NHS
South West
Yorkshire Partnership
NHS Foundation Trust

Last days of Life Care

Guidance for professionals

Symptom Management

Contents

Notes to guide prescribing of anticipatory medicines	page 1
Medication guidance	page 2
Commonly used palliative care drugs	page 4
Guidance on:	
• Pain	page 5
• Agitation, delirium and anxiety	page 7
• Nausea and vomiting	page 8
• Respiratory tract secretions	page 8
• Breathlessness	page 9
List of palliative care drug stockists	page 10

Barnsley Hospice

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With all of us in mind.

Notes to guide prescribing of anticipatory medicines

It is important to ensure suitable medicines and routes are prescribed as early as possible and are reviewed as the dying person's needs change.

When deciding which anticipatory medicines to offer take into account:

- the likelihood of specific symptoms occurring
- the benefits and harms of prescribing or administering medications
- the place of care and the time it would take to obtain medication

Drugs pre-emptively prescribed will vary according to the patient's existing medication and individual need but the following may help to provide a general guidance for potential symptom control in the last days of life.

The amounts advised in the following examples are the **minimum** and a greater number may need to be prescribed according to the patient's requirements.

Always prescribe **WATER FOR INJECTION 10mL x 10 ampoules** and **3 Vapour-permeable adhesive film dressings (e.g. Clear film) minimum size 6cm x 7cm**

FOR PAIN

If already taking morphine/equivalent convert in line with guidance in this document and the Palliative Care Formulary.

If not currently prescribed morphine or equivalent, the following would be an example prescription:

Morphine Sulfate 10mg/mL for injection
To have 2.5mg to 5mg by subcutaneous injection every 1 hour as required,
Supply 5 (five) ampoules

FOR AGITATION

First line:	**Second line:**
Midazolam 10mg/2ml for injection To have 2.5mg to 5mg by subcutaneous injection every 1 hour as required for agitation/restlessness Supply 5 (five) ampoules	Haloperidol 5mg/ml for injection To have 500micrograms (0.5mg) to 1.5mg by subcutaneous injection every 2 to 4 hours as required for agitation/delirium with a maximum of 5mg per 24 hours Supply 5 ampoules

FOR SICKNESS

Haloperidol 5mg/ml for injection
To have 500micrograms to 1.5mg by subcutaneous injection every 2 to 4 hours as required for nausea and vomiting with a maximum of 5mg per 24 hours
Supply 5 ampoules

FOR RESPIRATORY TRACT SECRETIONS

Hyoscine Butylbromide 20mg/ml for injection
To have 20mg by subcutaneous injection every 1 hour, maximum of 120mg in 24 hours
Supply 5 ampoules

Medication guidance

Points to consider regarding medication for symptom management.

- Before anticipatory medicines are administered review the dying person's individual symptoms and adjust the individualised care plan and prescriptions as necessary.

- If anticipatory medicines are administered:
  - monitor for benefits and any side effects at least daily and give feedback to the lead professional
  - adjust the individual plan and prescription as necessary

- If two or more doses of breakthrough (PRN) medication are required in a 24 hour period, review background medication and consider increasing or commencing continuous subcutaneous infusion.

- Breakthrough (PRN) medications should be prescribed as per guidelines.

- If regular background analgesia is increased, the breakthrough (PRN) dose should also be increased to approximately 1/10th of the 24 hourly dose.

- All medication information is provided as a guide. Individual clinician's discretion should always be used when prescribing.

- Please refer to Barnsley Palliative Care Formulary (2020-2023) for local guidance and syringe driver policy. Barnsley Palliative Care Formulary can also be found via the link: https://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/Palliative%20Care%20Formulary.pdf

Formula to calculate volume of medication to be given according to prescribed dose:

volume to be given = $\dfrac{\textbf{amount prescribed (what you want) x unit volume}}{\textbf{amount per unit volume (what you have got)}}$

e.g. to give 500micrograms (0.5mg) of haloperidol **volume to be given** = $\dfrac{0.5 \times 1}{5}$ **= 0.1ml**

A patient requires 2.5mg morphine sulfate **volume to be given** = $\dfrac{2.5 \times 1}{10}$ **= 0.25ml**

If additional advice and support is required please contact the relevant Specialist Palliative Care Team.

Barnsley Hospital	Monday to Sunday 9am -5pm	telephone 01226 (43)4921
Barnsley Community (South West Yorkshire Partnership NHS Foundation Trust):	Monday to Sunday 9am – 4.45pm 365 days per year	telephone 01226 644575
Barnsley Hospice:		telephone 01226 244244
Pall Call Out of hours		telephone 01226 244244

- **If symptoms persist contact Specialist Palliative Care Team**
- It is common practice to give subcutaneous drugs in the last days of life although most of these drugs are not licensed to be given by this route.

