

First Afebrile Seizure Guideline

(for 2-16 year olds with no underlying neurodisability)

Overview:

- This guideline refers to a child / young person over the age of 2 years presenting to A&E with a suspected first seizure without fever in a child **with no underlying neurodisability /neurological condition such as Cerberal Palsy/Autism** .
- If this is not the first afebrile seizure , please discuss with a paediatrician as this child might need EEG or further investigations/commencement of treatment before review in clinic (which may only be in a few weeks' time).
- **Other useful links** (related to these guidelines) :
 1. OUH first afebrile seizure referral form:

<http://ouh.oxnet.nhs.uk/EmergencyDepartment/Document%20Library/Paediatric%20First%20Fit%20Referral%20Form%20FINAL%202022.pdf>

2. Parent information leaflet:

https://www.rcpch.ac.uk/sites/default/files/2020-07/following_a_first_seizure_without_fever_in_cyp_parent_a4_2019_v1.2.pdf

Assessment and history taking:

- History of the event from eyewitnesses and from the child/young person.
- Description of what happened before, during and after the seizure
- Are video recordings available? Highlight the importance of videoing if a seizure recurs.
- When did the event occur? And for how long?
- Any evidence pointing to focality?
- **Post** event behaviour- sleepiness? Confusion? How long until their usual self?

Within a usual paediatric clinical history pay close attention to:

- **Any previous unusual episodes?** These may have been unusual nocturnal episodes, epileptic absences or episodes of morning myoclonic jerks. In these cases, follow up is more urgent and needs an immediate discussion with a consultant paediatrician before discharge planning.
- **Family history** of epilepsy
- **Birth and Perinatal history**
- **Past medical history** of significant childhood illnesses eg meningitis
- **Developmental history**- milestones, learning difficulties

Authors: Halah Faris, Geetha Anand, Nov 2022

Examination:

- Complete full paediatric general examination
- Look for any neurocutaneous skin marks
- An age- appropriate neurological examination (describing gait/power/tone/reflexes)
- Blood pressure and head circumference plotted on a centile chart.

A play based developmental assessment is helpful

Investigations:

1. **ECG**- Include calculating the QTc and document. Scan and upload to EPR if not already uploaded in ED.
2. **Blood tests**: guided by the history but as a minimum:
 - FBC
 - U+E
 - blood sugar level (NB hypoglycaemic episode not excluded when taken in recovery, pay careful attention to history of previous episodes).
 - Bone profile including: calcium, magnesium and vitamin D in children under 5 years.

