Last days of life

Introduction

When all reversible causes for the patient's deterioration have been considered, the multi-disciplinary team agrees the patient is dying and changes the goals of care.

Reversible causes to consider include:

• dehydration	• infection	• opioid toxicity
• renal impairment	• hypercalcaemia	• delirium

Clinical signs may include:

Patient is bedbound	Increasingly drowsy or semicomatose
Only able to take sips of fluid	Difficulty swallowing tablets

Management of a dying patient and their family

Plan and document care; consider using a care pathway or checklist.

Team

- Discuss prognosis (patient is dying), goals of care (maintaining comfort) and preferred place of death with the patient and/or family.
- If discharge home is possible, prompt and careful planning are needed. Contact GP, district nurse and occupational therapist urgently.

Medical staff

- Clarify resuscitation status; check DNA CPR form has been completed. (See: national policy)
  - Reassure the patient and family that full supportive care will continue.
- Discontinue inappropriate interventions (blood tests, IV fluids and medication, vital signs monitoring, frequent blood sugar tests).
- Medication – review at least once daily.
  - Stop any treatment not needed for symptom control.
  - Choose an appropriate route. If able to swallow, consider liquid formulations otherwise change to the subcutaneous or rectal route.
  - Consider need for a SC infusion of medication via a syringe pump.
  - Anticipatory prescribing of as required medication in advance for common symptoms.
- Hydration:
  - Discontinue tube feeding/ fluids if respiratory secretions are present, if there is risk of aspiration due to reduced conscious level, or at the patient's request.
  - Over-hydration contributes to distressing respiratory secretions.
    Artificial fluids are usually not appropriate, but if indicated can be given subcutaneously overnight. (See: Subcutaneous fluids)

Nursing staff

- Comfort nursing care (pressure relieving mattress, reposition for comfort only), eye care, mouth care (sips of fluid, oral gel), bladder and bowel care.
- Explain to the family why the nursing and medical care has been altered and what changes to expect in the patient's condition. (See leaflet: What happens when someone is dying)
- Ward team; record arrangements for contacting the family when the patient deteriorates or dies.
  Community team; ensure the family/ carers know who to contact when the patient dies.
- Consider emotional, spiritual/ religious, legal and family needs including those of children.
- Identify those at increased risk in bereavement and seek additional support.
  - Previous multiple losses or recent bereavement
  - Ambivalent or dependent relationship
  - Living alone and lacking a support network
  - Mental illness, drug or alcohol dependency
  - Dependent children (See: Bereavement on website)

Symptom Control in the last days of life

Anticipatory prescribing

All patients should have as required medication for symptom control available.

- **Opioid analgesic** SC, hourly; dose depends on patient, clinical problem and previous opioid use.
  - 1/6th of 24 hour dose of any regular opioid.
  - If not on a regular opioid, morphine SC 2mg or diamorphine SC 2mg.
- **Anxiolytic sedative**: midazolam SC 2-5mg, hourly.
- **Anti-secretory** medication: hyoscine butylbromide (Buscopan) SC 20mg, hourly.
- **Anti-emetic**: haloperidol SC 0.5mg, 12 hourly or levomepromazine SC 2.5-5mg, 12 hourly.

Pain

- Paracetamol or diclofenac (as liquid/ dispersible or rectally).
  NSAID benefits may outweigh risks in a dying patient; can help bone, joint, pressure sore, inflammatory pain.

Convert any regular oral morphine or oxycodone to a 24 hour, SC infusion		
eg. oral morphine 30mg	= SC morphine 15mg	= SC diamorphine 10mg
eg. oral oxycodone 15mg	= SC morphine 15mg	= SC oxycodone 7-8 mg

- For opioid dose conversions, see: Choosing & Changing Opioids and/ or seek advice.
- Fentanyl patches should be continued in dying patients. (See: Fentanyl patches)
- For patient with stage 4-5 chronic kidney disease, see: Last days of life (renal) guideline.
- Breakthrough analgesia, should be prescribed hourly as required:
  - 1/6th of 24 hour dose of any regular opioid orally and subcutaneously.
  - If not on any regular opioid, prescribe morphine SC 2mg or diamorphine SC 2mg.