Prescribing anticipatory subcutaneous medications for the last days of life

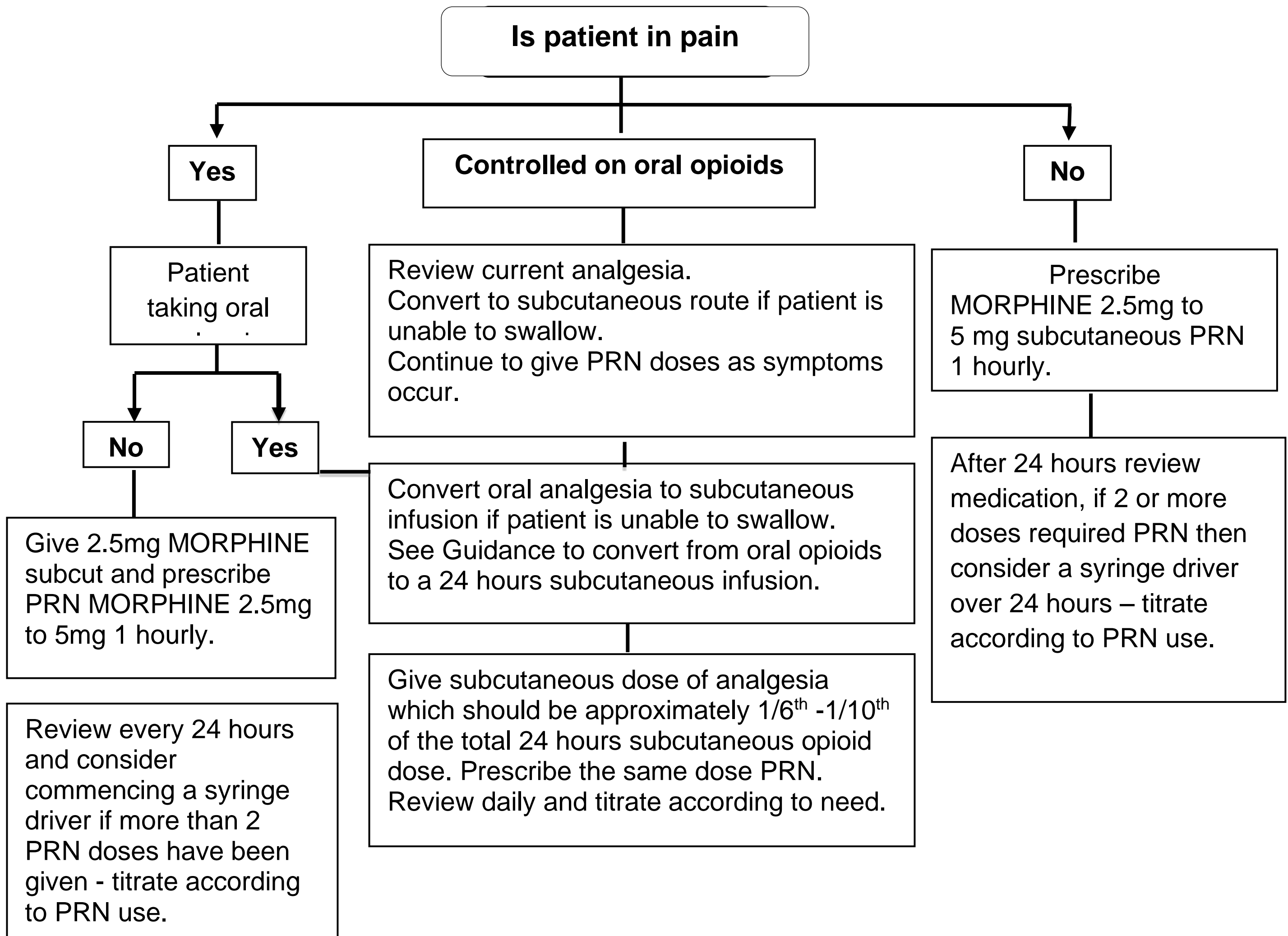
If any further advice is needed or alternative medication please contact the specialist palliative care team

