

PCF Guidelines: Palliative sedation in the imminently dying

Palliative sedation is the intentional drug-induced reduction of consciousness in order to relieve an *intolerable refractory symptom*. The commonest indications for palliative sedation are delirium and terminal breathlessness.

Palliative sedation is generally restricted to those who are imminently and irreversibly dying, e.g. progressive physical deterioration over several weeks, leading to:

- physical wasting and profound weakness → bedbound
- little or no oral intake of food and fluid.
- increasing drowsiness for much of the day → coma.

In addition, the patient is likely to have a limited attention span (→ disorientation) and may have developed delirium.

If the patient is rational, the drug of choice is midazolam (or other benzodiazepine).
If an agitated delirium, prescribe an antipsychotic (e.g. haloperidol) ± midazolam.
If necessary, replace haloperidol with levomepromazine (much more sedative)
If levomepromazine + midazolam fail to relieve, replace with phenobarbital alone.

As always, prevention is better than cure:

- prophylactic psychological intervention
- recognize and treat early delirium.

Note:

- mild delirium is not always easy to detect
- the use of midazolam alone may precipitate delirium
- if in doubt, treat with both an antipsychotic and midazolam.

Drug treatment should be proportionate to the circumstances of the individual patient and the dose monitored carefully. Sedation should be seen as a continuum, with p.r.n. sedation at one end and deep sedation at the other (Figure). Sometimes respite deep sedation for 1–2 days is sufficient. Abrupt deep sedation is rarely necessary, e.g. sudden massive arterial haemorrhage.

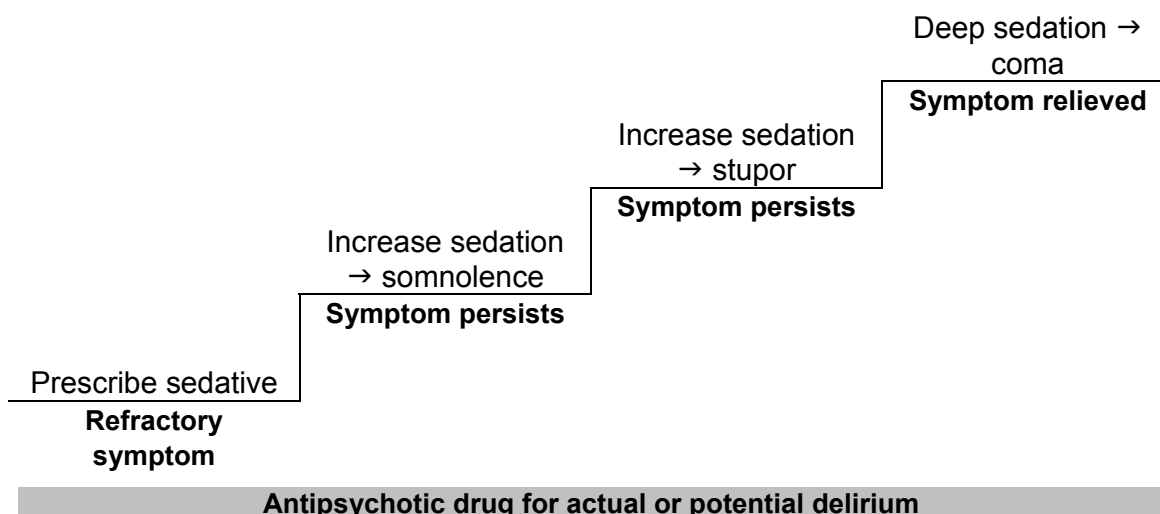


Figure Progressive and proportionate treatment for an intolerable refractory symptom in the imminently dying.

First-line drug (a benzodiazepine)

Midazolam has anxiolytic, anti-epileptic and muscle relaxant properties, and can be administered SC or IV either in single doses or by CSCI:

- start with 5–10mg stat and q1h p.r.n.
- if necessary, increase progressively to 20mg SC/IV stat
- maintain with CSCI 30–120mg/24h.

Benzodiazepine treatment as monotherapy for delirium is generally reserved for delirium caused by withdrawal of alcohol or sedative-hypnotics.

Second-line drugs (antipsychotics for delirium)

Haloperidol

- start with 5–10mg q1h p.r.n. (2.5–5mg q4h in the elderly)
- if necessary, increase progressively to 10mg IV stat
- maintain with CIVI/CSCI 10–20mg/24h.

Levomepromazine

Generally given only if it is intended to reduce a patient's level of consciousness:

- start with 25mg SC stat and q1h p.r.n. (12.5mg in the elderly)
- if necessary, titrate dose according to response
- maintain with 50–300mg/24h CSCI

Although high-dose levomepromazine ($\geq 100\text{mg}/24\text{h}$) is generally best given by CSCI, smaller doses can be conveniently given as a SC bolus o.n.–b.d., and p.r.n.

If levomepromazine not available, use chlorpromazine, but doses generally need to be higher (e.g. double those of levomepromazine).

Third-line drugs

Phenobarbital

Because of the irritant nature of the injection (and the volume after dilution), stat doses are generally given IV, but can be followed by CSCI:

- dilute 200mg (in 1ml ampoule) to 10ml with WFI
- start with 100–200mg IV stat and q1h p.r.n.
- maintain with 600–1200mg/24h CSCI
- if necessary, increase the dose to 2400mg/24h.

Propofol

Some centres use propofol instead of phenobarbital (see monograph in the Palliative Care Formulary).