PALCARE
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THE JIMMY S BILIMORIA FOUNDATION

PALLIATIVE CARE
GUIDELINES
FOR A HOME SETTING IN INDIA

SEIZURES

INTRODUCTION

Seizures (generalised or partial) occur in 10-15% of palliative care patients.

Causes

- CNS - primary tumours, metastases, cerebrovascular disease, epilepsy, haemorrhage, or radiation necrosis
- Biochemical abnormalities - hypoxia, hypoglycaemia, hyperglycaemia, hyponatremia, hypernatremia, hypocalcaemia, hypercalcemia, hypomagnesemia, uraemia, and hepatic failure
- Medications - ondansetron, tramadol, antipsychotics, and chemotherapeutic agents, either through their proconvulsant effect or by lowering the seizure threshold

ASSESSMENT

- Assessment must determine the cause of loss of consciousness or abnormal limb/facial movement, effectiveness of treatment and impact on quality of life for the patient and their family (***refer to the Guideline - Symptom Assessment***)
- Assessment should be done to exclude other causes of loss of consciousness or abnormal limb/facial movement. (e.g. vasovagal episode [syncope], postural hypotension, arrhythmia, hypoglycaemia, extrapyramidal side effects from dopamine antagonists, alcohol)
- Ask for history of epilepsy, previous secondary seizure, and cerebrovascular disease
- Enlist the medications the patient is on to look for drugs that can lower the seizure threshold
- Assess if the patient is experiencing withdrawal from benzodiazepines or alcohol, or weaning from steroids
- If the patient is already on anti-epileptic medications, check if there is a problem with the dose, frequency, compliance, drug interactions

MANAGEMENT

Recommendations

- Prophylactic anticonvulsant therapy in patients with brain tumours or metastases is not recommended

- For patients with reversible causes, one episode of seizure does not warrant long-term anticonvulsants
- For patients with irreversible causes long-term anticonvulsants are recommended only after the first seizure
- For patients with brain tumours (primary or metastatic), the commencement or increase in dose of steroids, such as dexamethasone, could be considered alongside long-term anticonvulsant treatment
- If patients require long-term anticonvulsants but are candidates for further chemotherapy, then institution of anti-epileptic medications which do not induce cytochrome P450 activity and thereby have little risk of interaction with the chemotherapeutic agents should be considered. Such medications include levetiracetam, gabapentin, lamotrigine, and pregabalin
- Avoid medications which can lower seizure threshold
- Phenytoin is no longer a first line drug for chronic seizure control in a palliative care setting, as it interacts with many drugs and is prone to cause side effects including sedation
- Consultation with a second palliative care specialist is mandatory before initiating Midazolam
- Setting of care should be discussed in the event of repeated seizures

Acute seizure management

- **Education - Advice to the family**

  - Remove sharp objects to ensure that patient does not get hurt
  - Do not attempt to restrain the patient
  - Do not try to force anything into the patient's mouth
  - When the seizure stops, turn the patient onto his/her side
  - Maintain airway by lifting the patient's chin
  - The patient will be sleepy for a while after the seizure
  - If the seizure does not stop in about 5-10 minutes or if another seizure occurs soon after the first, call for medical assistance
  - Reassure the patient and family that the seizures can be brought under control

- **Pharmacological measures**

  In acute setting, if seizures do not resolve within 5 minutes after the onset,

  - Inj. Lorazepam 4mg IV stat over 4 minutes (Lorazepam may be more beneficial than diazepam because it provides longer control of seizures and produces less cardio-respiratory depression)

or

- Inj. Midazolam 5mg S/C stat

- If seizures persist, then repeat dose after 10-20 minutes

If seizures persist, then

- Inj. Midazolam 20-30mg CSCI/24 hours

or

- Inj. Phenobarbital 100-200mg IM stat. followed if necessary, by 300-400mg by CSCI (using water as diluent) over 24 hours

If patient has known primary or secondary brain tumour,

- Inj. Dexamethasone 8-16mg/24 hours S/C or IV divided q12h (before 4.00pm) should be considered along with anticonvulsants

Chronic seizure management

- **Partial or secondary generalised seizures**

  - **Sodium Valproate**
    - Starting dose - 150-200mg m/r PO q12h, increase by 150 - 200 mg every 3 days
    - Usual effective dose - ≤ 1.5g/24 hours
    - Maximum daily dose - 2.5g/24 hours
  - **Carbamazepine**
    - Starting dose - 50-100mg PO q12h, increase by 50 - 100mg every 1 - 2 weeks (Use m/r products for doses ≥ 100mg)
    - Usual effective dose - ≤ 800mg/24 hours
    - Maximum daily dose - 2g
  - **Lamotrigine**
    - With enzyme-inducing anti-epileptic drugs, but without Sodium Valproate

      - Initial: 50mg PO OD for 2 weeks, then
      - 100mg/day divided q12h for 2 weeks
      - At week 5 and beyond, may increase by 100mg/day PO every 1-2 weeks to 300 - 500mg/day PO divided q12h
      - Lamotrigine XR: Start 25mg PO OD for 2 weeks, then 25mg PO OD for 2 weeks, then 50mg PO OD (week 5), 100mg PO OD (week 6), 150mg PO OD (week 7), to maintenance (200-250mg PO OD)

- With Sodium Valproate but without enzyme-inducing anti-epileptic drugs

    - Initial: 25mg PO OD A/D for 2 weeks, then
    - 25mg PO OD for 2 weeks
    - At week 5 and beyond, may increase by 25-50mg/day PO every 1-2 weeks to 100 - 400mg PO OD or divided q12h
    - Lamotrigine XR: Start 25mg PO A/D for 2 weeks, then 25mg PO OD for 2 weeks, then 50mg PO OD (week 5), 100mg PO OD (week 6), 150mg PO OD (week 7), to maintenance (200-250mg PO OD)

- Without enzyme inducing anti-epileptic drugs, or Sodium Valproate

    - Initial: 25mg PO OD for 2 weeks, then
    - 50mg PO OD for 2 weeks
    - At week 4 and beyond, may increase by 50mg/day PO every 1 - 2 weeks to 225 - 375mg PO OD or divided q12h
    - Lamotrigine XR: Start 25mg PO OD for 2 weeks, then 50mg PO OD for 2 weeks, then 100mg PO OD (week 5), 150mg PO OD (week 6), 200mg PO OD (week 7), to maintenance 300-400mg PO OD

➢ **Levetiracetam** can be considered when the first line treatments are not effective.

- Starting dose - 500mg m/r PO bd, increase by 250-500mg every 3 days
- Usual effective dose - ≤ 1.5g/24 hours (effective dose 1-3g)
- Maximum daily dose - 2.5g/24 hours (up to 3g)

Dying patient (may not be able to take oral medications)

- Lorazepam 0.5-1mg S/L or S/C q8h

OR

- Inj. Midazolam 5mg S/C, if required
- Inj. Midazolam 20-30mg CSCI/24 hrs can be used as maintenance therapy

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