Indication	Drug	Dosing	Frequency	Strength	Quantity	Notes regarding syringe driver use
Pain / breathlessness, - 1st line (Doses may be different for patients already on background opioids and existing need should be considered) In renal failure ask specialist palliative care advice	**Morphine Sulphate**	**2.5mg -5mg** (if no existing opiate medication) If already taking oral morphine a suitable breakthrough PRN is usually between 1/6th and 1/10th of the 24 hours dose.	1 to 2 hourly PRN	10mg/ml	10 x 1ml amps	If no existing opiates the syringe driver should only be used if PRNs have been required If converting from oral Morphine, use ½ of the 24hr oral Morphine dose in a syringe driver over 24 hours
Pain / breathlessness alternative to morphine	Oxycodone (alternative to morphine)	1mg - 2.5mg (if no existing opiate medication) If already taking oral morphine a suitable breakthrough PRN is usually between 1/6th and 1/10th of the 24 hours dose	1 to 2 hourly PRN	10mg/ml	5 x 1ml amps	If converting from oral Oxycodone to subcut use ½ of the 24-hour oral oxycodone in a syringe driver over 24 hours If converting from oral morphine to subcutaneous oxycodone, use half of the morphine dose.
Nausea, vomiting – 1st line **Haloperidol is also used for delerium**	**Haloperidol** **(extra pyramidal side effects and sedation in high doses)**	500 microgram to 1.5mg (max 5mg/24hr)	2 to 4 hourly PRN	5mg/ml	5 x 1ml amps	Syringe driver dose should be according to PRN need. Tendency to precipitate.
Nausea, vomiting (in Parkinson's disease or extrapyramidal side-effects)	Cyclizine (alternative to haloperidol for N+V)	50mg (max 150mg/24hr)	4 to 6 hourly PRN	50mg/ml	10 x 1ml amps	50 to150mg in 24 hrs according to PRN need (maximum 150 mg)
Nausea, vomiting (Alternative if haloperidol not available or appropriate or haloperidol not effective)	Levomepromazine	6.25 mg	4 to 6 hourly PRN	25mg/1ml	5 x 1ml	Dose for syringe driver should be according to PRN use
Anxiety, restlessness, panic, breathlessness	**Midazolam**	2.5mg to 5mg (starting dose – if not effective speak to specialist palliative care)	1 hourly PRN	10mg/2mls	10 x 2ml amps	Syringe driver use will be according to PRNs used
Respiratory tract secretions	**Hyoscine butylbromide (Buscopan)**	20mg	1 to 2 hourly PRN	20mg/ml	10 x 1ml amps	If symptoms start syringe driver 60-120mg/24hours Seek specialist palliative care if higher doses needed

Guidelines for commonly used palliative care drugs

DRUGS	INDICATIONS	STAT/PRN DOSES	STARTING DOSES FOR 24 HR SYRINGE DRIVERS	AMPOULES AVAILABLE	NOTES
Alfentanil	Pain in presence of renal failure	Seek specialist palliative care advice	Seek specialist palliative care advice	Seek advice	15 times stronger than subcutaneous Morphine
Morphine	• Pain • Cough, dyspnoea	If opioid naive • 2.5mg stat PRN (1 hourly)	If opioid naive • 10mg (pain) • 5mg to10mg (cough or dyspnoea)	10mg/1ml 20mg/1ml 30mg/1ml	If converting from oral Morphine, use ½ of the 24hr oral Morphine dose. To calculate breakthrough dose of Morphine divide the 24 hourly dose by 6.
Oxycodone	Pain, dyspnoea, cough	If opioid naive 1mgto 2.5mg stat/PRN (1 hourly)	If opioid naive 5mg	10mg/1ml 20mg/2ml	2nd line choice after Morphine. To convert from oral Oxycodone see Conversion Chart.
Cyclizine	Nausea and vomiting associated with motion sickness and raised ICP. Intestinal obstruction,	50mg stat/PRN (8 hourly) maximum dose 150 mg in 24hours	50 to 150mg in 24 hrs (maximum 150 mg)	50mg/1ml	Tendency to precipitate in higher doses. Moderately irritant to skin.
Haloperidol	Drug and metabolic induced nausea. Intractable hiccup. Delirium, terminal agitation	0.5mg to 1mg stat/PRN (2 to 4 hourly) Maximum dose 5mg in 24 hours	2.5 to 5mg in 24 hrs	5mg/1ml	Tendency to precipitate. Extra-pyramidal side effects and sedation may be seen in high doses.
Metoclopramide	Nausea and vomiting from gastric irritation. Impaired gastric emptying	10mg stat/PRN (8 hourly)	30mg in 24 hrs (Range 30 to 100 mg)	10mg/2ml	Use with care in patients with partial intestinal obstruction as it may increase colic or vomiting. Do not use in complete intestinal obstruction.
Levomepromazine (Nozinan)	• Nausea and vomiting. • Sedation/confusion/ terminal agitation	• 6.25mg stat/PRN (4 to 6 hourly) to a maximum of 25mg in 24 hours • Seek specialist palliative care advice	• 12.5mg to 25mg in 24 hours	25mg/1ml	Moderately irritant to skin. Broad spectrum anti-emetic. 2nd line treatment for nausea and vomiting
Midazolam	Terminal agitation, myoclonic jerking, anticonvulsant, dyspnoea (new guidelines)	1mg to 2.5mg 1 hourly (dyspnoea) 2.5mg to 5mg 1 hourly (agitation)	5mg to 10mg in 24 hours (range 5mg to 30mg)	10mg/2ml (or 10mg/5ml)	Short acting benzodiazepine. Useful for terminal restlessness/anxiety.
Hyoscine Butylbromide (Buscopan)	Respiratory tract secretions Obstructive symptoms with colic,	20mg stat/PRN 1 hourly to a maximum of 120mg	60 to 120mg/24hours	20mg/1ml	Seek specialist palliative care advice for higher doses. Does not cross blood brain barrier.

