

PALLIATIVE CARE TIPS

Issue # 18 Myoclonus – Seizures - Hyperalgesia

Original contributor: Robin Fainsinger, MD, Clinical Director, Regional Palliative Care Program; Editor: Yoko Tarumi, MD, Palliative Care Program, Royal Alexandra Hospital (Revised and Re-issued December 2009)

Myoclonus: Intermittent, irregular, involuntary, jerking movements generally involving the limbs

1. Occurs more commonly in patients on higher doses of opioids or in the presence of renal failure.
2. Standard approach has been to prescribe benzodiazepines such as clonazepam.
3. Our recommended management is to look for reversible causes: -
 - a. Correct renal failure and dehydration.
 - b. Change the opioid and decrease the analgesic dose by 20 to 30 %.
 - c. If renal failure is irreversible, decrease the opioid dose and administration interval.
4. The management as above will generally resolve the problem. It is extremely unusual in our practice to require the use of benzodiazepines.

Seizures: Occurs in 25 to 30 % of patients with primary or secondary brain cancer.

Causes:

1. Brain and leptomeningeal cancer.
2. Infections
3. Metabolic or medication (e.g. opioids).
4. Untreated myoclonus can progress to seizures.

Treatment:

1. Prophylactic management generally recommended in patients who have had a seizure.
2. For active seizure: -
 - a. Lorazepam 2 mg sc.STAT }
 - b. Midazolam 5 mg sc STAT } repeat as necessary
 - c. Diazepam 10 mg (parenteral) per rectum or I.V. Stat }
3. Prophylactic management: -
 - a. Phenytoin 300 - 400 mg per day
 - b. If patient unable to swallow give Phenobarb 30 - 120 mg sc q8h (this can be very sedating)
4. Persistent seizures - continuous subcutaneous infusion of Midazolam (rarely required)

Hyperalgesia: This is a somewhat controversial term used to describe the paradoxical reaction of patients having increasing pain with increasing opioid doses. This is thought to be a manifestation of opioid toxicity due to opioid metabolites.

Management:

1. Ensure adequate hydration and renal function.
2. Change the opioid and decrease the equianalgesic dose by 20 to 30 %

For more detailed management refer to Alberta Health Services Regional Palliative Care Program Evidence-Based Care Management Tools (www.palliative.org):

1. **Acute Seizure Pharmacological Management in Palliative Patients**
2. **Chronic Seizure Pharmacological Management in Palliative Care**

REMEMBER: For referrals, questions, or telephone consultations call 496-1300 weekdays and weekends.

Palliative Care Tips are now available on our Website: www.palliative.org