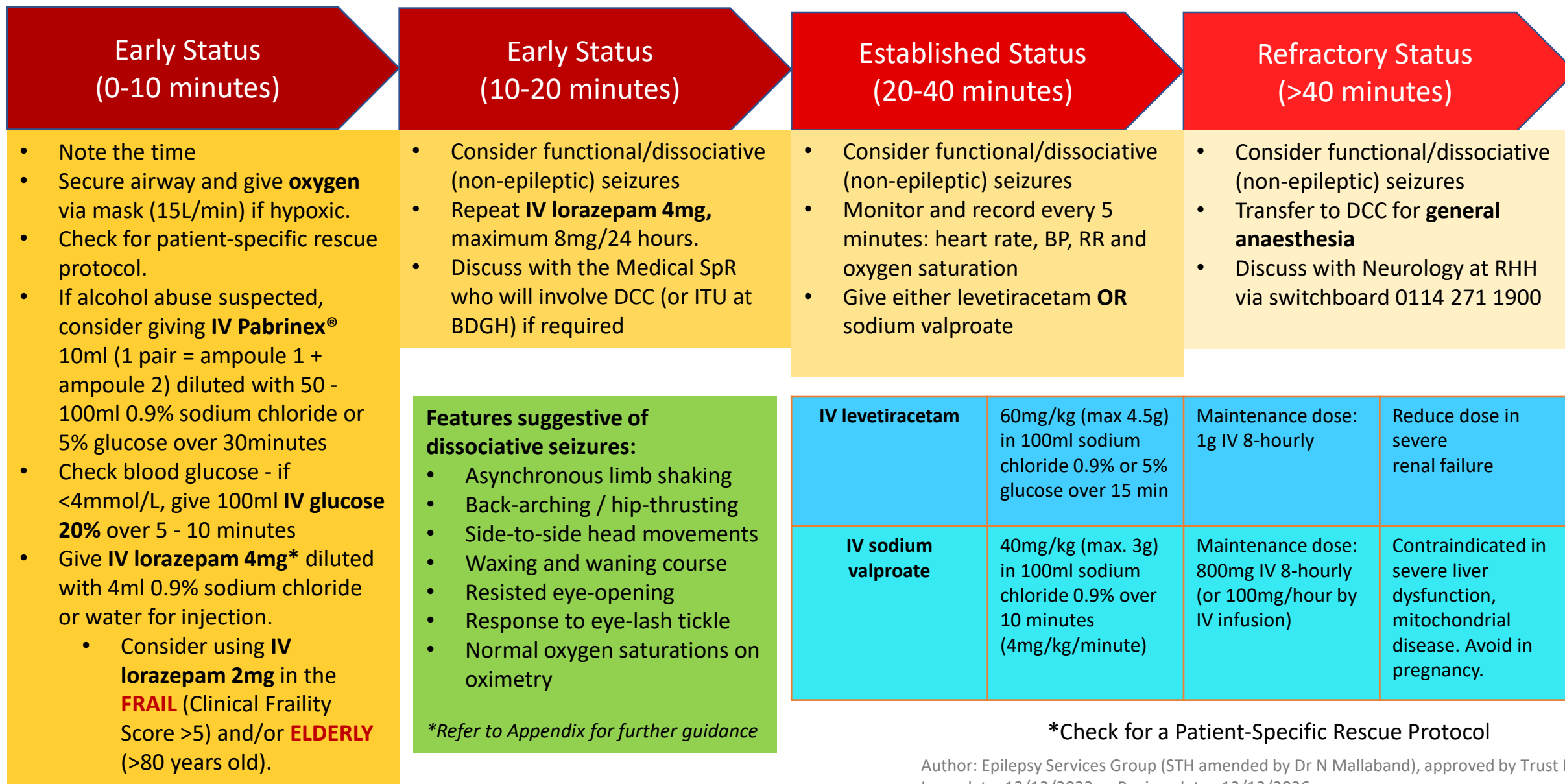


Adult Treatment Protocol for Convulsive Status Epilepticus



*Check for a Patient-Specific Rescue Protocol

Adult Treatment Protocol for Convulsive Status Epilepticus

Early Status (0-20 minutes)

- Consider thiamine if alcohol abuse suspected
 - 10ml of IV Pabrinex[®] over 30minutes in 50-100ml 0.9% sodium chloride or 5% glucose over 30 minutes)
 - Give thiamine before glucose
- Give IV glucose if blood glucose <4mmol/L
 - 100ml of glucose in 20% solution
- If pregnant and >20/40 gestation, to consider eclampsia and treat if appropriate
- Obtain witness history
- Determine epilepsy, medication history and check for a patient specific plan, either on Portal letters or Symphony Alerts and initiate treatment as per protocol if clinically indicated
- Give **IV lorazepam 4mg**
 - if no venous access, consider PR diazepam 10mg or IM lorazepam 4mg or buccal midazolam 10mg
- Consider functional/dissociative (non-epileptic) seizures, especially in patients resistant to benzodiazepines
- If seizures continue 10 minutes after first dose, repeat **IV lorazepam 4mg** (NB. maximum TWO doses of lorazepam 4mg per 24 hours)
- Consider treating acidosis if pH less than 7
- Hourly obs for 12 hours after lorazepam administration
- Discuss with Intensive Care, General Medicine

