

## MERCY HOSPICE AUCKLAND

### Guidelines for Sedation in Terminally Ill Patients

Terminal sedation is the intentional clinical practice of suppressing consciousness to control symptoms during the last days or hours of life.<sup>1</sup>

When there is no other means of relieving unendurable symptoms, sedation may be considered a humane clinical option.<sup>2</sup>

While any decision to provide sedation will be made in discussion and with informed consent of the patient and family, there may be times when the need to provide sedation for acute symptoms is a medical emergency.

Where a patient is not able to provide consent or indicate their wishes, a full discussion of the need for and the implications of sedation with the next of kin and/or family is appropriate.

In providing terminal sedation the principle of "double effect" is acknowledged and has been widely discussed in the palliative care literature. Legal precedent in the US & UK clearly differentiates terminal sedation from the practice of physician assisted suicide or slow euthanasia.<sup>3</sup>

#### Indications for terminal sedation

- Irreversible delirium
- Intractable & severe pain
- Severe dyspnoea
- Refractory nausea & vomiting
- Acute haemorrhage
- Intractable emotional distress

The indication for sedation for intractable emotional distress is less clear than for control of physical symptoms. For this indication non-drug options, a second opinion and psychiatric, psychological and/or pastoral support should be sought before considering sedation. Similarly a patient or family request for sedation in the absence of intractable symptoms requires discussion and consideration of other measures that may offer relief.

#### Medications used for sedation

**Midazolam** is first line treatment.<sup>2</sup> It is a short acting potent Benzodiazepine, easy to titrate and compatible with most other drugs used in terminal illness. There is familiarity with its use in palliative care practice

**Clonazepam** is a long acting Benzodiazepine and less easy to titrate than Midazolam. It has a long duration of action it can be used once daily by s/c injection or oral drops.<sup>4</sup>

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<sup>1</sup> Cherny NI, Portenoy RK. Sedation in the management of refractory symptoms: guidelines for evaluation and treatment. J Palliat Care 1994; 10:31 - 8

<sup>2</sup> Macleod AD. Sedation in terminally ill patients. New Ethicals Journal 2002 (Sept): 37 - 41

<sup>3</sup> Quill TE, Byock IR. Responding to intractable terminal suffering: the role of terminal sedation and voluntary refusal of food and fluids. Ann Intern Med 2000; 132: 408 - 14

<sup>4</sup> Guidelines for medical practitioners using sections 110 & 110A of the Mental Health (Compulsory assessment and Treatment) Act 1992. Ministry of Health Wellington 2001

**Levomepromazine** (Nozinan) is a sedative antipsychotic. It may be appropriate for sedation in irreversible delirium.<sup>5</sup>

[NB Delirium per se is best treated with non-sedating anti-psychotic agents unless a patient remains agitated and at physical risk to self or others when a sedative anti-psychotic or additional sedative medication may be required.

See separate guidelines for the treatment of delirium]

**Phenobarbitone** is a long acting barbiturate. It is indicated as second or third line treatment when one or more of the above medications are inadequate.<sup>6 7</sup>

NB: Where there is uncertainty about adequacy of absorption of SC medications, (E.g. Peripheral vascular shutdown or oedema), IV administration of sedative drugs may be required. Midazolam & Phenobarbitone can be administered IV using the same doses as for SC administration. IV Boluses of Phenobarbitone should be diluted and administered over 30 minutes

**If the above are not adequate advice of an anaesthetist should be sought.**

#### **Dosages of Medications used for Terminal Sedation \***

Drug	Initial dose	Usual Maintenance dose (continuous s/c infusion)
Midazolam	2.5 – 5 mg s/c or IV stat Repeat every 10 – 15 mins till patient settled	30 – 100 mg per 24 hrs
Clonazepam	2 mg s/c or po stat Repeat every 30mins Till patient settled	2.5 – 10 mg per 24 hrs
Levomepromazine	12.5 – 25 mg s/c stat	25 – 250 mg per 24 hrs
Phenobarbitone **	200 mg s/c or IV stat Repeat every 10 – 15 mins till patient settled	1200 mg per 24 hrs

Dosage should be increased by 30% every hour until sedation is achieved. Once desired level of sedation is achieved maintain infusion at that level. If patient rouses and symptoms return increase dosage by 30% per hour again until sedation is achieved. The dosage ranges are representative. Individual patients may require higher or lower doses to achieve the desired level of sedation.

Previous doses of opioids and other symptom relief medication should be continued.

NB Opioids per se or increased doses of opioids are not indicated for sedation.

\*\* Phenobarbitone – s/c via syringe driver - dilute with water for injection and use in separate syringe driver  
- IV - dilute in 10 ml water for injection or normal saline & infuse over 30 minutes

\* Adapted from refs 2-7

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<sup>5</sup> Levomepromazine (methotrimeprazine) and the last 48 hours. O'Neill J, Fountain A. Hospital Medicine 1999; 60 (Reprint)

<sup>6</sup> Truog R, Berde CB, Mitchell C, Grier H. Barbiturates in the care of the terminally ill. N Engl J Med 1992;327: 1678 - 1682

<sup>7</sup> Stirling LC, Kurowska A, & Tookman A. The use of Phenobarbitone in the management of agitation & seizures at the end of life. J Pain & Symptom Management 1999; 17:363 - 368