East Kent Prescribing Group

Recommendation for Buccal Midazolam for Patients with Epilepsy

GUIDANCE

The following two preparations are both recommended for use in East Kent:

- **Buccolam® (Midazolam Hydrochloride) prefilled oral syringes: 5mg in 1ml**
- **Epistatus® (Midazolam Maleate) prefilled oral syringe: 10mg in 1ml**

Epistatus remains the preparation preferred by KCHFT Special Epilepsy Services for adults. For patients under 18, Buccolam pre-filled syringes are preferred as they are licensed from 3 months of age. Epistatus is now licensed as below from 10 years to less than 18 years and can be considered as an alternative in this age group.

1. Buccal midazolam is not necessary for all patients with epilepsy and should only be prescribed for use in the community for children, young people and adults who have had a previous episode of prolonged or serial convulsive seizures where buccal midazolam is considered suitable.
2. Buccal midazolam should always be prescribed by **brand**.
3. The dose should always be prescribed in mg and ml.
4. Treatment should be initiated in conjunction with the patient's Epilepsy Specialist Nurse or Learning Disability nurse to ensure appropriate training is provided. Specialty teams:

The Children services:	**The adult epilepsy service:**
Diana Roberts Children's Specialist Epilepsy Nurse Kent Community Health NHS Foundation Trust Tel: 03001231553 Email: diana.roberts@nhs.net	Whitstable and Tankerton Hospital Monday to Friday, 9am to 5pm 01227 594628 Email: kentchft.epilepsynursing@nhs.net

5. If preparations other than the two recommended products are currently prescribed, treatment should be reviewed in conjunction with the patient's secondary care specialist and/or Specialist Nurse to ensure:
    a. - use is in line with the patient's Epilepsy Care Plan
    b. - the necessary training and education is provided for parents and careers
6. GPs should not switch patients from one brand to another unless a written request has been received from the patient's secondary care specialist or Specialist Nurse to ensure training and education has been provided and the Epilepsy Care Plan updated.
7. **All patients receiving buccal midazolam are reviewed to ensure the prescribed preparation corresponds with the patient's current Epilepsy Care Plan.**
8. This guidance will be reviewed in the event of a change in license status for buccal midazolam preparations.
9. Patients or their careers should be informed when medication is unlicensed or used off license and this should be recorded in the notes. Clear instructions should be given; otherwise the Patient Information Leaflet given at dispensing may be confusing. Written consent before starting treatment may be appropriate depending on practice policy.

Approved by: East Kent Prescribing Group *(Representing Ashford CCG, Canterbury and Coastal CCG, South Kent Coast CCG and Thanet CCG)*
Date: June 2018
Address: c/o *Canterbury and Coastal CCG, Ground Floor, Council Offices, Military Road, Canterbury, Kent,CT1 1YW*
Contact: T: 01227 791267 | E: accg.eastkentprescribing@nhs.net

Background

1. Buccal midazolam may be considered as an alternative to rectal diazepam for use in the community for children, young people and adults who have had a previous episode of prolonged or serial convulsive seizures.

2. It is important that patients requiring emergency medications have access to them, in order to improve quality of life and reduce unnecessary unscheduled admissions but it is also important that they are not overprescribed, particularly in groups unlikely to require them, due to the potential for adverse effects and the need for prudent use of NHS resources

3. Overuse of buccal midazolam or other rescue (emergency) benzodiazepines can lead to drug tolerance and adverse events, such as sedation and respiratory suppression. Over and potentially inappropriate prescribing of emergency benzodiazepines should not be used as a means to alleviate individual, parental or career's anxiety.

4. Historically, the main buccal midazolam preparation recommended by specialists in East Kent has been an unlicensed preparation: **Epistatus 5ml (four doses) supplied in a 30ml multi-dose bottle 10mg/ml.**

5. Evelina Children's Hospital have included in their formulary, Buccal midazolam for children aged 3 months to 18 years.

6. In addition to the above two preparations, there are a number of further products now available with different presentation and instructions for administration which can lead to confusion for patients and careers.

7. Although licensed products should always be used where possible, it would seem sensible for patients to continue with the current unlicensed treatment (Epistatus) where:
   - Epistatus is effective **and** where informed patient consent to use an unlicensed preparation has been given due to:
     - The lower volume required for administration - particularly important with regard to the circumstances when used.
     - Numbers of carers already trained in administration techniques with Epistatus
     - Length of experience with Epistatus
     - Flexible dosage options with the multi-dose preparation
     - The potential risks associated with switching midazolam preparations
     - The pending application for extended license for Epistatus.

8. The above guidance aims to support safe prescribing of buccal midazolam by GPs in line with recent MHRA and NPSA guidance. Table 1 sets out a comparison of the recommended products.

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Table 1: Comparison of recommended products

	Buccolam pre filled oral syringes	Epistatus 10mg in 1ml Oral pre-filled syringe
Patients aged 3 months to 10 years	**Licensed**	**Unlicensed** May be initiated and/or continued where the patient and/or career has been informed there is a licensed alternative.
Patients 10 years to <18 years	**Licensed**	**Licensed** Children and adolescents aged 10 to less than 18 years.
Adults	**Unlicensed**. May be initiated and/or continued where the patient and/or career has been informed this is an unlicensed product.	**Unlicensed** May be initiated and/or continued where the patient and/or career has been informed this is an unlicensed product.
Strength	**5mg/ml**	**10mg/ml**
Formulation	Pre-filled syringes - • 2.5mg in 0.5ml • 5mg in 1ml • 7.5mg in 1.5ml • 10mg in 2ml	Pre-filled syringe - • one single-use oromucosal syringe of 10 mg in 1 mL
Salt	Hydrochloride	Maleate
pH	2.9-3.7	5.0 – 5.5
Shelf life	18 months	14 months
Excipients	No preservatives, flavourings, colourants or ethanol.	Ethanol 197 mg/mL, Liquid maltitol qs to 1 mL (675 mg), Includes less than 1 mmol sodium (saccharin sodium and sodium hydroxide) per dose. Other excipients include Glycerol and Purified water. **Effects on Ketogenic diet:** Epistatus contains maltitol, calorific value 2.3kcal/g maltitol which equates to approximately 0.8kcal per single dose of Epistatus.
Cost	£81.00-£91.50 for 4 syringes. **NB 'Broken bulk' will be charged when less than 4 syringes are prescribed**	£45.76 for 1ml single syringe Drug tariff category C so controlled cost

References

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2. Prevention of Harm with Buccal Midazolam | Signal NPSA Feb 2012 http://www.nrls.npsa.nhs.uk/resources/type/signals/?entryid45=132975
3. Summary of Product Characteristics - BUCCOLAM 2.5 mg oromucosal solution. ViroPharma SPRL, first published 19/09/2011. Updated 01/10/2016 http://www.medicines.org.uk/EMC/medicine/25538/SPC/BUCCOLAM+10+mg+oromucosal+solution/
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