

Management of First Seizure in Adults

Presentation with first seizure

Evaluate potential cause of seizure. Consider the following non-exhaustive list:

- CNS:
 - o Infections meningitis, encephalitis
 - o Strokes (bleed, embolism, thrombosis)
 - o Traumatic ICH
 - Space occupying lesions
 - Encephalopathies Uraemic, hepatic, hypertensive
- Metabolic: Disorders of glucose, sodium, calcium, tonicity (hyper/hypo), acid base
- Withdrawal states alcohol, benzodiazepine, barbiturate
- Toxins TCA, propanolol, theophylline, anticonvulsants, tramadol, organophosphates
- Illicit drugs cocaine, MDMA, other stimulants
- Environmental hyperthermia/heatstroke

Tests: BSL; CT brain + /- contrast; ECG (note QT interval); FBE; U&E; LFT; CMP

Anti-epileptic drugs usually not commenced if single seizure and investigations normal.

Disposition

Admit if:

- Multiple seizures or status epilepticus
- · Prolonged post ictal confusion, or focal neurological deficit
- Investigations reveal underlying condition that requires treatment

Discharge if:

 Patient has normal physical examination and investigation results and is observed for a period of time determined by a senior ED staff determined by circumstances.

For Discharge

- Give safety advice and *ECI First Seizure Factsheet* (For example no driving, no operating heavy machinery, no swimming alone, avoid heights etc.)