GENERALISED CONVULSIVE STATUS EPILEPTICUS IN PAEDIATRICS





Onset of seizures

First Aid

- Use the ABCDE approach
- Open airway
- Maintain adequate oxygenation & ventilation
- Monitor (starting with RR, SPO₂, pulse, BP, CRT)
- · Check glycaemia and underlying causes*



5 min

Give 1st dose



10 min

Reassess, give 2nd dose

Reassess & establish IV / IO access & ECG

1st line medication

- Midazolam 0.3 mg kg⁻¹ intranasal/buccal (max. 10 mg)
 - OR
- Midazolam 0.2 mg kg⁻¹ intramuscular (max. 10 mg)

OR

• Diazepam 0.5 mg kg⁻¹ rectal (max. 20 mg)

If IV/IO access

- Midazolam 0.15 mg kg⁻¹ IV/IO (max. 10 mg)
 - **OR**
- Lorazepam 0.1 mg kg⁻¹ IV/IO (max. 4 mg)



15-20 min

Give 1st dose

Reassess

Call for help (PICU/anaesthesia/

referral clinic)

2nd line medication

• Levetiracetam 40-60 mg kg⁻¹ IV over 5 min (max. 4.5 g)

If Levetiracetam is not available, use:

• Phenytoin** 20 mg kg⁻¹ IV over 20 min (max. 1.5 g)

OR

• Phenobarbital 20 mg kg⁻¹ over 15 min

OR

• Valproid acid*** 40 mg kg^{-1} IV over 15 min (max 3g)



30-40 min

Prepare RSI / intubation

Consider different 2nd line medication, if not prepared for intubation



No later than 40 min

3rd line medication

- Proceed with RSI & intubation & start 3rd line anti-seizure medication infusion (e.g. propofol, thiopental, midazolam, ketamine, phenobarbital)
 - · Consult paediatric neurologist
 - EEG monitoring
 - Consider brain imaging
 - Monitor for complications, e.g. respiratory and haemodynamic instability, renal dysfunction, metabolic disturbances, and adverse drug effects



- **Phenytoin: monitor ECG and BP, caution with cardiopathies, arrhythmias and AV blocks
- ***Valproic acid should be avoided in pregnant teenagers, suspected liver failure or metabolic diseases



