5. Opioid adverse effects in palliative care

Adverse effect	Management
Constipation	Regular laxative. Use stimulant (eg. senna) plus laxative with softening action (eg. docusate or lactulose)
Nausea / vomiting	*If gastric stasis* (large volume vomiting): metoclopramide *In other cases:* haloperidol▲ 2.5mg SC △ or 1.5 - 3mg PO at night
Dry mouth	Local measures (eg. water spray, iced drinks)
Sedation **Confusion** **Nightmares** **Hallucinations** **Urinary retention** **Myoclonus**	Sedation is usually mild and self-limiting (2-5 days). First exclude other causes (eg. drugs, hypercalcaemia) *If due to opioid:* reduce opioid dose, but if pain returns contact pain or palliative care specialist for advice on alternative opioids. **NB. Opioids should not be used for sedating or 'settling' a patient**
Fear of opioid	Information: psychological dependence, respiratory depression and tolerance are rare. Correctly used, opioids do not hasten death
Respiratory depression or severe sedation	*If respiratory rate less than 8/min and SaO_2 = <90%:* Rreduce opioid dose. Give oxygen by face mask. Insert IV access cannula Dilute 400microg naloxone in 10ml normal saline Give naloxone IV: titrate 40 microg. steps to produce improvement without reversing analgesia. Continue with infusion (see BNF). If unsure, contact pain or palliative care specialist for advice.
Opioid withdrawal (shivery, colic, diarrhoea)	Restart opioid, then reduce dose in 30% steps over at least 5 days. If withdrawing from transdermal fentanyl, contact pain or palliative care specialist

If unpleasant adverse effects persist for >48 hours, (or you are unsure), ask for help

6. Is the pain persisting?

- **Is the compliance poor?** Check if drug instructions are clear and understandable
- **Is this a new pain?** Work back through Part 1
- **Is there unresolved fear, anger or depression?** Exclude depression and anxiety state and check the support available
- **Is there a different way of administering the analgesic?** Check parts 1 & 3

If pain is still >50% of starting level (or you are unsure) contact your local palliative care or pain team

Key to abbreviations

NSAID = non steroidal anti-inflammatory drug
TENS = transcutaneous electrical nerve stimulation
$S_a 0_2$ = oxygen saturation by pulse oximetry
nr = not recommended
▲ = unlicensed use △ = unlicensed route
❍ = not in Newcastle Formulary

SC = subcutaneous.
IV = intravenous
IM = intramuscular
PR = rectal
CR = controlled release
IR = immediate release

tabs = tablets
caps = capsules
soln = solution

Advice for Doctors and Nurses on
Managing Pain in Adult Palliative Care

(February 2002)

1. Diagnosing and treating pain

Help the patient to manage any anxiety, fear, anger or low mood

Is the pain related to movement?

- **Slightest passive movement?** *Exclude a fracture- see Part 2 overleaf*
- **Pain on stressing bone on examination?** *Consider bone metastases:*
  Try a NSAID (eg, ibuprofen or diclofenac). If no improvement after 48 hours, start and titrate a strong opioid. If bone metastases are confirmed, arrange radiotherapy.
- **Active movement only?** *Exclude muscle spasm or strain:*
  If trigger point present- refer to pain or palliative care team for TENS or local injection
  Muscle strain: local cooling or refer for TENS
- **Related to joints, infiltration or distension?** NSAID *or* corticosteroids (not both).
- **During a procedure or during transfer?** Change technique or method of moving.
  Consider: 4-hourly dose of usual analgesic *or* Entonox

Is the pain present at rest?