Causes to consider

- Hypoglycaemia
- Alcohol withdrawal
- Metabolic disturbance
- Infection (including meningitis & encephalitis)
- Stroke
- Neoplasm
- Subarachnoid haemorrhage
- Drug overdose
- Poor compliance with anti-seizure medications

Investigations:

- U&E, LFT, Ca, Mg, glucose, FBC, clotting, anti-seizure medication levels.
- 12-lead ECG
- Consider toxicology (blood and urine), arterial blood gases.

Consider IV lorazepam 2mg instead if patient is frail (Clinical Frailty Score >5) and/or elderly (>80 years old). *Whilst IV lorazepam 4mg may cause temporary sedation +/- respiratory depression, undertreatment of early status epilepticus may lead to established status epilepticus which is resistant to treatment. The patient should be observed for at least 12 hours post-lorazepam administration (Lorazepam T_{1/2} is approximately 12 hours).*

Some patients may present with seizure clustering or increase in seizure frequency/severity before going into status epilepticus i.e. status-in-evolution phenomena. Please seek Neurology advice if unsure what to do in such circumstances.

Adult Treatment Protocol for Convulsive Status Epilepticus

Established Status (20-40 minutes)

- Consider functional/dissociative (non-epileptic) seizures, especially in patients who are resistant to benzodiazepines.
- Observations including HR, BP, RR, oxygen saturation and temperature monitoring every 5 minutes.
- Give **either**
 - IV levetiracetam** 60mg/kg (max. 4.5g) in 100ml 0.9% sodium chloride over 15 minutes then 1g IV 8 hourly
adjust maintenance dose in renal failure
- Or**
 - IV sodium valproate** 40mg/kg (max. 3g) in 100ml 0.9% sodium chloride over 10 minutes (4mg/kg/minute) then 800mg IV bolus 8 hourly (or 100mg/hour by IV infusion)
low rates of respiratory depression but may rarely cause an encephalopathy & is contra-indicated if mitochondrial disease (which can be present with status epilepticus) is suspected – therefore avoid in young with status epilepticus of unknown cause.
Avoid if possibility of pregnancy (teratogenic).
- Contact medical on call SpR via and contact Intensive Care.
- Consider further investigation: CT head and CSF examination (particularly if no history of seizures).

Refractory Status (>40 minutes)

- Transfer to Intensive Care
- Consider (normally under guidance of RHH neurology on call):
 - IV phenobarbital 10 - 20mg/kg** (rate: 100mg/min), NB significant risk of respiratory depression;
- OR**
 - IV phenytoin 18mg/kg** (range 15 - 20) undiluted at 50mg/min with ECG and BP monitoring (risk of bradycardia and hypotension)
- General anaesthesia for 12 to 24 hours
- Commence, continue or adjust maintenance anti-seizure medication after discussion with neurology.
 - Consider placement of nasogastric tube for oral anti-seizure medication administration.
 - Refer to STH guidance for enteral and parenteral alternatives for patients unable to take medication by mouth:
http://nww.sth.nhs.uk/STHcontDocs/STH_CGP/neurology/AdministrationOfAEDs.pdf
 - On discharge refer to OP neurology

Adult Treatment Protocol for Convulsive Status Epilepticus

Appendix: Dissociative seizures – features and management

Features of Dissociative Seizures

Often situational onset

Observation:

- Variable motor activity
- Duration of persistent ictal motor activity of >3 min
- Asynchronous limb movements
- Back-arching
- Side-to-side head movements
- Ictal eye closure
- Ictal crying/weeping/speaking

Examination:

- Resisted eye-opening
- Response to eyelash-tickling
- Partial responsiveness to speech/touch

Management of Dissociative Seizures

- Make the patient safe e.g. by placing a cushion under their head, remove dangerous objects.
- Introduce yourself and say that they are having a dissociative seizure. Talk to them calmly. Remember that most people can hear and sense those around them during their dissociative seizures.
- Reassure them that the seizure will stop on its own.
- Step back and avoid touching the patient once you have made them safe.
- If breathing too fast, encourage the patient to slow down breathing and to breathe deeply.
- If talking causes the seizure or breathing to get worse, say you will stop talking but watch from a distance to ensure the patient is safe.

Of note:

- Dissociative seizures can be made worse by medications used to stop epileptic seizures (such as benzodiazepines).
- Document your observation and description of the seizure.
- Please do not say to the patient that 'you are faking a seizure'. Also, please be cautious about what you say within earshot of the patient.