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Medicines Optimisation *Key Messages* – *Bulletin 38*

Anticipatory Prescribing in End of Life (Adults)

KEY MESSAGE: Medication for end-of-life symptom control should be made available so that these medicines can be given if required without unnecessary delay

- The term End of Life (EoL) refers to patients who are in their last days of life.
- Medication should be available on an as required basis for symptom control. This may include medication for:
  - Pain
  - Agitation
  - Acute terminal events e.g. bleeding
  - Nausea & vomiting
  - Respiratory tract secretions
- **Anticipatory prescribing** should ensure that there is a supply of medication available in the patient's home with the necessary equipment, to prevent delay in administration when symptom relief is required.
- Anticipatory medications may be required to be given by a syringe driver as a continuous subcutaneous infusion if the patient is unable to swallow medication orally due to dysphagia, vomiting or a reduced level of consciousness.

Pain

- First line subcutaneous (SC) opioid for just in case /as required doses and continuous subcutaneous infusion over 24 hours (CSCI) is **Morphine**.
- Recommended starting doses for **opioid naïve** patients are as follows:
  - Just in case / as required SC injection doses: **2.5mg – 5mg** Morphine up to every 2 hours.
  - CSCI / 24 hours: **5mg – 10mg** Morphine (for diluent use water for injection).
- If previously on oral opioid, calculate equivalent **oral morphine dose in last 24 hours** including breakthrough doses. Conversion ratio of **oral morphine** to **SC morphine** is **2:1**. Convert to subcutaneous morphine by dividing by 2.
- **As required** analgesia should be prescribed at **1/6th of total morphine daily dose**. A **stat dose** may be required at initiation of CSCI to cover symptoms in the first few hours.
- Increase syringe driver dose by total amount of breakthrough opioid given or by 30-50%, whichever is less. Ensure when required doses are also increased accordingly. Morphine doses greater than 360mg/24hours are difficult to deliver because of the volume of the corresponding breakthrough dose.

Pain

- **Oxycodone** may be used as a second line opioid if morphine causes unacceptable side effects such as drowsiness, hallucinations or confusion. Oxycodone is also an option in patients with mild to moderate renal impairment.
- Recommended starting doses for **opioid naïve** patients:
  - Just in case / as required SC injection doses: **1mg - 2.5mg** oxycodone up to every 2 hours
  - CSCI / 24 hours: **2.5mg – 5mg** oxycodone
  - Doses of more than 100mg oxycodone in 24 hours are not usually required
- Conversion ratio of **oral morphine** to **SC oxycodone** is **3:1.** Convert to subcutaneous oxycodone by dividing oral morphine dose by 3.
- Opioids with active metabolites such as morphine and oxycodone may accumulate in severe renal impairment. Consider Alfentanil if **eGFR < 30ml/min/1.73m^2** or patient on **dialysis**: Seek **specialist advice** on dosing.

Managing patients on opioid patches

- Patients on opioid patches should **continue** with their patch in the last days of life.
- If new opioid responsive pain develops requiring the use of a CSCI, the **opioid patch should be left in place and continued to be changed as normal**. The **total daily PRN doses** of analgesia should be converted for administration via the syringe driver and titrated as required.
- This is to avoid conversion of the transdermal opioid to an alternative SC opioid.
- Opioid patches should **not** be initiated at the end of life when the oral route is no longer available.

Opioid patches should not be used for unstable pain or in opioid naïve patients.

Other Symptom Relief

Agitation

- **Midazolam** - use as first line choice for non-specific agitation or breathlessness:
  - Just in case / as required SC injection doses: **2.5mg - 5mg** up to every 2 hours,
  - CSCI / 24 hours: **5mg - 10mg.** Contact specialist advice service for advice regarding dose escalation.
  - Caution in severe liver disease: may cause drowsiness. Dose should be halved and dosage interval increased.
- **Levomepromazine** - use as first line choice for terminal agitation (Caution in Parkinson's disease - seek specialist advice*).
  - Just in case / as required SC injection doses: **6.25mg** up to every 4 hours
  - CSCI / 24 hours: **12.5mg - 25mg**. Usual maximum dose in 24 hours: **50mg**
- **Haloperidol** - use first line for hallucinations and mental anguish (Avoid in Parkinson's disease):
  - Just in case / as required SC injection doses: **0.5mg - 1mg** up to every 2 hours
  - CSCI / 24 hours: **2.5mg - 5mg.** Usual maximum dose in 24 hours: **10mg**