Pain



Supporting information

- If further information is needed contact the Specialist Palliative Care Team
- If on a fentanyl patch maintain the patch, do not remove it and prescribe breakthrough opioid doses as attached guidance
- Please note a syringe driver may take up to 4 hours to become effective
- **If patients have known renal failure, please contact the Specialist Palliative Care team for advice.**

Guidelines for Converting Oral Analgesia to Subcutaneous

Converting from	To	Factor
Oral Morphine	Subcutaneous Morphine	Divide by 2
Oral Morphine	Subcutaneous Oxycodone	Divide by 3
Oral Oxycodone	Subcutaneous Oxycodone	Divide by 2

Conversion of Step 2. Analgesia (weak opioids) to sub cut Morphine in 24 hours

Weak Opioids	Usual Max 24 hour Dose	Dose of Morphine for continuous subcutaneous infusion via syringe driver over 24 hours	Dose of subcutaneous Morphine for breakthrough
Tramadol	400mg	10mg to 20mg	2.5mg to 5mg
Codeine Phosphate	240mg	10mg	2.5mg to 5mg

For alternative step 2 conversions, e.g. BuTrans, Transtec
Please seek Specialist Palliative Care advice

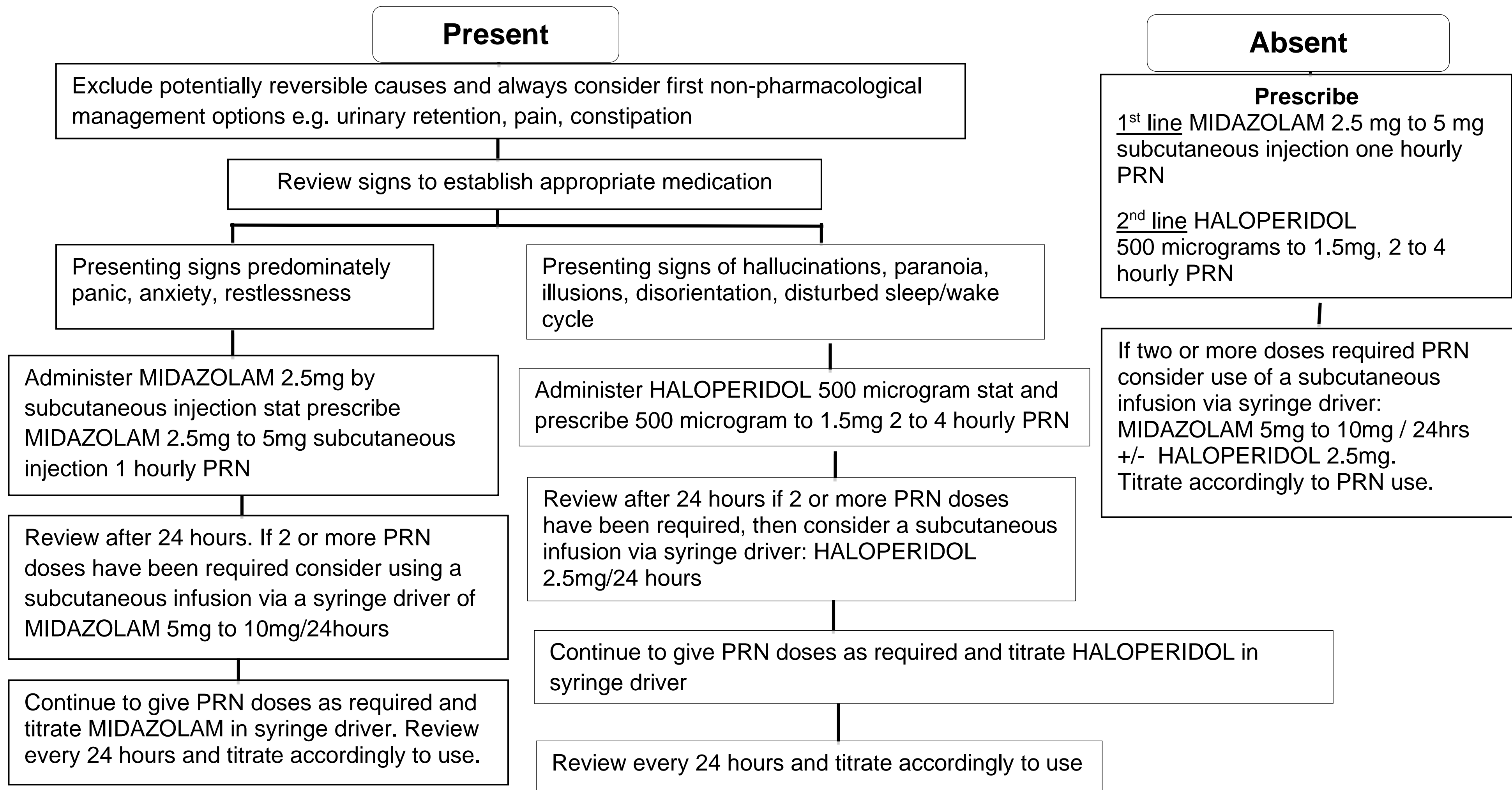
Fentanyl patch in situ
Do not remove the patch as this will complicate management

