

CANCER PAIN INSERVICE

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Care

Guiding Principles:

- Opioids: PO:SC (2:1)
- breakthrough dose 50% of q4h dose
PRN OR
- 25% of q4h dose q1h PRN
- Switch to slow release opioid only when
pain stable on short acting opioid
- Order regular laxatives
- **In the elderly, use lower opioid initial dose**

CASE STUDY

Mr. P. G.:

- 72 year old man recently diagnosed with non-small cell ca lung with mets to liver, ribs, thoracic spine, and brain.
- palliative radiotherapy to ribs for pain management.

Mr. P. G.

- Comfortable, no myoclonus
- ESAS 3/10 for pain
- Tolerating hydromorphone 1.5mg PO q4h and 0.75mg PO q2h prn

Mr. P. G.

Telephone Call:

- PPS 40
- Rib cage pain controlled, ESAS 2-3/10
- Tolerating hydromorphone
- Appears uncomfortable
- Wife indicates he has been complaining of mid back pain. ESAS 8/10
- Not mobilizing, no bowel movement for 3 days

Mr. P. G.

- Admitted and treated with IV decadron and XRT
- Discharged home
- Telephone call (few days later)
- PPS 40
- Comfortable, ESAS 2/10 (rib and back)
- Tolerating meds
- Only change is a tapering dose of decadron



Mr. P. G.

Telephone Call:

- PPS 30
- No rib cage or back pain ESAS 1/10
- Generally deteriorating with c/o headache, increased congestion, difficulty swallowing, poor appetite.
- Requires total assistance and care

Options

Things to think about:

- change route
- means of delivering analgesia
- resources
- supplies
- education

CADD PUMP

CADD = **C**ontinuous **A**mbulatory **D**elivery
Device

- portable pump
- in palliative care, usually for SC infusion
- 2 sizes of cassettes 50 ml and 100 ml
- option available for use of intravenous bags

CADD PUMP

Why and When:

For patients with:

- inability to tolerate oral medication
- severe nausea
- inadequate GI absorption
- uncontrolled pain

CADD PUMP

Why and When:

For patients:

- requiring SC medication at home
- requiring continuous infusion of medication especially analgesia
- to avoid bolus effect from intermittent injections

CADD PUMP

HOW:

- Total the 24 hour dose and divide into an hourly rate, using SC route
- Consider the dosage and volume when ordering opioid
- Consider BT (breakthrough) dose when ordering the concentration

Mr. P.G.

- Currently taking hydromorphone 1.5 mg PO q4h
- Breakthrough dose 0.75 mg PO q2h PRN

Conversion to s/c

Intermittent:

- Now taking hydromorphone 1.5 mg PO q4h
- Total the 24 hr dose ($1.5 \times 6 = 9$ mg) PO
- Divide by 2 ($9/2 = 4.5$ mg) SC
- Divide by 6 ($4.5/6 = 0.75$) q 4 hr.
- Dose is 0.75 mg s/c q 4 h

CADD Pump

Continuous Infusion

- Total the 24 hour PO dose $1.5\text{mg} \times 6 = 9$
- Add in the breakthrough dose or approximate (i.e. $2 \times .75 = 1.5 \text{ mg}$)
- Total the actual 24 hr dose: $9 + 1.5 = 10.5$
- Divide by 2 = 5.25 mg
- Divide by 24 ($5.25/24 = 0.22 \text{ mg}$)
- Dose $0.2 \text{ mg s/c per hour}$

CADD Pump Order

Hydromorphone

- Concentration 2 mg per mL
- Cassette 50 mL
- Rate: 0.2 mg sc / hr
- Demand Dose: 0.2 mg sc q 60 min.PRN



QUESTIONS??

