NAUSEA & VOMITING (N&V)

Exclude obstruction & biochemical abnormalities

Oral antiemetics

1) Metoclopramide 10mg tds: Prokinetic
2) Haloperidol 1.5mg nocte: Opiate induced N&V
3) Cyclizine 25mg-50mgs tds: ↑ ICP or obstruction
4) Levomepromazine 6.25-12.5mg nocte (¼-½ tablet)
   (Nozinan) 6mg tablets available for named patient only

- ***Can*** *use 2 and 3 together*
- ***Not advisable to use*** *1 & 2 or*
  1 & 3 together

Rectal antiemetics

Domperidone 30-60 mg tds / qds
Prochlorperazine (Stemetil) 25mg bd

Subcutaneous antiemetics

Use water for injection unless indicated

1. Metoclopramide **Stat dose** 10mg
   SD dose 30mg-60mg/24hr
2. Haloperidol **Stat dose** 500 microgram-1.5mg
   SD dose 1.5mg-3mg/24hr
3. Cyclizine **Stat dose** 25-50mg
   SD dose 100mg-150mg/24hr
4. **Levomepromazine** (Nozinan)
   Stat dose 5mg-6.25mg **SD dose** 5mg-25mg/24hr

- **Broad spectrum antiemetic**
- Is the new European name for Methotrimeprazine
- If used alone dilute with 0.9% sodium chloride

Can *use 2 & 3 together*
Not advisable to use *1 & 2 or*
1 & 3 together

AGITATION

Consider treatable causes:
Constipation, urinary retention, hypercalcaemia, infection

Diazepam (oral/sl) 2-5mg qds
Stesolid 5-10mg PR
Haloperidol **Stat dose** po or s/c 1.5-3mg nocte
SD dose s/c 3mg-10mg/24hr

TERMINAL RESTLESSNESS

1st line on *LCP is:

Midazolam Stat dose s/c 2mg-10mg
SD dose s/c 5mg-60mg /24hr

Alternatives

Levomepromazine **Stat dose** s/c 6.25mg-12.5mg stat
SD dose s/c 6.25mg-50mg/24hr
Phenobarbitone **Stat dose** s/c 50mg-100mg
SD dose s/c 100mg-300mg/24hr

ORAL THRUSH

Nystatin suspension 1ml qds
Fluconazole 150mg stat or 50mg od for 7-10 days
Miconazole gel

RESPIRATORY SECRETIONS (DEATH RATTLE)

First Line on *LCP is:

Hyoscine butylbromide (Buscopan)
Stat dose s/c 20mg **SD dose** s/c 40mg-60mg/24hr
Used in conscious patient as less sedating & causes less confusion than alternatives

Alternatives

Hyoscine hydrobromide
Stat dose s/c 400microgram
SD dose s/c 400mcg*-2,400mcg/24hr
Hyoscine patch 1.5mg/72hr

Glycopyrronium (Robinul): seek advice
Stat dose 200microgram s/c
SD dose s/c 400mcg*-2,400mcg/24hr

For further information or advice contact:

St Leonard's Hospice, York
Tel: (01904) 708553

Hospital Palliative Care Team, York
Tel: (01904) 725835

Community Macmillan Nurses, Selby and York PCT
Tel: (01904) 724476

Medicines Information, York Hospital Pharmacy
Tel: (01904) 725960

***LCP is Liverpool Care Pathway for the dying patient**
***SD is syringe driver**
*** mcg should always be written in full micrograms**

This formulary was produced by the
York Palliative Care Pharmacy Group &
Selby & York locality of NYYPCT Palliative Care Team &
St Leonard's Hospice
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Palliative Care Formulary

INTRODUCTION

This formulary is a guide for prescribers in hospitals and Primary care across the locality. The acceptance and use of this formulary will enhance the quality and consistency of palliative care. Some drugs are unlicensed for route & indication but are nationally used in specialist palliative care units. Dose adjustments may be required in patients with renal impairment.

PAIN

Analgesia should be prescribed on a **REGULAR** basis.
NB: **Laxatives (softener and stimulant) should be co-prescribed at step 2 & 3**

Step 1 Paracetamol 1g qds **+/-**
Ibuprofen 400-600mg tds **or** Diclofenac 50mg tds

Step 2 Step 1 + weak opiate
Weak opiates
Dihydrocodeine 30-60mg qds **or**
Codeine 30mg-60mg qds
Combination preparations are prescribed
Cocodamol 8/500 or 30/500 (up to 2 qds)
If intolerant of codeine consider buprenorphine patch (Butrans) or tramadol

Step 3 **Replace Step 2 opiate** with 4hrly immediate release morphine (e.g. Oramorph) + equivalent rescue dose. Titrate according to response
Then/Or
Convert to 12 hourly sustained release morphine
Conversion
Oral Codeine/ dihydrocodeine to oral morphine **divide by 10**

Morphine formulations

Zomorph SR (Formulary choice)
10mg, 30mg, 60mg, 100mg, 200mg (capsule contents can be sprinkled on food)
MST Continus tablets 5mg, 10mg, 15mg, 30mg, 60mg, 100mg, 200mg
MST Continus sachet 20mg, 30mg, 60mg, 100mg, 200mg
Oramorph liquid (immediate release morphine)
10mg/5ml, 100mg/5ml
For rescue or breakthrough pain
Prescribe immediate release Morphine equivalent to
1/6 of total daily dose (TDD) of slow release Morphine.