- **Inspiration?** *Exclude pleurisy or rib metastases.* Treat infection if present.
  Consider a NSAID. If pain persists refer to pain or palliative care team.
- **Periodic (regular pain every few minutes)?** *Colic from bowel, bladder, or ureter:*
  Hyoscine butylbromide (Buscopan) 10-20mg SC△ or IV (ineffective orally)
  Bladder colic: consider instilling 20mls 0.25% bupivacaine for 30 mins. 8-12 hourly
- **Related to eating?** *Exclude oral, pharyngeal, gastric or duodenal problems*
  Mucosal pain: treat infection if present. Consider benzydamine (Difflam) mouthwash, or try benzocaine lozenges. If this is chemotherapy mucositis: see local policy.
  Gastritis: use H_2 blocker (cimetidine, ranitidine), or proton pump inhibitor (lansoprazole or omeprazole).
- **Skin changes?** *Exclude pressure damage or ulcer.* If ulcer present: contact local wound viability nurse for advice. Contact pain or palliative care team if pain persists
- **Unpleasant sensory changes at rest?** *Consider neuropathic pain:*
  Start and titrate a strong opioid. Add amitriptyline 10mg at night, titrated up to 50mg if tolerated. If no better, add gabapentin 100mg 1st day, 100mg 12-hourly 2nd day, 100mg 8-hourly 3rd day, then titrate. Caution in renal impairment.
- **In an area supplied by a peripheral nerve?** *Consider nerve compression:*
  Start and titrate a strong opioid. Exclude skeletal instability (eg. vertebral collapse). Consider dexamethasone 8mg daily, reducing to lowest dose that will control pain.

Is the pain very severe? *See Part 2 overleaf*

2. Severe pain in palliative care

Immediate

Exclude acute crisis eg. myocardial infarction, pulmonary embolus, cord compression
For fracture: immobilise. *For colic:* hyoscine butylbromide 20mg SC△, IV or IM.
For agitation that prevents assessment: ask for specialist help.
For severe pain at rest: diamorphine or morphine IV or IM (5mg or equivalent of 4-hourly dose). Repeat every 20mins SC if needed up to 3 doses

Within 1 hr

If pathological fracture: decide if patient is able to travel for X-ray.
If still in pain: repeat above dose of diamorphine. Check Part 1 on previous page

Within 4 hrs

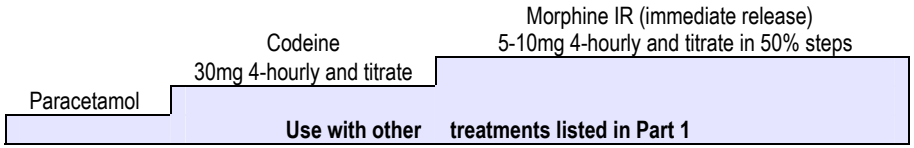
If still in pain: convert to morphine PO or diamorphine SC and increase dose by 50%.
Review in 2 hours: if still in pain contact pain or palliative care specialist
If treatment is to be delayed for 6 hours or more: ask advice. Consider diamorphine equivalent (see opposite), plus lorazepam▲ 500microg. sublingual△ or PO.

Within 24 hrs

Ensure a good night's sleep with sedatives if necessary
If pain is localised (eg. fracture): consider referral for spinal analgesia or nerve block.

3. Using opioids in palliative care

WHO analgesic staircase *To be used in conjunction with treatments in Part 1*



Choice of opioid

If poor renal function: ask pain / PC specialist for help. Use morphine / diamorphine with care
If poor hepatic function: continue on codeine, morphine or diamorphine.
If non-oral route needed: use diamorphine SC or fentanyl
(NB. Transdermal fentanyl is not suitable for titration or in unstable pain).
Use IR preparation for titration and breakthrough, CR preparation for maintenance

Doses

See conversion table in Part 4 opposite for equivalents.
Typical starting dose: *if previously on non-opioid* = 2.5 – 5mg oral IR morphine 4-hourly
if previously on weak opioid = 5 – 10mg oral IR morphine 4-hourly
Typical oral morphine dose range = 30 - 600mg 24 hour total dose (median 120mg)

