

Illness Scenario 1 Refresher Course

This is a Teaching Scenario. Some flexibility in how it progresses is possible according to individual learner needs

History {initial candidate briefing prior to arrival of child}

A 1 year old child presents with a generalised tonic-clonic seizure. He has received buccal midazolam from the paramedics in the ambulance. On arrival he is not convulsing but is responsive only to painful stimuli.

He has a past history of 24 hrs of mild fever, irritability and drowsiness the last hour.
Estimated weight 11 kg.

Initial impression {provide information as candidate assesses child and applies monitoring}

As the candidate starts to assess the patient, he has a generalised tonic-clonic seizure and then becomes hypoxemic with resp depression requiring BVM ventilation. Conscious level initially responding only to painful stimuli and then unresponsive. Febrile 38.1

Clinical Course {to be given to candidate as they progress}

With airway opening and BVM ventilation O₂ sat and improves. There is no response to a second dose of benzodiazepine and the convulsion continues.

BSL is 8.2 mmol/L. Plans to manage the airway, including ensuring the presence of an experienced airway clinician should be initiated. The convulsion eventually stops with an infusion of intravenous levetiracetam or phenytoin.

INSTRUCTORS INFORMATION

Key Treatment Points

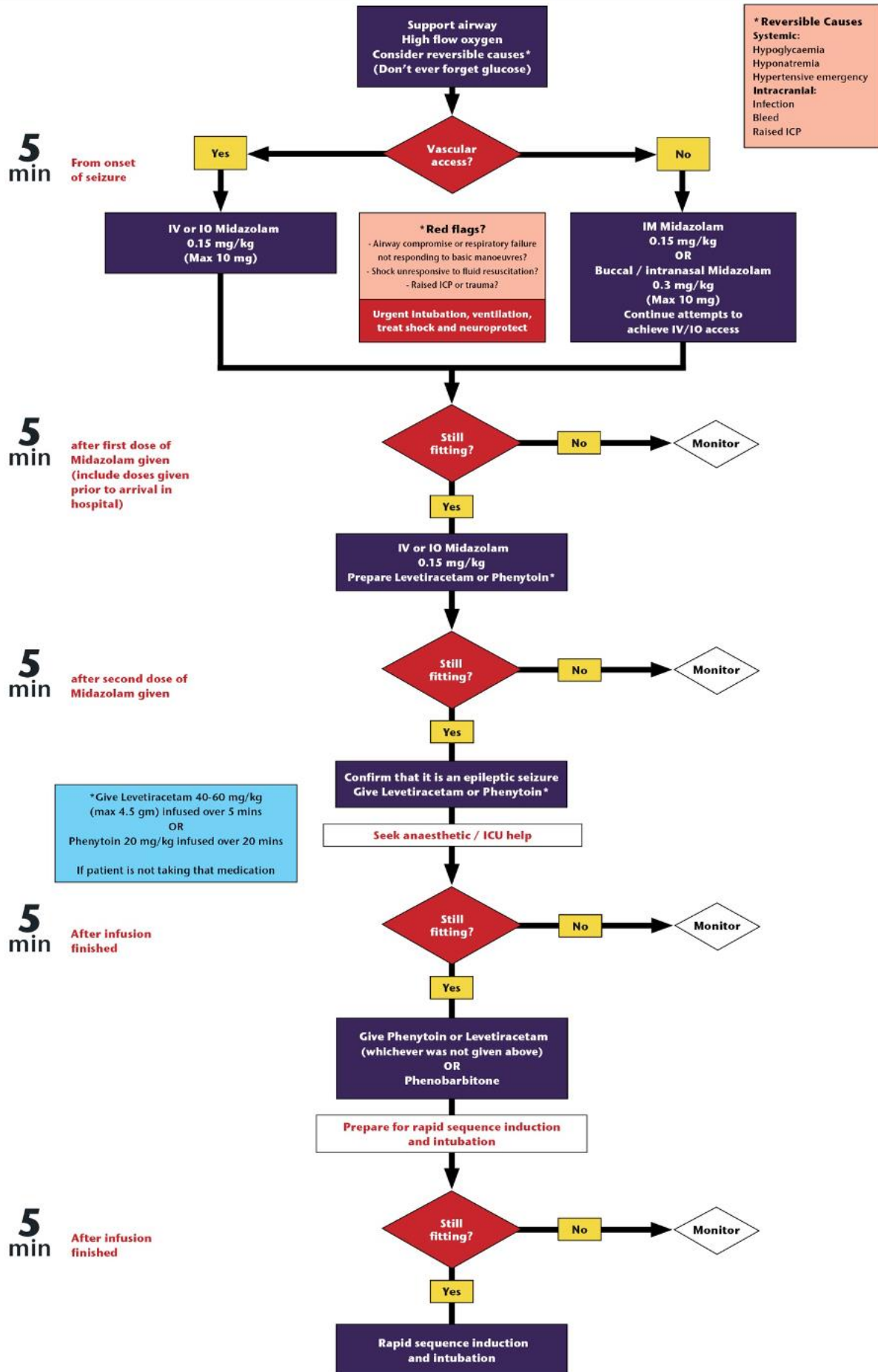
Airway	Establish airway patency High flow O ₂ via face mask commenced early Titrate O ₂ therapy to SpO ₂ 94-98% when stable Arrange for intubation or intubate	
Breathing	BVM ventilation with 100% O ₂	
Circulation	IV /IO access	
	Bloods for FBC, U&Es, BGL, VBG and cultures	
Specific Therapy	Status epilepticus algorithm Blood sugar check Acyclovir, Antibiotics	

Diagnosis: Convulsive Status Epilepticus, Encephalitis

Learning objectives

At the end of this session participants should be able to:

- Apply the structured approach to management and diagnosis during convulsive status epilepticus (CSE)
- Recall and classify the potential causes of CSE
- Recall and apply the APLS status epilepticus algorithm in their own practice
- Recall and apply the management of encephalitis/meningitis in their own practice



Potential Issues to be Discussed/Resources

- [CPG Meningitis Encephalitis Paediatric Improvement Collective](#)
- Discuss algorithm: obtaining IV or IO access after 1st dose of IM/Intranasal/buccal midazolam (a copy of the algorithm will be available), role of levetiracetam
- Discuss convulsions with a fever
- Acyclovir/antibiotics to cover encephalitis/meningitis
- RSI for intubation and seizures