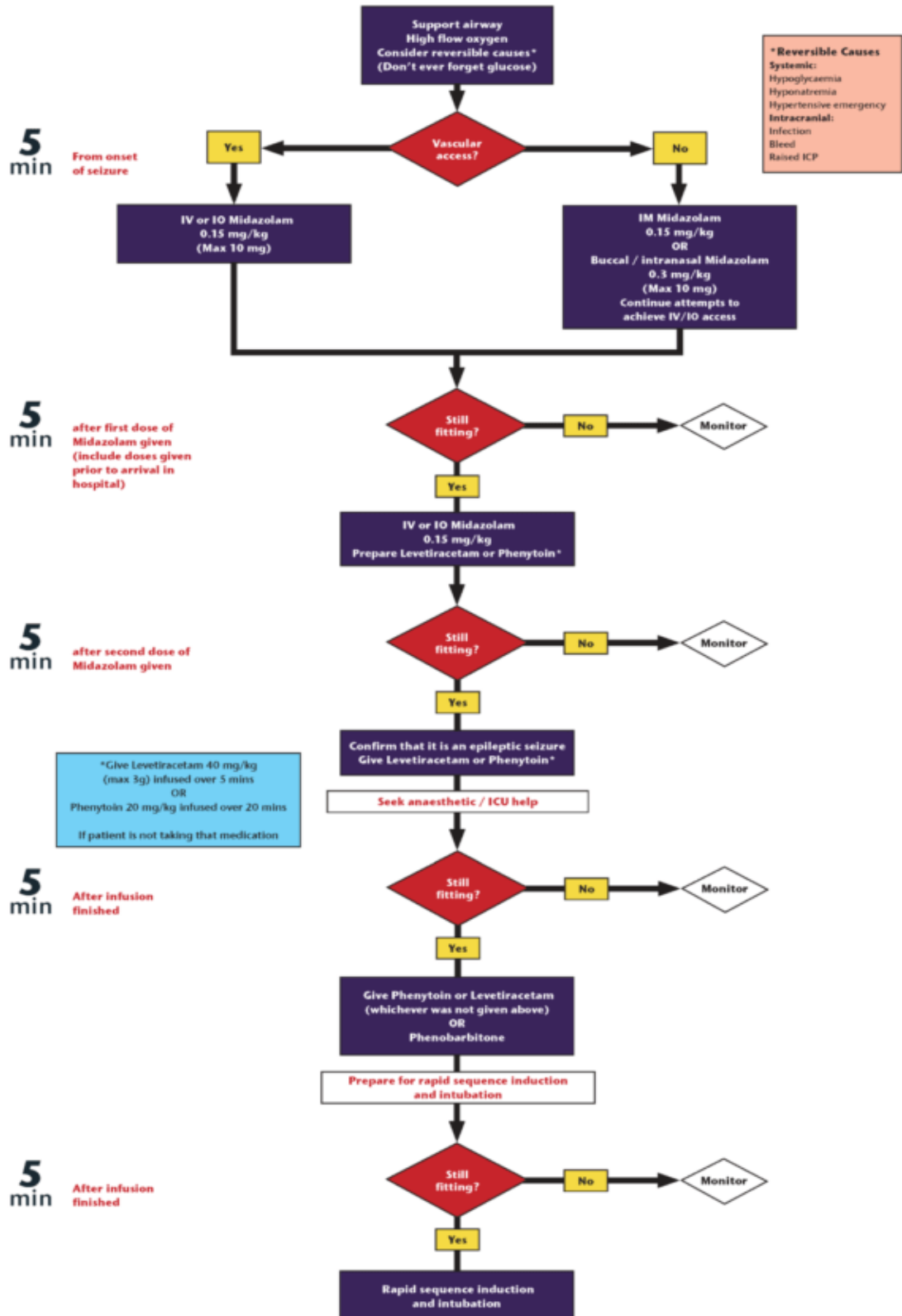
Consider urgent imaging – like CT scan (after discussion with the paediatric consultant) if:

- ❖ Focal onset seizures
- ❖ Prolonged post ictal period
- ❖ Prolonged seizure and /or status epilepticus
- ❖ Focal neurological deficit
- ❖ History of Todds paresis
- ❖ Preceding history of headaches/vomiting/change in behaviour

Acute Management:

- As per APLS protocol
- Also consider the relevance of the RCPCH Decreased Consciousness guideline if the child is not recovering as expected post seizure.
https://www.rcpch.ac.uk/sites/default/files/2019-04/RCPCH%20DeCon%20Poster_R9%20A1%20updated%20April%202019.pdf

Status epilepticus management



Consider Admission if:

Admission is at the discretion of the attending consultant but will include:

- Children aged <2years
- Any child with a focal seizure
- Any child / young person who has required treatment for status epilepticus
- The child / young person who is persistently 'post-ictal' (refer to DeCon guideline) i.e : GCS <15
- Illness requiring admission (causing acute symptomatic seizures) e.g. meningitis, encephalitis, head injury etc.
- Frightened child / young person, or anxious parents/carers
- Child or young person with existing neurological condition (including autism, developmental impairments not yet diagnosed, and cerebral palsy)
- Second seizure- If the child presents with suspected second epileptic seizure, discuss with attending Consultant for consideration of sleep EEG and commencing antiepileptic medication
- If seizures occur from sleep
- Possible infantile spasms

Discussion with Paediatric Consultants/ Arranging Follow up:

- All children with first suspected epileptic seizure/seizure without fever, must be discussed with a paediatrician (COW, or CDU consultant) – 9am to 10pm
- After 10pm, please discuss with paediatric ward/ED Registrar (#1392/1711) who can advise on admission, and then discuss with COW at morning handover, regarding further investigation/ follow-up.
- Complete the referral form if the child is being discharged from ED.

Discharge Advice:

Safety precaution/supervision

Will need presenting to ED if further seizure (before seen in First seizure clinic) as we may need to consider antiepileptics.

https://www.rcpch.ac.uk/sites/default/files/2020-07/following_a_first_seizure_without_fever_in_cyp_parent_a4_2019_v1.2.pdf

References:

1. Epilepsies in children, young people and adults
NICE guideline [NG217]Published: 27 April 2022
2. OUH first afebrile seizure guidelines 2015 /March 2022
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