Agitation / delirium

Anxiety/ distress	midazolam SC 2-5mg, hourly, as required	
Confusion/ delirium	haloperidol SC 2mg, once or twice daily	
Established terminal delirium/ distress	1st line midazolam SC 20-30mg over 24 hours in a syringe pump + midazolam SC 5mg hourly, as required OR regular rectal diazepam 5-10mg, 6-8 hourly.	2nd line midazolam SC 40-80mg over 24 hours in a syringe pump + levomepromazine SC 12.5-25mg, 6-12 hourly, as required. Stop haloperidol.

Nausea/ vomiting (see: Nausea / Vomiting)

- If already controlled with an oral anti-emetic, use the same drug as a SC infusion.
- Treat new nausea/ vomiting with a long acting anti-emetic given by SC injection or give a suitable antiemetic as a SC infusion in a syringe pump.

Long acting anti-emetics: haloperidol SC 1mg 12 hourly or 2mg once daily.
levomepromazine SC 2.5mg 12 hourly or 5mg once daily.

- Doses of antiemetics for use in a SC infusion - See: Subcutaneous medication.
- Persistent vomiting: an NG tube, if tolerated, may be better than medication.

Other relevant guidelines

- Subcutaneous medication (prescribing advice and drug compatibility tables)
- Choosing & changing opioids • Subcutaneous fluids • Mouth Care • Levomepromazine
- End-of-life care in non-cancer illnesses: Renal disease, Liver disease, Heart disease - see website

Breathlessness

- Oxygen is only useful if hypoxic; nasal prongs are better tolerated than a mask.
- A fan or position change can help.

Intermittent breathlessness/ distress	midazolam SC 2-5mg hourly, as required &/ or lorazepam sublingual 0.5mg, 4-6 hourly, as required. Opioid (2 hourly as required) • regular opioid → 25% of the 4 hourly breakthrough analgesia dose of opioid; titrate dose. • no opioid → morphine SC 2mg or diamorphine SC 2mg.
Persistent breathlessness	midazolam SC 5-20mg + morphine SC 5-10mg or diamorphine SC 5-10mg (if no previous opioid use) via a syringe pump over 24 hours.

Respiratory tract secretions

- Avoid fluid overload; assess fluid balance, stop IV/SC fluids and tube feeding. Changing the patient's position may help.
- Intermittent SC injections often work well or medication can be given as a SC infusion.

1st line: hyoscine butylbromide SC 20mg, hourly as required (up to 120mg/ 24hours).
2nd line: glycopyrronium bromide SC 200micrograms, 6-8 hourly as required.
3rd line: hyoscine hydrobromide SC 400micrograms, 2 hourly as required.

Acute terminal events (see: Emergencies in palliative care)

Dying patients occasionally develop acute distress; can be due to:

- Bleeding: haemorrhage from GI or respiratory tract, or external tumour.
- Acute pain: bleeding into a solid tumour, fracture, ruptured organ.
- Acute respiratory distress: pulmonary embolism, retained secretions.

Management

- Prescribe sedation in advance if patient at risk; document and discuss anticipatory care plan with family and key professionals.
- Give midazolam IM 5-10mg into deltoid muscle or diazepam rectal solution 10mg PR (can be given via stoma) or sedate using IV midazolam if IV access available.
- If patient is in pain or has continued respiratory distress despite midazolam, give additional morphine SC or diamorphine SC as required.

Practice points

- Opioid analgesics should not be used to sedate dying patients.
- Sudden increase in pain or agitation; exclude urinary retention, constipation; other reversible causes.
- Subcutaneous infusions provide maintenance treatment only. Additional doses of medication by SC injection will be needed if the patient's symptoms are not controlled.
- Midazolam is titrated in 5-10 mg steps. Up to 5mg can be given in a single SC injection (1ml). Single SC doses can last 2-4 hours. Useful as an anticonvulsant.
- Rectal diazepam solution; longer acting alternative to midazolam given PR or via a stoma.
- Terminal secretions can be controlled in about 60% of cases; fluid overload, aspiration and respiratory infection increase incidence.
- Consider a nicotine replacement patch for heavy smokers.

Resources

Professional

NHS End of life care Programme http://www.endoflifecare.nhs.uk/eolc
Liverpool Integrated Care Pathway http://www.mcpcil.org.uk/liverpool_care_pathway

Patient

Patient leaflet on website: What happens when someone is dying.

Further reading: http://www.palliativecareguidelines.scot.nhs.uk