Appendix 2: Flow Chart for Status Epilepticus

Airway
Breathing
Circulation
Glucose

↓

IV access

→ Yes → **Appendix 1: APLS algorithm**

→ No

Basic investigations
Glucose, FBC, U&E, LFT, CRP, Ca, Mg, blood culture. Check BP

Consider urine culture, urine toxicology, antiepileptic drug levels, viral & mycoplasma titres

↓

Still convulsing after 40 minutes

↓

Intubate and ventilate
Contact PICU

↓

Investigations

CT scan : unknown aetiology of status epilepticus, focal neurological signs, focal seizure, asymmetric or unreactive pupils, suspicion of raised ICP, ↓GCS 1 hour post seizure, history of trauma, suspicion of non accidental head injury

EEG: unexplained status epilepticus in any child, refractory convulsive status, focal seizures, possible non convulsive status. Consider CFM if refractory status epilepticus (>60 minutes despite appropriate treatment)

Lumbar puncture: Do later if age <12m, suspicion of meningitis or encephalitis. Send for MC&S, protein, glucose and herpes PCR.
Contradindications: within 30 minutes of convulsive seizure, GCS <13, focal neurological signs, systemic meningococcal disease, signs of raised ICP (unequal or unreactive pupils, absent brainstem reflexes, decerebrate or decorticate posturing, bradycardia, hypertension, abnormal respiratory pattern), local infection over LP site, bleeding disorder or anticoagulants.

Metabolic: Perform if positive family history, unexplained death, or consanguinity.
Do blood gas, ammonia, lactate, serum organic acids, and urine amino and organic acids

Treatment

Anti convulsants:

Phenobarbitone:	20mg/kg load over 30 min
Midazolam:	2-20 microgram/kg/min infusion
Phenytoin:	18mg/kg load over 20 min
Thiopentone:	4mg/kg load 2-4mg/kg/hr to induce burst suppression with EEG monitoring

Antibiotics and antivirals:
Cefotaxime in all seizures >30min, complex febrile seizures
Erythromycin & Acyclovir: signs suggestive of encephalitis ie. fever, altered consciousness, behavioural changes, recent herpes infection, focal neurological signs, any neonate presenting with seizures or reduced GCS of unknown cause

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