Titration

Increase dose by 50% every other day (can be increased daily if urgent control is needed)
NB. Adjust transdermal fentanyl slowly, under specialist advice

For breakthrough pain ('as required' or 'PRN')

- Divide 24 hour dose by 6 to give the required breakthrough dose
  NB. for breakthrough pain whilst on fentanyl call pain or palliative care specialist
- Use IR opioid 1-hourly PRN- ask for help if pain is no better after 3 consecutive doses

If pain is still >50% of starting level (or you are unsure), ask for help

4. Opioid conversions in palliative care

Current opioid and route ➤	Oral codeine	Oral dihydrocodeine	Oral morphine	Oral oxycodone°	Diamorphine sc infusion	Oral hydromorphone	Recommended first line opioid and route ➤
		nr	x 10	x 20	x 30	nr	Oral codeine
	÷ 10	÷ 5		x 2	x 3	x 7.5	Oral morphine
	÷ 30	÷ 15	÷ 3	÷ 1.5		x 2.5	Diamorphine infusion

3 step conversion

1. Find the current opioid and route at the TOP of the table
2. Find the new opioid and route you are changing to on the RIGHT of the table
3. Where the lines cross, read the conversion factor

x multiply current opioid by this factor

÷ divide current opioid by this factor

nr = not recommended

Example: Oral morphine to diamorphine infusion: conversion factor of morphine is (÷ 3)
So, 60mg/24 hours oral morphine ≡ 20mg /24 hours SC diamorphine

- Alternative opioids are available- contact the pain or palliative care specialist.
- The following are **not recommended** for routine use in palliative care: dextromoramide, buprenorphine, pethidine, and methadone.
- For fentanyl use manufacturer's tables. As quick check use this conversion:
  oral morphine mg/day ÷ 3 ≈ fentanyl microg/hour
  [ie. morphine 75mg/day ≈ fentanyl 25microg/hour.]

Caution on fentanyl:
1) This is an opioid whose potency is easily underestimated
2) The effects of transdermal fentanyl can continue for 30 hours after removing patch

- These conversions are approximations, and the patient must be observed for:
  -opioid toxicity if moving to a more potent opioid or a different strong opioid.
  -opioid withdrawal on stopping, moving to a weaker opioid or changing to a different strong opioid.
- More potent opioids or routes DO NOT provide greater efficacy. eg. a pain that is not responsive to titrated oral morphine, will not respond to injectable diamorphine either, even though this route and drug are 3 times as potent. An alternative route may be needed to ensure adequate absorption.

If pain is still >50% of starting level (or you are unsure), ask for help

Information for Doctors and Nurses: Seeking Help and Advice on Palliative Care

Newcastle and North Tyneside Palliative Care Strategy Group (January 2002)

24 hour clinical advice (and all hospice services)

Correct as of 2 Jan 02

Marie Curie Centre 219 1000 Fax: 219 1099

St. Oswald's Hospice 285 0063 Fax: 284 8004

Other services (in alphabetical order)

Cancer Care at Home Newcastle Team Tel: 256 3033 North Tyneside Team Tel: 200 8242

Freeman Palliative Care Team 284 3111 ext. 27221 Fax: 223 1247

Marie Curie Nurses contact local Primary Health Care Team

NCCT Palliative Care Support Team Direct: 219 4249 (internal: 24249) Fax: 272 4236

Newcastle Community Palliative Care Services Direct: 226 1315 Fax: 219 5204

North Tyneside Palliative Care Team Direct (Tel & Fax): 220 5955

Northgate Learning Disability Palliative Care Team 01670 394 179 Fax: 01670 394 005

RVI Palliative Care Support Team (adult) Direct: 282 4019 (internal: 24019) Fax: 282 5466

RVI Paediatric Oncology Support Team Direct: 282 4788 (internal 24788) Fax: 282 0284

Other information: Texts

Clinical Decision Guide to Symptom Relief in Palliative Care
(Regnard C, Hockley J) Oxford: Radcliffe Medical Press, 2002

