Guidelines for the management of procedure-related pain

1. Palliative care patients may experience pain whilst undergoing a number of procedures:

- position changes
- wound dressing changes
- venous cannulation
- urethral catheterisation
- aspiration or drainage of the chest/abdomen
- nasogastric tube insertion
- central line insertion/removal
- investigations, e.g. MRI scan
- treatments, e.g. radiotherapy
- epidural/intrathecal line insertion/removal.

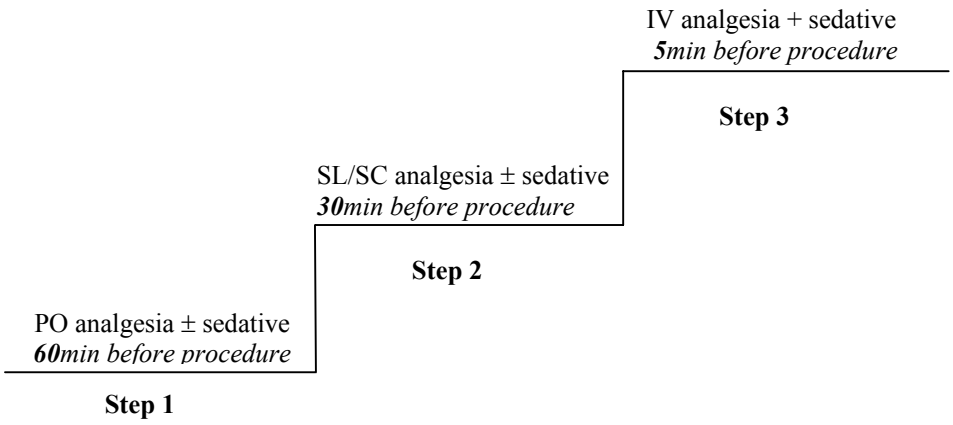
2. The goal is adequate pain relief without undesirable effects. What measures are most appropriate depend on the anticipated pain severity, procedure duration, current opioid use, and a patient's past personal experience. Thus, severe procedure-related pain may necessitate parenteral analgesia and sedation as first-line therapy.

3. Always include non-drug approaches:
   - *explore* past experiences of procedure-related pain, identify what was helpful or unhelpful, and clarify present concerns
   - *explain* the procedure thoroughly before starting
   - *assure* that you will stop immediately if the patient asks you to
   - *place* in the most comfortable position
   - *distract and relax*, e.g. through talking, music, hypnosis and other relaxation techniques.

4. Use a local anaesthetic when a cannula, urinary catheter or tube is inserted transdermally e.g.
   - EMLA cream for venous cannulation *(if needle phobic or if requested; wait **60**min)*
   - lidocaine (lignocaine) gel for urethral catheterisation *(always; wait **5**min)*
   - lidocaine (lignocaine) tissue infiltration for chest aspiration *(always; wait **5**min).*

5. Consider nitrous oxide-oxygen (Entonox) inhalation if the procedure is short and the patient is able to use the mask or mouthpiece effectively.

6. Give analgesia from the appropriate step of the ladder.[a]



a. general anaesthetic approaches are beyond the scope of these guidelines.

Examples of analgesia for procedure-related pain

Step 1: If anticipating mild to moderate pain
Give 60min before the procedure
PO morphine: give the patient's usual rescue dose for breakthrough pain.
If necessary, combine with PO diazepam 5mg, SL lorazepam 500–1000microgram, or an alternative sedative.

Step 2: If anticipating moderate to severe pain
Give 30min before procedure
SC morphine 50% or SC diamorphine 33% of the patient's usual PO morphine rescue dose.
If necessary, combine with SL/SC midazolam 2.5–5mg, SL lorazepam 500–1000microgram, or an alternative sedative.

Step 3: If anticipating severe to excruciating pain
Give 5min before procedure.
IV morphine 50% or IV diamorphine 33% of the patient's usual PO morphine rescue dose *or*
IV Ketamine 0.5-1mg/kg (typically 25–50mg)
combined with IV midazolam 2.5–5mg or an alternative sedative.

Alternatives to SC/IV morphine/diamorphine
Fentanyl citrate (OTFC) 200microgram or more transmucosally *or*
Alfentanil 250–500microgram SL (*from ampoule for injection*) *or* SC/IV
Fentanyl 50–100microgram SL (*from ampoule for injection*) *or* SC/IV
Sufentanil 12.5–25microgram SL (*from ampoule for injection) or* SC/IV *(not UK*)

7. If pain relief inadequate, give a repeat dose and wait again. If still inadequate, move to the next step.

8. If a sedative or sedative analgesic is used, monitor the patient to ensure that the airway remains patent, and consider intervention if the patient becomes cyanosed because of severely depressed respiration, e.g. rate ≤8 per min.

9. An opioid antagonist (e.g. naloxone) and a benzodiazepine antagonist (e.g. flumazenil) should be available in case of need. To prevent the complete reversal of any background regular opioid analgesic therapy, use naloxone *20–100micrograms* IV, repeated every 2min until the respiratory rate and cyanosis have improved.

10. If the procedure is to be repeated, give analgesia based on previous experience, e.g. drugs used and the patient's comments.