**PEPA Workplace Activity Outcome**

**Karen Fawkes - Nurse Practitioner – Bethanie Aged Care**

**END OF LIFE PRESCRIBING GUIDE FOR NURSE PRACTITIONERS**

**(AGED CARE SETTING)**

**INDICATORS RESIDENT IS MOVING FROM DETERIORATING PHASE TO END OF LIFE:**

Increasing episodes of chest pain (especially in residents with heart disease)

Increasing exacerbations of SOB with decreasing time between exacerbations (especially with respiratory disease)

Increasing pain, agitation, falls, pedal oedema, abdominal distension, jaundice

Increasing periods of sleep, time in bed, assistance needed with ADL’s

Increasing tumor/organ size (such as a palpable spleen/liver)

Decreasing appetite/weight/swallow/strength/mobility/urine output/conscious level

Decreasing hb/platelets despite infusion (if the resident is receiving hospital treatment)

No change to condition despite addressing appropriate reversible causes (dehydration, UTI, constipation, hypo/hyper glycaemia, sepsis, pain, urinary retention, anxiety, medication related symptoms)

Australian modified karnofsky score 20 or less

**STEPS PRIOR TO CHARTING END OF LIFE MEDICATION:**

Discuss with resident/NOK/GP/Staff

Document in the progress notes that these medications are only to start after discussion with Facility Manager and/or CNM

When determining dosage take into account- allergies, age, weight, renal and liver function, if the resident is already using opioids or if they are opioid naïve

**END OF LIFE MEDICATION:**

Commence with PRN s/c medication and progress to a subcutaneous pump only if the resident is requiring PRN medication more than 4 hourly

There are no maximum doses in the terminal phase for analgesia

Most residents will only require morphine and midazolam in a subcutaneous pump with PRN medication to cover other symptoms (a second sub cutaneous needle can be used). Three medications can be combined in a pump however adding more can reduce the effectiveness of those medications

Haloperidol can be added if the resident has nausea or agitation and is preferred over metoclopramide (this reduces the risk of mistakenly giving metoclopramide to residents with bowel obstruction which can lead to perforation). Haloperidol (metoclopramide also) is a dopamine antagonist and will exacerbate symptoms in those residents with Parkinson’s disease however can be used in the last days of life (prochlorperazine should be used prior to the terminal phase)

Secretions can usually be managed with PRN dosing of butylbromide however this can be added to subcutaneous pumps if required

Use hydromorphone for those with end stage kidney disease (reduced dose) or true allergy (rare) to morphine/oxycodone.

1mg hydromorphone s/c is equivalent to 5mg morphine s/c however an equivalent dose of 1mg s/c hydromorphone to 3mg s/c morphine can be used to prevent under dosing.

PRN MEDICATIONS:

These can be used for breakthrough pain in combination with a subcutaneous pump or used alone if the resident is settled and is not requiring PRN medication more than 4 hourly.

**Morphine Sulphate (pain/dyspnoea):**

In the opioid naïve initial doses in the terminal phase may need to be smaller and more often such as 1-2mg, s/c, 1-2 hourly, PRN. This dosage can also be used for acute dyspnoea. Once the resident is settled the dosage can be changed to 2.5mg-5mg, s/c, PRN 1-4 hourly (this increased dosage can also be given hourly for acute dyspnoea if the resident requires more than 3 hourly doses consecutively)

5-10mg, s/c, PRN, 1-2 hourly, (not opioid naïve)

**HYDROMORPHONE (use if resident is allergic to morphine /oxycodone or has RF):**

0.25mg-0.5mg, s/c, 1-2 hourly, PRN (start low with renal failure as higher doses may induce hallucinations due to reduced ability to renally clear medication)

**MIDAZOLAM (anxiety/residents with epilepsy who can no longer take their medication orally):**

2.5mg-5mg, s/c, PRN, 1-2 hourly

**HALOPERIDOL (nausea/delirium):**

0.5mg, s/c, PRN, 4 hourly (nausea)-2mg should be enough to saturate vomiting receptors

0.5mg-1mg PRN, 4 hourly (delirium)**-**maximum 5mg in 24 hours

**HYOSCINE BUTYLBROMIDE (secretions):**

10-20mg, s/c, PRN, 2 hourly (hyoscine hydrobromide will cross the blood-brain barrier and can induce delirium)

**CLONAZEPAM (agitation):**

This can be used for severe agitation not settled by midazolam and can initially be used in combination with midazolam. If larger doses are required cease the midazolam and use clonazepam in a nikki pump with PRN doses as required

0.5mg-1mg, s/c, PRN, 4 hourly

SUBCUTANEOUS PUMP DOSAGES:

**Morphine Sulphate (pain/dyspnoea):**

10-20mg, s/c, 24 hours -buprenorphine transdermal patch 5mcg is equivalent to 12mg morphine s/c) patches can be left in-situ and dosage in the nikki pump reduced accordingly

Never cease patches used to treat parkinson’s symptoms

morphine 30mg oral equivalent to 10mg morphine s/c

hydromorphone 6mg oral equivalent to 2mg hydromorphone s/c

**Midazolam (anxiety/for those residents who can no longer take oral epilepsy medication):**

10-60mg, s/c, 24 hours

**Haloperidol (nausea/delirium):**

0.5-2mg, s/c, 24 hours for nausea

0.5-5mg, s/c, 24 hours for delirium management

**Hyoscine butylbromide (PRN dosing is usually enough to manage secretions):**

60-120mg, s/c, 24 hours

**Clonazepam:**

Only use in a pump if agitation is not settled with midazolam and/or PRN clonazepam dosing

If PRN midazolam and clonazepam are not covering agitation then cease midazolam in pump and add 4-8mg clonazepam, s/c, 24 hours (and use PRN clonazepam also if required)

IF FURTHER ADVICE IS REQUIRED:

Discuss with GP

MPACCS (Mobile Palliative Care Consultancy Service) can provide phone advice or on-site visits from a palliative consultant and/or CNS (referral form will need to be completed)

Locum service available out of hours/weekends

Therapeutic Guidelines (eTG)