Morphine Intolerance (including renal patients)

Some patients will get significant side effects with morphine
Consider opiate dose reduction, if appropriate. Patients may benefit from switching to Fentanyl or Oxycodone.
Remember some pains are not opiate responsive. **Consult the Specialist Palliative Care Team for further advice**

Transdermal Fentanyl

Fentanyl TTS each patch **usually** lasts **72 hrs**
(In some pts the patch may need changing every 48hrs)
Patch strength 12 mcg/hr, 25mcg/hr, 50mcg/hr, 75mcg/hr, 100mcg/hr

Note

- Slow onset of action
- Cover with Morphine for first 12 hrs
- Residual effect up to 24hrs as sub-dermal reservoir

Approximate conversion Divide total daily dose (TDD) of oral Morphine in mg by 3 for equivalent patch strength in mcg/hr.

For breakthrough pain use immediate release morphine but if morphine intolerant use OxyNorm (capsule or liquid) or Alfentanil spray

OxyCodone

Prescribed as 12 hourly sustained release tablet with immediate release capsule or liquid breakthrough medication which may be taken up to every 4 hrs as needed

OxyContin S/R tabs	5mg, 10mg, 20mg, 40mg, and 80mg
OxyNorm I/R capsules	5mg, 10mg, 20mg
OxyNorm I/R liquid	5mg/5ml, 10mg/ml

Conversion Oral Morphine to oral Oxycodone **divide by 2**

Subcutaneous opiates

(Remember to prescribe breakthrough doses 1/6 of total daily dose (TDD) when prescribing a syringe driver)

Diamorphine is the usual choice but as it is in short supply, Morphine is used first line on the *LCP in hospital

Morphine inj 10mg/ml, 30mg/ml
Conversion Oral Morphine to s/c Morphine **divide by 2**

Diamorphine inj 5mg, 10mg, 30mg, 100mg, 500mg
Conversion Oral Morphine to s/c Diamorphine **divide by 3**

Oxycodone (oxynorm) inj 10mg/ml, 20mg/2ml
Conversion Oral Oxycodone to s/c Oxycodone **divide by 2**

Alfentanil inj 500 micrograms/ml (2ml, 10ml)
(Used in renal impairment if GFR<30ml/min)

ADJUVANT ANALGESICS

BONE PAIN

Ibuprofen 400-600mg tds (liquid available)
Diclofenac 50mg tds (soluble tabs & suppositories)

Gastroprotection for NSAIDs

Lansoprazole 15mg-30mg od
Consider in high risk patients
I.e. elderly, previous peptic ulcer or GI bleed, concomitant steroids, cardiovascular disease

NEUROPATHIC PAIN:

Tricyclic antidepressants
Amitriptyline 10-100mg nocte
(Others antidepressants may have analgesic properties)

Anticonvulsants
Gabapentin 100mg nocte titrating by 100mg initially
Maxm dose 600mg tds
Reduce dose in patients with renal impairment
(Pregabalin, Clonazepam, Carbamazepine may be used)

Steroids: Dexamethasone 4-8mg daily

COLIC

Hyoscine butylbromide (Buscopan)
Poorly absorbed orally
Stat dose 20mg prn 6hrly s/c
SD dose 40mg-120mg/24hrs s/c
Maxm SD dose 240mg s/c
(Stop stimulant laxative & prokinetic)

LIVER PAIN

Dexamethasone 8-12mg daily & titrate down

BOWEL OBSTRUCTION

Is it constipation?
Background pain Morphine/ Diamorphine
Antiemetics: Cyclizine or
Cyclizine+ Haloperidol or
Levomepromazine (Nozinan)
Colic: see Buscopan above
Antisecretory: Buscopan or Octreotide
(Octreotide reduces the volume of vomitus)

RAISED INTRACRANIAL PRESSURE (↑ ICP)

Dexamethasone 16mg daily & titrate doses down as recommended by oncologists/ Doctors
(Do not give steroids after 6pm as insomnia may be a problem). Monitor for glycosuria.

CONSTIPATION

Try to anticipate constipation and treat the cause

- A **softener & stimulant** is usually required in patients taking opiates. **Avoid bulking agents**
- Full rectum–stimulant if soft faeces/softener if hard
- Do not use stimulant if obstruction present

Softener	Docusate 100-200mg bd/tds
Osmotic	Movicol sachets 1 to 2 sachet od/ bd (up to 8/day) Lactulose 15ml bd may cause bloating. **(Delayed effect - use regularly)**
Stimulants	Senna 2-4 nocte Bisacodyl 5mg-20mg nocte (10mg PR)
Combined	Co-danthramer strong caps/liquid Co-danthrusate capsules

Impaction

- Rectal examination & Abdominal X-ray to **exclude constipation & overflow or obstruction**
- Oral route alone is usually ineffective

Resistant	Consider Citramag
Suppositories	Bisacodyl 10-20mg (**stimulant**) **or** Glycerin 1-2 **(mainly softener)**
Enemas	Citrate micro enema 1-3 **or** Phosphate 1 mane

If above ineffective
Warm arachis oil (if no nut allergy) administered over night as a retention enema **(softener)** which may need to be followed by phosphate enema **(stimulant)**

DYSPNOEA (BREATHLESSNESS)

Exclude reversible causes and remember the importance of explanation and reassurance.

Oral Morphine 2mg-10mg 4 hrly or when needed,
Or titrated according to response.
Diazepam 2mg-5mg po bd / tds
Lorazepam 500microgram sublingual tds
Midazolam **Stat dose** s/c 2mg
SD dose s/c 5-10mg/24hr.