

Palliative Care Guideline: Management of Seizures/Epilepsy in Patients Unable to Swallow Oral Medication

Background

Patients may have established epilepsy for which they have been taking anticonvulsants orally for a long period of time. Other patients will develop seizures *de novo* as a result of their disease, either due to a primary brain tumour or due to metastases from a primary cancer elsewhere, most commonly breast, kidney, lung, colon and melanoma. Only around two thirds of metastatic brain disease will be visualised on a CT scan.

Patients may develop difficulties with swallow in advanced disease for two main reasons:

1. Neurological and cognitive problems. This is most likely to be seen in primary brain tumours and neurodegenerative conditions such as motor neurone disease (MND). This may be manifest before the patient is deemed to be approaching the last few days of life.
2. Patients who are entering the last few days of life may struggle with swallowing and tablet burden due to general weakness and reduced conscious level.

1. Management of new seizures in the terminal phase

- Midazolam 5-10mg SC/IM/buccal stat if seizure occurring.
- Start a syringe driver with 20-30mg/24 hours of midazolam.
- Use prn midazolam and titrate as necessary until seizure free.
- IM Midazolam is as effective as IV lorazepam in status epilepticus.
- If seizures persist, seek Specialist Palliative Care advice – a switch to phenobarbital may be necessary.

2. Management of previously well controlled epilepsy not related to current intracranial pathology in the terminal phase

This assumes the patient has been free of seizures for months to years and sedation as a side effect of medication is acceptable

- Stop oral anticonvulsants
- Start a syringe driver with 20-30mg/24 hours of midazolam.
- Titrate as necessary
- If it is desirable to avoid sedation seek Specialist Palliative Care advice with regard to other SC anticonvulsants e.g. lacosamide, levetiracetam (see below) or valproate

3. Management of patient on levetiracetam up to 1g/24 hours for seizures secondary to intracranial pathology

- As per section 2

4. Patient with brittle epilepsy or has needed rapid titration of levetiracetam to control seizures secondary to intracranial pathology

- If patient is deemed to be in the last few days of life midazolam as above may be appropriate. Otherwise consider levetiracetam subcutaneously in a syringe driver. Evidence is for a 1:1 conversion. A maximum of 2g will fit in a 24 hour syringe driver. Please note this has cost implications.
- Site reactions of blanching and erythema have been reported but do not appear to effect absorption.
- From clinical experience levetiracetam is compatible with hyoscine butylbromide, levomepromazine, methadone, metoclopramide, midazolam, morphine and oxycodone. Infusions should be diluted in 0.9% saline.

Additional Notes

Phenobarbital

- Give a stat dose of 100mg IM
- Start subcutaneous infusion via syringe driver with 100mg/24h and titrate up to 400mg/24h
- Phenobarbital should be diluted in 0.9% saline and never mixed with other drugs; it must be given via a separate saf-T.

Sodium valproate

- The oral to subcutaneous conversion ratio is 1:1.
- Usual dose range is 400-1800mg/24h diluted in water for injection

References

PCF7 Palliative Care Formulary Sixth Edition 2020 palliative drugs.com

Sutherland et al *Subcutaneous levetiracetam for the management of seizures at the end of life*. BMJ Supportive & Palliative Care <http://dx.doi.org/10.1136/bmjspcare-2016-001261>

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