CliP (Current Learning in Palliative Care) 15 minute worksheets
(Regnard C, ed) Oxford: Radcliffe Medical Press, 2002

Introduction to Palliative Care
(Twycross RG) 1998 Oxford: Radcliffe Medical Press

Oxford Textbook of Medicine, 3rd ed.
(Doyle D, Hanks G, Calman K eds) Oxford: Oxford University Press, 2002

Palliative Care Formulary, 2nd ed
(Twycross RG, Wilcock A, Thorp S) Oxford: Radcliffe Medical Press, 2002

Other resources: Websites

www.dundee.ac.uk/MedEd/welcome.htm *Dundee palliative care program*

www.hospice-spc.council.org.uk *National Council for Hospice and Specialist Palliative Care Services* can now be visited on their website which contains summaries of Council publications with links to other palliative care organisations.

www.kcl.ac.uk/kis/schools/kcsmd/palliative/top.htm
St. Christopher's Hospice and Kings College Department of Palliative Care and Policy: contains the on-line version of the UK Hospice Directory, links to other sites and information on department activities.

www.mailbase.ac.uk/lists/palliative-medicine *Mailbase:* a site for discussion groups and now containing a palliative medicine mailbase:

www.palliativedrugs.com *Palliative Drugs:* advice on drugs relevant to palliative care.

www.palliative-medicine.org *Association for Palliative Medicine*

Turn over for notes on when to seek help

Notes on when to seek help

Palliative care is the care of people with advanced, progressive and life-threatening or life-limiting disease. It is the right of all patients to receive effective palliative care and the duty of all professionals to enable this. In many cases doctors and nurses will be able to deliver this care. Occasionally, further help and advice ensures more effective palliative care. Consider seeking help in the following situations:

- **Unfamiliar situations**
  Diagnosis: a diagnosis that is uncommon in your practice may present new problems.
  Symptoms: a symptom that is uncommon to you may have a simple solution you can obtain on discussing the problem with a specialist. Other symptoms need the patient to be seen by a palliative care specialist.
  Drugs: some symptoms in palliative care need drugs or routes of delivery that may be uncommon in your practice. Using resource texts, internet or discussing the drug with a specialist may be all you need.
- **Persistent or severe symptoms**
  Physical or psychological problems can sometimes be difficult to resolve. If first and second line treatments have failed, discussion with, or a visit by, a palliative care specialist can offer new options.
- **Complex situations**
  Some patients have a complex mix of physical, psychological, social, ethical and spiritual issues which can make clear cut decisions difficult. Discussion with a palliative care specialist can help you to see the situation more clearly.

Types of palliative care help and advice available

Telephone advice: discussion with a medical or nurse specialist in palliative care.

Outpatients: available at both Newcastle Hospices and in some hospital combined clinics. Arranged to allow detailed assessments of problems.

Day Hospice: available in St. Oswald's Hospice, Marie Curie Centre and The Green, Wallsend. Specialist day centre care gives patients a change of scene, and access to nursing, physiotherapy and OT help, medical help if needed, and giving family some respite. **Day Treatment**: some units offer day case treatment such as transfusions, drug titration, and first dose drug monitoring.

Cancer Care at Home: provides nursing support for carer relief, early discharge from hospital, end-stage disease or in time of crisis. The care managed in partnership with the local Primary Health Care Team.

Community and hospital palliative care teams: all hospitals and communities in the area now have access to specialist nursing and medical palliative care advice. These teams will see patients in hospital, home, nursing or residential homes or community hospitals.

Inpatient care: available at both Newcastle Hospices. Full interdisciplinary specialist palliative care team available: speciality consultants , registrar and junior medical staff, 24 hour medical cover, 24 hour specialist nursing care, physiotherapy, occupational therapy, social work support, and chaplaincy, all backed by extensive volunteer support programs.