TITLE- MIDAZOLAM (EPISTATUS) FOR TREATMENT OF SEIZURES IN PAEDIATRIC PATIENTS

TARGET AUDIENCE	Paediatric patients within primary and secondary care
PATIENT GROUP	All paediatric patients who require treatment of seizures

Clinical Guidelines Summary

Introduction

It is recommended that in children and young people who have had convulsive status epilepticus (tonic clonic seizures longer than 5 minutes, focal seizures longer than 10 minutes and absence status longer than 10-15 minutes) the prescription of buccal midazolam or another alternative emergency medication should be considered. They should also have an emergency care plan that gives guidance to parents, guardians or carers in the treatment of status epilepticus.

Indications for midazolam prescribing

Midazolam is indicated for the treatment of prolonged, convulsive seizures in children and young people aged from 3 months of age. Midazolam should be initiated in consultation with a paediatrician with an expertise in epilepsy.

The consensus view across the Scottish Paediatric Epilepsy managed clinical network is to prescribe the **Epistatus® 10mg/1mL oromucosal solution brand** for all children and young people requiring treatment of seizures with midazolam.

There are 5 preparations Epistatus® 10mg/1mL oromucosal solution:

- Epistatus 2.5 mg oromucosal solution pre-filled oral syringe
- Epistatus 5 mg oromucosal solution pre-filled oral syringe
- Epistatus 7.5 mg oromucosal solution pre-filled oral syringe
- Epistatus 10 mg oromucosal solution pre-filled oral syringe
- Epistatus 10mg/1mL oromucosal solution 5ml bottle*

Epistatus oral syringes are licensed for children from 3 months to less than 18 years, they are single use only and have no graduations therefore can only administer the full dose within the syringe.

Information for General Practitioners & Community Pharmacists

*Epistatus 10mg/1mL oromucosal solution 5ml bottle, is an unlicensed product but may be required occasionally due to the clinical circumstances.

Midazolam (Epistatus®) Oromucosal Liquid 10mg in 1 ml (5ml bottle) can be found by ticking the specials box on the vision GP prescribing systems.

The carer of a child or young person prescribed Epistatus must be trained by appropriately instructed staff when and how to administer Epistatus.

Epistatus Dosage

The recommended dose in Epistatus by the BNF for children is in the table below however, some sensitive or underweight children may be prescribed 0.3mg/kg, up to a maximum dose 10mg (1ml). The prescribed dosage of Epistatus should typically be administered by the buccal route

Age range	Dose	Labelled packaging colour
3 months to 11 months	2.5 mg (0.25 ml)	Yellow
1 year to 4 years	5 mg (0.5 ml)	Blue
5 years to 9 years	7.5 mg (0.75 ml)	Purple
10 years to 17 years	10 mg (1 ml)	Orange

A **second dose** will be considered on an individual basis in consultation with the consultant in charge of the child's care and documented in the child's individual care plan.

Quantity of Epistatus prescribed

Most children and young people requiring Epistatus should receive 2 pre-filled oral syringes or 2 bottles of oromucosal liquid, 1 for the home and another for nursery or school. In certain circumstances, some children and young people may require to keep more.

The requirement to hold emergency medication should be reviewed on an annual basis.

Side effects & adverse effects of Midazolam

Midazolam can cause drowsiness, respiratory depression and unsteadiness. See BNF for children for a more comprehensive list.

As with other benzodiazepines, alertness decreased; anxiety; ataxia; confusion; depression; dizziness; dysarthria; fatigue; headache; hypotension; mood altered; muscle weakness; nausea; tremor; vision disorders; withdrawal syndrome.

References/Evidence

1. https://bnfc.nice.org.uk/drugs/midazolam accessed 18/7/23
2. https://www.medicines.org.uk/emc/product/14280 accessed 18/7/23
3. SPEN |Scottish Paediatric Epilepsy Network Buccal Midazolam Guideline 2023

Appendices

1. **Governance information for Guidance document**

Lead Author(s):	Lynsay McAulay
Endorsing Body:	ADTC
Version Number:	V1
Approval date	**22/2/24**
Review Date:	22/2/27
Responsible Person (if different from lead author)	

CONSULTATION AND DISTRIBUTION RECORD	
Contributing Author / Authors	Dr J Andrew, Dr K Robb, Dr C Herbert & SN C McMillan
Consultation Process / Stakeholders:	

Distribution	

CHANGE RECORD			
Date	**Lead Author**	**Change**	**Version No.**
29/12/23	Lynsay McAulay	*Version 1 submitted to ADTC*	1
			2
			3
		.	4
			5

2.You can include additional appendices with complimentary information that doesn't fit into the main text of your guideline, but is crucial and supports its understanding.

e.g. supporting documents for implementation of guideline, patient information, specific monitoring requirements for secondary and primary care clinicians, dosing regimen/considerations according to weight and/or creatinine clearance