APLS: Status Epilepticus

Advanced Life Support Group
A charity dedicated to saving life by providing training

- Individual Emergency Plan takes precedence
- Early anaesthetic support if ABC concern *
- Pre-hospital benzodiazepine doses count

5 min — From onset of convulsion

Secure airway
High flow oxygen
Consider reversible causes
(Don't ever forget glucose)

Vascular access?

STEP 1

YES → **Lorazepam** (IV / IO)
0.1mg/kg (max 4mg)

OR **Midazolam** (buccal)
3-11 months 2.5mg
1-4 years 5mg
5-9 years 7.5mg
10-17 years 10mg
~ 0.3mg/kg (max 10mg)

NO → **Diazepam** (rectal)
1 month-1year 5mg
2-11 years 5 – 10mg
12-17 years 10 –20mg
~ 0.5mg/kg (max 20mg)

Pre-hospital (trained parent(s) / carer(s) / paramedics)
OR
In hospital

5 min — After 1st benzodiazepine

Convulsion ongoing? (check ABC)*
NO → Monitor
YES ↓

ANTICIPATE
Get 2nd dose Benzodiazepine ready
Maximum 2 doses (including pre-hospital doses)

STEP 2

Vascular access?

YES → **Lorazepam** (IV / IO)
*dose as per step 1

OR **Midazolam** (buccal)
*dose as per step 1

NO → **Diazepam** (rectal)
*dose as per step 1

Pre-hospital (with paramedics)
OR
In hospital

5 min — After 2nd benzodiazepine

Convulsion ongoing? (check ABC)*
NO → Monitor
YES ↓

ANTICIPATE:
Get Levetiracetam ready

STEP 3

Levetiracetam 40mg/kg IV / IO (max 3g)
Give over 5 minutes

Refer to local monograph for dilution and infusion.

ANTICIPATE:
Get Phenytoin / Phenobarbitone ready
Prepare for RSI

10 min — After infusion finished

Convulsion ongoing? (check ABC)*
NO → Monitor
YES ↓

In hospital with paediatric registrar and/or consultant

STEP 4

Team ready for immediate RSI?
YES → Rapid Sequence Induction
NO ↓

Already on phenytoin?

NO → **Phenytoin** 20mg/kg IV / IO (max 2g) give over 20 minutes

YES → **Phenobarbitone** 20mg/kg IV / IO (max 1g) give over 20 minutes

Refer to local monograph for dilution and infusion. Cardiac monitoring.

After infusion finished

Convulsion ongoing? (check ABC)*
NO → Monitor
YES ↓

Inform PICU and/or paediatric retrieval team

Anaesthetist **MUST** be present

Rapid Sequence Induction (RSI)
Ketamine 1-2mg/kg
OR **Thiopental** (Thiopentone) 3-5mg/kg IV/IO
OR **Propofol** (refer to local monograph)

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