- Ensure that patch is adherent to patient's skin.
- Reassess patient to identify any other causes for increased pain.
- Continue to change patch every 72 hours.
- If pain is uncontrolled commence subcutaneous infusion of opioid **in addition to Fentanyl patch** according to the PRN doses that have been required
- Administer breakthrough analgesia as required according to dose regime below.

Transdermal Fentanyl Patch currently in use	Breakthrough doses of subcutaneous Morphine when Fentanyl Patch in use only
12mcg	2.5mg to 5mg
25mcg	5mg to 10mg
50mcg	10mg to15mg
75mcg	15mg to 20mg
100mcg	20mg to 30mg

Adapted from: PCF6 Palliative Care Formulary (2017)
Contact Specialist Palliative Care Team for additional advice if required

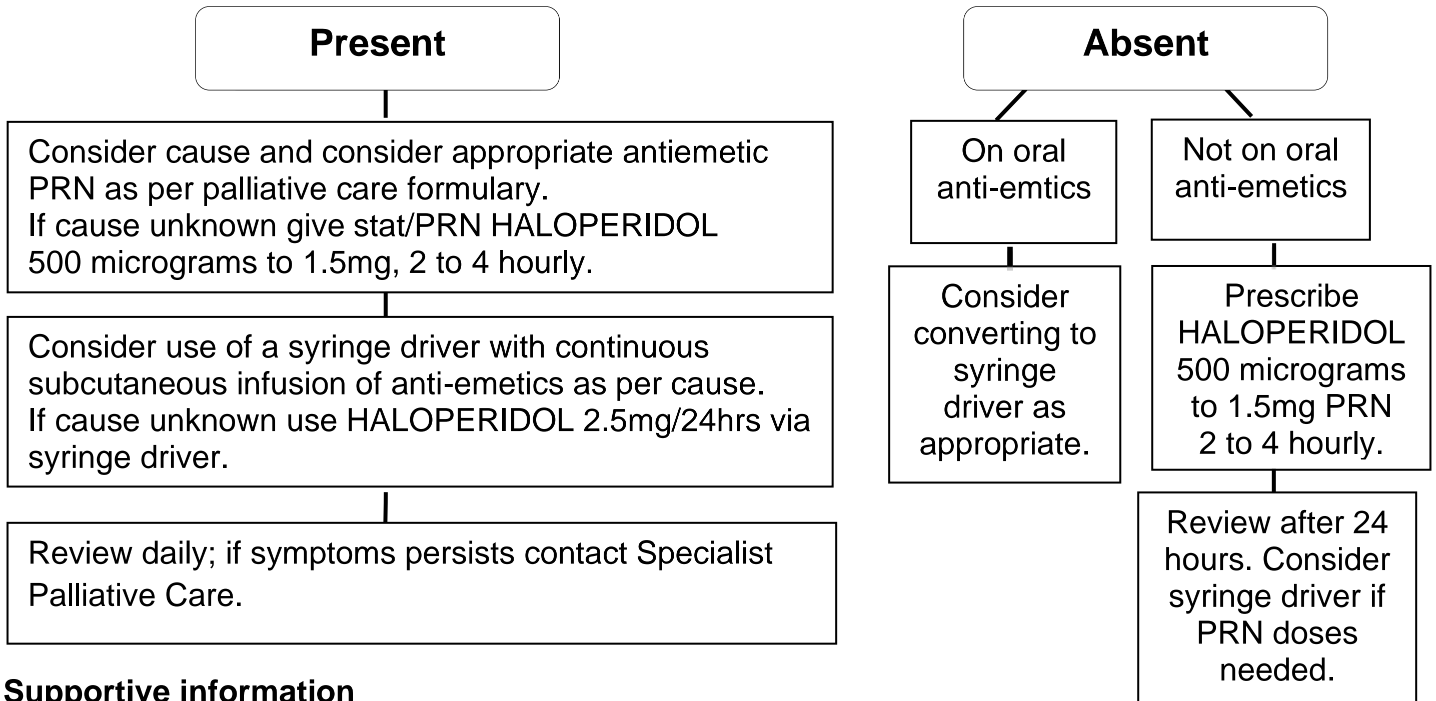
Agitation, delirium and anxiety



Supportive information

- HALOPERIDOL is not recommended for patients with Parkinsons Disease, in this case use MIDAZOLAM or seek Specialist Care advice.
- Please be aware that MIDAZOLAM can cause a paradoxical increase in agitation, in this instance use HALOPERIDOL
- **If symptoms persist or any further advice is needed contact the appropriate Specialist Palliative Care team.**
- Sometimes both MIDAZOLAM and HALOPERIDOL may be required. If symptoms persist, please contact Specialist Palliative Care team

