AAST PALLIATIVE CARE COMMITTEE PRODUCT

AAST PALLIATIVE CARE MEDICATION GUIDELINES

A PRIMER FOR SURGEONS

This brief overview is targeted to End of Life Care for the patient anticipated to die within days to <4 weeks. There may be different strategies and medications employed for those with >4 weeks expected lifespan.

The general principle of palliative care is to start with lower dosages and titrate up to the lowest effective dosage. If tolerance develops, the dosage may need to be increased, depending on prognosis and timeframe. Non-pharmacologic adjuncts (eg. music, counseling, sleep masks, minimization of disruptions, etc.) may assist with pain management and should be employed when feasible and applicable.

Morphine and oxycodone are available in sublingual formulation if patient is unable to take PO or IV. Other medications may be available in transdermal formulation. Multimodal pain and dyspnea treatment can be useful as well. There may be some overlap of utility of several of the medications listed below.

AGITATION

- Haloperidol 0.5 mg, oral, every 6 hours PRN, for distressful delirium or hallucinations
- Haloperidol lactate injection – 2.5 mg IV every 4 hours PRN for distressful delirium or hallucinations. Give IV only if patient unable to tolerate oral medication.

ANALGESICS

- **Initial dosing for dyspnea or pain in opioid-naïve patients**
  - Fentanyl 25-100mcg IV/SQ every 2-3 hr PRN
  - Hydromorphone 2-4mg PO vs 0.5-2mg IV/SQ every 3-4hr PRN
  - Morphine 2.5-10mg PO vs 2-10mg IV/SQ every 3-4hr PRN
- **Analgesics for Mild/Moderate Pain or Respiratory Distress**
  - Acetaminophen, Morphine injection, Fentanyl injection, or Hydromorphone injection
- **Analgesics for Severe Pain**
  - Morphine infusion or Fentanyl infusion or Hydromorphone infusion
  - Use hydromorphone for patients with renal failure
  - For additional analgesia - morphine infusion dosing:
    - If <4mg of morphine given over 2 hrs, start at 2mg/hr
    - If 5-16 mg of morphine given over 2hrs, start at 4-6 mg/hr
    - If >16 mg of morphine given over 2 hrs, start at 8mg/hr
- Fentanyl infusion if morphine contraindicated or already receiving fentanyl
- Morphine or Fentanyl infusion with bolus/PRN option
- Hydromorphone infusion with bolus/PRN option

ANTICHOLINERGICS

Management of oral secretions

- Glycopyrrolate injection— 0.2mg IV every 6 hours scheduled, for excessive orotracheal secretions; first dose prior to extubation if applicable
- Scopolamine transdermal patch— 1-2 patches behind the ear, replace every 72hr
- Hyoscyamine 0.125-0.5mg sublingual or subcutaneously every 4hr
- Atropine ophthalmic 1% drops— 1-2 drops sublingually every 6hr

ANTIEMETICS

- Ondansetron 4mg IV, every 4 hours PRN nausea, vomiting
- Prochlorperazine 10mg PO/IV every 6 hours PRN or 25mg rectal every 6hr
- Dexamethasone 2-8mg IV/PO every 4-8hr PRN for malignant bowel obstruction or elevated intracranial pressure

ANXIETY/SLEEP

Sedation and Analgesia (treat both anxiety and pain)

- Begin analgesic/anxiolytic medications at current rate (if the patient is comfortable and calm)
- Increase as needed by 10% every 15 minutes for uncontrolled anxiety
- Analgesic/anxiolytic medication instructions
- Lorazepam 0.5mg PO/IV every 30 minutes as needed
- Midazolam infusion
- For patients with chronic benzodiazepine use, no abrupt discontinuation. Gradual taper if desired to reduce, to minimize withdrawal risk

BOWEL MANAGEMENT

- Avoid magnesium hydroxide in patients with end-stage renal disease
- Sennosides-docusate sodium 8.6-50 mg tablet, 2 tablets, PO, 2 times daily
- Polyethylene glycol PO powder -17g, PO 2 times daily PRN constipation refractory to docusate-senna
- Magnesium hydroxide liquid – 30 ml, PO, PRN constipation refractory to docusate-senna and polyethylene glycol (PEG). May give in place of PEG or in additional to PEG per patient request.

FEVER

- Acetaminophen 650mg PO/rectal every 4 hours PRN, liquid formulation available if needed
- Ibuprofen 400mg oral every 6 hours PRN
- Ketorolac injection – 15mg IV every 6hr given for temperature >101°F

PALLIATIVE SEDATION

Palliative Sedation describes sedation intended to smooth the transition of dying, when there is intractable pain and/or distress unrelieved by other measures. It is not to promote or to hasten the dying process but is for alleviation of severe symptoms unable to be controlled by other treatments and may require higher dosing of medications than previously listed. The process has the effect of decreasing the patient's consciousness and should be proportional to the refractory symptoms. When necessary, it should be undertaken with shared decision-making with the patient/family. Goals should be defined with the patient/family as well as caregivers, and the setting of prognosis and life expectancy should be outlined.

USE OF BUPRENORPHINE, CHRONIC ANALGESICS OR ANXIOLYTICS

An important recent change is the elimination of need for DEA X Waiver for the prescription of Buprenorphine. It can now be prescribed by a clinician holding a standard DEA registration. It can be utilized as a combination product of Buprenorphine/Naloxone, range 2/0.5 to 12/3, typically every 8-12hr. Buprenorphine is available as sublingual, buccal or transdermal formulations.

It is recommended that chronic buprenorphine continue at the same previously prescribed dosage, used in combination with multimodal analgesia for breakthrough pain. Splitting the same daily buprenorphine dosage may be considered to smooth pain relief. Non-opioid medications should be the initial additional medications utilized. Short-acting opioids may be added with expected dosages higher than opioid-naïve patients.

For a patient with chronic opiate usage, a general rule of thumb is to continue at least the equivalent of the verified home dosage unless there are signs of toxicity, in which case, consider dose reduction of 30-50% until signs are resolved and pain still controlled. Many times, the chronic dosage equivalent will need to be increased for acute worsening of symptoms. If the patient is still alert and refractory severe symptoms, appropriate medications likely need to be increased.

Key: PO=oral; SQ=subcutaneous; IV=intravenous

WHERE TO HANG:

- Surgeon Lounge
- OR Locker Room
- Resident Workroom
- ICU Workroom

Need additional copies?

Send an email to aast@aast.org with the subject header: Goals of Care, with mailing information.

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