Nausea and vomiting

- **Levomepromazine** – first line (Note causes sedation & caution in Parkinson's disease*)
  - Just in case / as required SC injection doses: **6.25mg** up to every 4 hours
  - CSCI / 24 hours: **6.25mg - 25mg**. Usual maximum dose in 24 hours: **50mg**
- **Haloperidol** - second line (Avoid in Parkinson's disease):
  - Just in case / as required SC injection doses: **0.5mg - 1mg** up to every 4 hours
  - CSCI / 24 hours: **2.5mg - 5mg**. Usual Maximum dose in 24 hours: **10mg**

Respiratory secretions

- The risk of respiratory tract secretions can be reduced by avoiding fluid overload. Any intravenous or SC fluids should be reviewed if symptoms develop.
- **Hyoscine butylbromide** - can be used to reduce secretions but may cause dry mouth:
  - Just in case / as required SC injection doses: **20mg** every 4 hours
  - CSCI / 24 hours: **60mg – 80mg**. Maximum dose in 24 hours: **120mg**
  - Avoid in heart failure – use **Glycopyrronium bromide:** 200micrograms every 4 hours PRN, adjusted according to response. Maximum of 6 doses in 24 hours. CSCI/ 24 hours: 600micrograms – 1.2mg. Max 1.2mg in 24hours

Other

- In the event of catastrophic bleed or fitting – use midazolam 10mg IM/ SC stat.

***Please seek specialist palliative care advice for patients with Parkinson's Disease.**

At all stages, please consider the underlying cause and alternative treatment options.
Please seek early specialist advice for dose escalation and medication changes via CSCI.

For Palliative Care advice 7 days a week / 24 hours a day contact the Specialist Palliative Care Advice Service via 0330 158 8011.

For information on syringe driver compatibilities, see http://book.pallcare.info/index.php?op=plugin&src=sdrivers

Specialist Drugs

Some medications are not recommended to be initiated in primary care without specialist advice. This includes **alfentanil, clonazepam, ketamine, ketorolac, methadone** etc. If symptoms are not controlled with standard, recommended treatments, seek advice from palliative care specialist.

References

http://book.pallcare.info/index.php?tid=176
http://www.palliativecareguidelines.scot.nhs.uk/guidelines/pain/Anticipatory-Prescribing.aspx
https://www.bma.org.uk/advice/employment/gp-practices/service-provision/prescribing/focus-on-anticipatory-prescribing-for-end-of-life-care

Title	KEY MESSAGES Bulletin 38 - Anticipatory Prescribing in End of Life (Adults)
Description of policy	*To inform healthcare professionals*
Scope	*All Healthcare professionals involved in prescribing and administering anticipatory medication at end of life.*
Prepared by	Prescribing & Medicines Management Team
Other relevant approved documents	Key message bulletin 39: Prescribing Considerations at End of Life (EOL) Key message bulletin 40: Initiation and Management of Opioids in Palliative Care
Evidence base / Legislation	Level of Evidence: *A. based on national research-based evidence and is considered best evidence* ***B. mix of national and local consensus*** *C. based on local good practice and consensus in the absence of national research based information.*
Dissemination	Is there any reason why any part of this document should not be available on the public web site? ☐ Yes / No ☒
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Version Control (To be completed by policy owner)

Version	Date	Author	Status	Comment
1.0	April 2017	Prescribing & Medicines Management Team *(LB)*	Final	
1.1	May 2019	AGEM Medicines Optimisation Team	Update	Advice regarding diamorphine shortage added. Conversion ratios added.
1.2	January 2023	NHS Norfolk & Waveney Medicines Optimisation Team (NC)	Update	Morphine added as first choice opioid. Information relating to diamorphine removed. 'Mcg' abbreviation replaced with 'Micrograms'. Frequency of Levomepromazine for nausea & vomiting changed. Maximum dose of midazolam removed and replaced with note to contact specialist advice service for dose escalation via CSCI. Time ranges removed for PRN doses. Caution regarding use of levomepromazine in Parkinson's disease added. Specialist advice telephone number added. Levomepromazine replaced haloperidol as 1st line drug for nausea and vomiting, cyclizine removed.