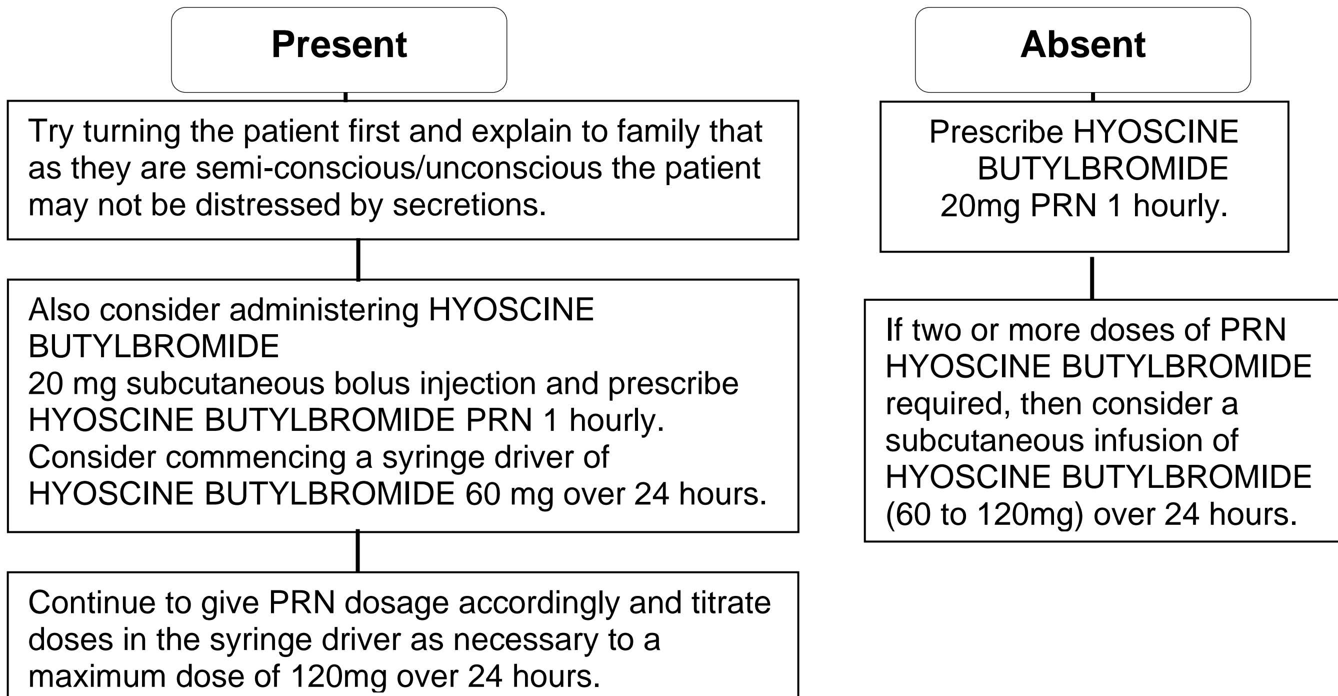
Nausea and vomiting



Supportive information

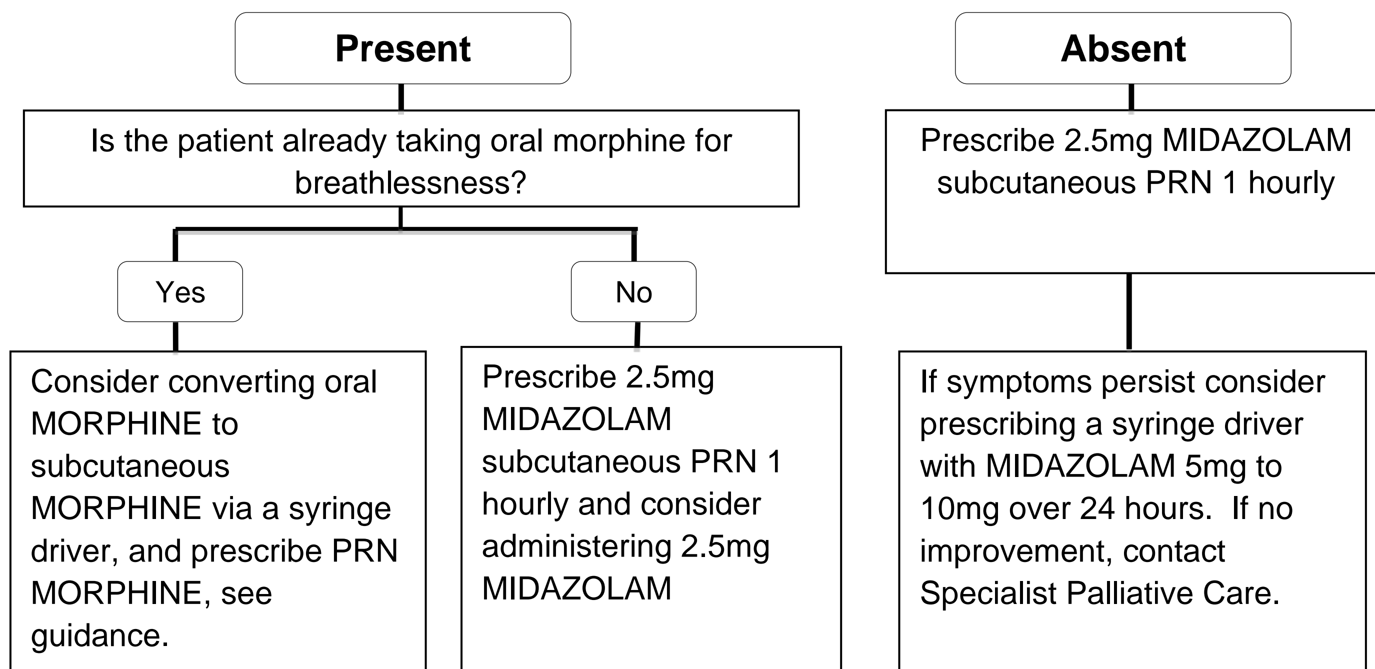
- **If symptoms persist or further advice is needed contact the Specialist Palliative Care Team**
- HALOPERIDOL is not recommended for patients with Parkinson's Disease, first line Cyclizine would be suggested. For alternative anti-emetics see Palliative Care Formulary or contact the Specialist Palliative Care team.

Respiratory tract secretions



- Consider changing or stopping medicines if noisy respiratory secretions continue after 12 hours (medicines may take up to 12 hours to become effective)

Breathlessness



Supportive information

- An alternative to Midazolam would be to use low dose subcutaneous Morphine 2.5mg this may be more useful in patients with heart failure.
- **If symptoms persist, contact Specialist Palliative Care team.**
- Identify and treat reversible causes of breathlessness in the dying person, for example pulmonary oedema or pleural effusion.
- Consider non- pharmacological management of breathlessness in a person in the last days of life. Do not routinely start oxygen to manage breathlessness. Only offer oxygen therapy to people known or clinically suspected to have symptomatic hypoxaemia.

