PROTOCOL

Title: Acute Seizure (Status Epilepticus) Protocol for Pharmacological Management in Palliative Care Patients

Date Approved: March 20, 2003

Approved By: Clinical Practice Committee

A. PURPOSE:
To identify palliative persons at risk of a seizure and treat pharmacologically in the event of witnessed seizure activity (status epilepticus).

B. DEFINITION:
Acute seizure activity is a symptom of central nervous system irritation resulting in excessive and abnormal neuronal discharges. An acute seizure refers to > 5 minutes of (a) continuous seizures or (b) two or more discrete seizures between which there is incomplete recovery of consciousness. The onset of seizure activity is considered a palliative emergency that warrants immediate intervention and appropriate follow-up treatment (refer to management of chronic seizure guidelines).

C. GENERAL INFORMATION:

Patients identified to be at risk for a seizure need to be informed, along with family members/caregivers, of the seizure risk, what to expect in the event of a seizure and treatments that can be administered. A medication order should be obtained for stat dosages of anticonvulsant medication for emergency use in the event of acute seizure activity. Medications and equipment are to be stored with easy accessibility.

Palliative patients at risk for seizure activity:
- primary or metastatic cerebral tumors. Malignancies known to metastasize to the brain include: breast, lung, melanoma, as well as infiltrates from leukemias and lymphomas.
- leptomeningeal disease
- A pre-existing seizure disorder
- Other causes of seizure include: metabolic disturbances, infection, opioid neurotoxicity, drug withdrawal, intracerebral hemorrhage, encephalopathy, oxygen deprivation, paraneoplastic syndromes.
Acute Seizure (Status Epilepticus) Pharmacological Management in Palliative Patients

Appropriate medications for management of an acute seizure.

- **Midazolam**: benzodiazepine with rapid cerebral penetration (3-5 minutes) and a short half-life. Can be given subcutaneously or IM. Less erratic IM absorption than lorazepam or diazepam. Has been reported to be effectively used for status epilepticus via IV, SC, IM, intranasal, rectal and buccal routes. Dose is 0.15-0.3 mg/kg.

  **Appropriate medication order:**
  Midazolam 5 mg SC STAT for seizure > 5 minutes. May repeat q 20 minutes x3.

- **Lorazepam**: benzodiazepine with similar onset of action to Midazolam with a longer duration of action. Can be given SC, IM, IV, SL and slower onset of action than diazepam when given rectally. Parenteral solution must be kept refrigerated and protected from light. Dose is 0.05 mg/kg up to maximum of 8 mg/12 hr.

  **Appropriate medication order:**
  Lorazepam 2 mg SC STAT for seizure > 5 minutes. May repeat q 20 minutes x1.

- **Diazepam**: benzodiazepine with a fast onset of action and long half-life. Can be given IV, PR and has erratic IM/SC absorption, therefore not recommended. Dose is 0.2-0.5 mg/kg up to maximum 20 mg. Rectal use is with the parenteral solution administered with a disposable plastic syringe and a 6 cm plastic catheter, or commercially prepared rectal gel (Diastat). (Cost equivalency -parenteral solution $0.56 per ampule vs. $67.25 for Diastat gel)

  **Appropriate medication order:**
  Diazepam 10 mg per rectum STAT for seizure > 5 minutes. May repeat q 20 minutes x1.

**D. EQUIPMENT:**

As per guidelines for parenteral or rectal administration of medications.

**E. PROCEDURE:**

1. The physician in conjunction with team members will identify the palliative person at risk for seizures.
2. The person, family members and staff will be informed of the risk for seizure, signs of seizure activity and what treatments will be administered.
3. For persons at risk of a seizure, medical order will be written for stat doses of medication to be administered for seizure activity > 5 minutes.
4. Guidelines for care and management of seizure activity should be implemented as per facility/location guidelines.
5. In event of seizure >5 minutes, medications to be administered as ordered.
6. Physician to be contacted if seizure activity continues after medication administered as ordered.
7. When seizure activity has stopped, physician to be notified of seizure and for further management.
References


Ativan Drug Monograph CPS 2002.


Care Beyond Cure-A Pharmacotherapeutic Guide to Palliative Care: Canadian Society of Hospital Pharmacists (Canada), 2000.

Diastat Drug Monograph CPS 2002.


Lowenstein D., Bleck T., Macdonald R. It’s time to revise the definition of status epilepticus. Epilepsia 40:120-122, Citation 1999.

Midazolam-palliativedrugs.net/book Chapter 4.
