in a variety of postures
- Events always occur during sleep
- Duration of confusion following the event is 1 hr, then subsides
- Myalgia, headache or bitten lateral tongue or cheek are noted.

## Consider alternative diagnosis if:

- Event always occurs while standing or just after standing
- Prodrome if remembered, is dominated by visual symptoms or dizziness
- Eye witness account describes a 'fall down, lie still' event with loss of awareness
- Event includes severe/sudden onset of pain
- Confusion does not subside

## Treatment

- Anti-epileptic drugs are a first line treatment
- 80% of patients remain seizure free with AED treatment
- Elderly more susceptible to adverse drug rxn's
- Other treatments include surgery, diet therapy + VNS

GP's role	Neurologist/ Epileptologist	Epilepsy Queensland	Person with Epilepsy
<ul style="list-style-type: none"> <li>• Initial review and screening</li> <li>• Ordering bloods/ EEG</li> <li>• Manage treatment plan in consultation with Neurologist</li> <li>• Referral to Neurologist, complimentary health &amp; wellbeing services</li> </ul>	<ul style="list-style-type: none"> <li>• Establish a diagnosis</li> <li>• Develop treatment plan</li> <li>• Liaise with GP and other health practitioners to provide holistic care</li> </ul>	<ul style="list-style-type: none"> <li>• Information, referral and support services</li> <li>• Development of Epilepsy Management Plan</li> <li>• Epilepsy &amp; midazolam training</li> </ul>	<ul style="list-style-type: none"> <li>• Access Government/ community assistance               <ul style="list-style-type: none"> <li>- Centrelink/DVA</li> <li>- NDIS if required (&lt; 65 yrs)</li> <li>- Community support services (MOW, community nursing etc)</li> </ul> </li> <li>• Allied health assessment / support</li> <li>• Utilise personal safety devices etc</li> <li>• Follow medical advice</li> </ul>

## Tips to support a person living with epilepsy in older life



- Safety precautions needs to be balanced against risk & restrictions
- Develop a personalised Epilepsy Management Plan; contact Epilepsy Queensland for assistance developing a personalised plan
- Listen to understand – the patient may lack confidence or be embarrassed by their condition
- Explain steps of assessments, diagnosis and management in simple language
- Encourage patient to ask questions & provide information in a range of formats
- Consider referrals to complimentary health & wellbeing services e.g. OT, Psychologist, sleep specialists etc.
- Referral to Epilepsy Queensland for further information, training, resources and support services



# Classification of Seizures

The International League Against Epilepsy (ILAE) Classification of the Epilepsies was updated in 2017, to reflect improvements in understanding and underlying mechanisms.

Seizures are classified as either **Focal Onset**, **Generalised Onset** or **Unknown Onset**. The type of seizures determine treatment and investigations.

## Generalised Onset Seizures:

Abnormal electrical activity starts & spreads rapidly to involve both sides of the brain. Least common presentation in elderly population

<b>Tonic-Clonic</b>	Stiffening or contraction of muscles, loss of consciousness, then rhythmical jerking of both sides of the body. May also involve, dribbling, vomiting, loss of bowel or bladder control & changes in breathing
<b>Absence</b>	Sudden vacant stare, which impairs the persons awareness & responsiveness, typically lasting 5-10 secs. Eyes may roll upwards or eyelids may flutter.
<b>Atonic</b>	A sudden loss of muscle tone often resulting in a fall.
<b>Tonic</b>	Stiffening of the body or limbs often resulting in a fall
<b>Myoclonic</b>	Brief shock-like jerks of a muscle/group of muscles. May occur in clusters



## Focal Onset Seizures:

Abnormal electrical activity starts in one small section of the brain, resulting in varying outward signs & symptoms. Most common presentation in elderly population.

<b>Aware</b> Knows that the seizure is happening & can remember the events afterwards	<b>Impaired Awareness</b> Behaviour may be confused, person may not respond appropriately & will have limited or no memory of the event afterwards
<b>Motor Onset Symptoms</b> <ul style="list-style-type: none"> <li>• Changes in movement are usually seen on one side of the body</li> <li>• May involve: <ul style="list-style-type: none"> <li>• Twitching</li> <li>• Jerking</li> <li>• Stiffening</li> <li>• Going limp</li> </ul> </li> <li>• May also involve automatisms <ul style="list-style-type: none"> <li>• Lip smacking</li> <li>• Chewing</li> <li>• Swallowing</li> <li>• Fiddling with clothing etc.</li> </ul> </li> </ul>	<b>Non-motor Onset Symptoms</b> <p><b>Autonomic</b></p> <ul style="list-style-type: none"> <li>• Palpitations • Nausea • Hunger • Flushing</li> <li>• Pupil Changes • Goose bumps</li> <li>• Urge to urinate</li> </ul> <p><b>Behaviour Arrest</b></p> <ul style="list-style-type: none"> <li>• Comes on &amp; ends gradually</li> <li>• Person will stop what they are doing &amp; stare</li> </ul> <p><b>Cognitive</b></p> <ul style="list-style-type: none"> <li>• Language impairment • Déjà vu (feelings of familiarity) • Jamais vu (feelings of unfamiliarity)</li> <li>• Hallucinations • Perceptual distortions</li> </ul> <p><b>Emotional</b></p> <ul style="list-style-type: none"> <li>• Anxiety • Fear • Joy • Other emotional responses unrelated to situation/out of context</li> </ul> <p><b>Sensory</b></p> <ul style="list-style-type: none"> <li>• Tingling • Numbness</li> <li>• Seeing spots or coloured shapes</li> <li>• Smelling unpleasant odours</li> <li>• Hearing sounds - buzzing, ringing</li> <li>• An unusual taste • Feelings of heat &amp; cold</li> </ul>