Palliative Care Participating Pharmacies

Name	NHS Code	Address	Telephone	Stock List	Opening Times
AM Clark Ltd	FMV43	1 Market Place, Penistone, Sheffield, S36 6DA	01226 763103	A	Mon-Fri: 8.45am - 6pm Sat: 8.45am - 5.30pm
Asda Pharmacy	FD418	Old Mill Lane, Barnsley, S71 1LN	01226 704810	B	Mon-Thurs: 8am - 10pm Fri: 9am - 6 pm Sat: 8am - 10pm Sun: 10am - 4pm
Cohens Chemist	FDP29	199 King Street, Hoyland, Barnsley, S74 9LJ	01226 749062	A	Mon-Fri: 9am - 1pm, 2pm - 6pm
Cohens Chemist	FDW01	16 - 18 Market Street, Hoyland, Barnsley, S74 9QR	01226 743223	A	Mon - Fri: 8am - 11pm Sat: 9am - 10pm (closed 2-4 pm) Sun: 10am - 10pm (closed 2-4 pm)
Cohens Chemist	FPJ07	Apollo Court, High Street, Dodworth, Barnsley, S75 3RF	01226 203921	A	Mon-Fri: 8.30am - 6pm
Elliotts Pharmacy	FXF21	Burleigh Medical Centre, Burleigh Street, Barnsley, S70 1 XY	01226 282146	A	Mon-Fri: 9am - 6.30pm Sat: 9am - 12.30pm
Gatehouse Pharmacy	FJ831	The Gatehouse, Longcroft, Mapplewell, Barnsley, S75 6FH	01226 382422	A	Mon-Fri: 7am - 11pm Sat: 8am - 8pm Sun: 9am - 5pm
Lo's Pharmacy	FE054	Queensway, Grimethorpe, Barnsley, S72 7LJ	01226 711243	A	Mon-Fri: 9am - 6pm
Lo's Pharmacy ltd/Ellisons Chemist	FH042	Cockerham Hall Mews, 17 Huddersfield Road, Barnsley, S70 2LT	01226 281666	A	Mon-Fri: 8.30am - 6pm
McKay Healthcare t/a Silkstone Pharmacy	FNN73	3 High Street, Silkstone, Barnsley S75 4JH	01226 791838	A	Mon-Tue: 8.30am - 5.30pm Wed: 8.30am - 6pm Thur-Fri: 8.30am - 5.30pm
RD Hills	FND79	5 Chatsworth Road, Athersley South, Barnsley, S71 3QL	01226 282882	A	Mon-Fri: 9am - 6pm (closed 1-2 pm)
Rotherham Road Pharmacy (Bookachemist Recruitment Ltd)	FHE60	4 Rotherham Road, Great Houghton, Barnsley S72 0DB	01226 757340	A	Mon-Fri 8.45am - 6.15pm
Stone Pharmacy (Meds2u Limited)	FTK41	Garland House Surgery, 1 Church Street, Darfield, Barnsley S73 9JX	01226 270240	A	Mon-Sat: 7am - 10.30pm Sun: 9am- 4pm
Tesco Instore Pharmacy	FHW40	Wombwell Lane, Barnsley, S70 3NS	01226 881000	B	Mon: 8am - 10.30pm Tues-Fri: 6.30am - 10.30pm Sat: 6.30am - 10pm Sun: 10am - 4pm
Ward Green Pharmacy	FAW19	95 Vernon Road, Barnsley, S70 5HJ	01226 320790	A	Mon-Fri: 9am - 6pm
Weldricks Pharmacy	FG196	The Goldthorpe Centre, Goldthorpe Green, Rotherham, S63 9EH	01709 893287	A	Mon-Fri 8.30 - 6.30
Weldricks Pharmacy	FQ008	Welfare Road, Thurnscoe, Rotherham, S63 0JZ	01709 892207	A	Mon-Fri 8.30 - 6.30
Wm Morrison Pharmacy	FW170	Cortonwood Retail Park, Brampton, Rotherham S73 0TB	01226 754763	A	Mon-Fri: 8.30am - 8pm Sat: 8.30am - 7pm Sun: 10am - 4pm

Drugs

Clonazepam 500mcg tablets

Cyclizine Injection 50mg/1ml

Dexamethasone Injection 3.8mg/1ml

Dexamethasone Tablets 2mg

Haloperidol Injection 5mg/1ml

Hyoscine Butylbromide Injection 20mg/1ml

Levomepromazine Injection 25mg/1ml

Levomepromazine Tablets 25mg

Metoclopramide Injection 10mg/2ml

Midazolam Injection 10mg/2ml

Morphine Injection 10mg

Morphine Injection 30mg

Oxynorm (Oxycodone) injection 10mg/ml (1ml amps)

Oxynorm (Oxycodone) liquid 5mg/5ml

Water for Injection 10ml