Practical Management of Common Problems in Palliative Care

Palliative Care:

….. an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial, and spiritual.

World Health Organization, 2007

PAIN

Nociceptive – caused by nerve stimulation
Neuropathic – caused by nerve damage
Incident – predictable, caused by specific event (e.g. movement)

Remember that an individual may have a number of pains.
Assess the quality of each pain. *What does it feel like?*
Assess the severity of each pain.
Use a numerical score (0-10) or a Visual Analog Scale.

OPIOIDS

APPROXIMATE ORAL EQUIVALENCIES:

Morphine	10 mg
Hydromorphone	2 mg
Codeine	100 mg
Oxycodone	5 - 7.5 mg

SUBCUTANEOUS OR INTRAVENOUS DOSES:
Divide the PO dose by 2.
(e.g. Morphine 10 mg PO = Morphine 5 mg IV)

TRANSDERMAL DOSE CONVERSIONS:
24 hr PO Morphine (mg) to Fentanyl T/D (mcg/hr)

60-134 mg/day = 25 mcg/hr	315-404 mg/day = 100 mcg/hr
135-224 mg/day = 50 mcg/hr	405-494 mg/day = 125 mcg/hr
225-314 mg/day = 75 mcg/hr	495-584 mg/day = 150 mcg/hr

For high doses, check dose conversion charts – e.g. CPS

The correct dose is the dose that keeps the individual comfortable.

The best pain relief is achieved by giving the analgesic on a regular, rather than a prn basis.
Immediate release opioids PO/SC/IV should be dosed q4hourly
Controlled release opioids should usually be dosed q12hourly
Transdermal Fentanyl should be dosed q72hours

Remember a dose for breakthrough pain:
aim for 10% of daily dose, given q1h PO or q30min SC prn
For Fentanyl T/D, aim for Morphine 10 mg PO (5 mg SC)
or Hydromorphone 2 mg PO (1 mg SC) per every 25 mcg of patch
e.g. Fentanyl 75 mcg/hr: 6 mg Hydromorphone q1h prn

When changing from one opioid to another for suspected development of tolerance, reduce the calculated dose by 30%; increase if necessary.

DEALING WITH COMMON OPIOID SIDE EFFECTS

Constipation: very frequent; all patients on opioids should be warned of this side effect and usually started on stool softeners (e.g. docusate) and laxative (e.g. sennosides).

Nausea / Vomiting: initially occurs in 2/3 of opioid users, but tolerance develops in more than one half of them; Metoclopramide and Haloperidol are the most effective antinauseants for this and can often be tapered or stopped after a short time.

Sedation: may occur on initiation or dose escalation; tolerance usually develops to mild sedation; if persists, lower the dose or change to a different opioid.

Dry mouth: a common side effect; encourage PO fluid intake and good mouth care.

Neurotoxicities: mild hallucinations are common; for confusion, delirium and myoclonus, consider other causes as well as changing the opioid.

Respiratory depression: generally only a problem with excessive doses; reduce the dose of opioid; in severe cases give small doses of Naloxone to partially reverse the opioid effect.

If any opioid-related side effects are persistent and bothersome, consider changing the opioid.

COMMON MEDICATIONS FOR NEUROPATHIC PAIN

Opioids may be very helpful, alone or as an adjunct.
TCA, e.g. Amytriptiline 10-75 mg hs - start low, increase slowly
Tegretol - check CBC, LFT's monthly; do not exceed therapeutic level
Gabapentin 300-3000 mg/day - start low, increase slowly
Pregabalin 50-100 mg tid
Steroids – e.g. Dexamethasone up to 16 mg per day
Baclofen 5-20 mg PO qid - start low, increase slowly
- avoid abrupt withdrawal
Clonazepam 0.5 mg PO od-bid – may increase slowly to max 8 mg/day
- avoid abrupt withdrawal
Cannabinoids – e.g. nabilone, dronabinol - start low, increase slowly

Anticonvulsants may be more effective for "*shooting*" pains. For "*burning*" or "*tingling*" pains, TCA's may be more helpful. If the antidepressant or anticonvulsant is ineffective alone at maximum tolerated doses, add the other.

INCIDENT PAIN

Fentanyl IV solution given SL
Start with 12.5–25 mcg SL 5 minutes prior to the incident
(e.g. transfer, dressing change)
Increase as needed by 25 mcg to maximum 100 mcg pre-incident
Sufentanil may be useful in more severe pain, as it is 5 times as potent as Fentanyl.

NAUSEA / VOMITING

NON-PHARMACOLOGIC MEASURES

Calm reassuring environment
Avoid exposure to foods which may precipitate nausea
Transfer the cooking role / cooking location
Good, frequent mouth care
Frequent small snacks
Flexibility in food availability
Review drugs - d/c if possible
Change the opioid
Complementary therapies

PHARMACOLOGIC OPTIONS include:

Haloperidol - 1-4 mg /day in divided doses; PO/SC
- central Dopamine antagonist
- excellent for opioid / chemical / metabolic nausea
- extrapyramidal side effects, but unusual at low doses

Metoclopramide - 10-20 mg q4h PO/SC/IV
- peripheral and central Dopamine antagonist
- useful for gastric stasis / ileus
- s/e: extrapyramidal; prolonged half-life in renal failure; colic in GI obstruction

Domperidone - 10-30 mg q4H PO
- peripheral Dopamine antagonist
- useful for gastric stasis / ileus

Prochlorperazine - 10 mg q4h; PO/PR/IV
- peripheral and central Dopamine antagonist
- extrapyramidal side effects, drowsiness

Dimenhydrinate - 25-50 mg PO/IV q4h; 100 mg PR q6h
- central Histamine and Acetylcholine antagonist
- drowsiness is common

Promethazine - 25 mg PO/PR q4h; 12.5-25 mg IV q4h
- central Histamine and Acetylcholine antagonist
- drowsiness is common

Scopolamine - 500 mcg T/D patch – 1-3 patches q 72 hours
- central and peripheral Acetylcholine antagonist

Ondansetron - 8 mg q8h PO/IV **Granisetron** - 1 mg q12H PO/IV
- Serotonin blockers in gut, and centrally
- most useful post chemotherapy, abdominal radiotherapy and post-operatively
- s/e: headache, constipation, diarrhea, expense

Dexamethasone – 4-8 mg per day PO/SC
- potential peripheral and central effects

Lorazepam - 1-2 mg q4H prn PO/SL/SC
- little intrinsic antiemetic properties, but reduces anxiety, anticipatory nausea

BOWEL OBSTRUCTION

Considering surgery is almost always warranted, BUT surgical morbidity and mortality are high. Consider venting gastrostomy.
NG Suction + IV Fluids are generally not recommended, except for short periods.
Conservative management does not shorten survival.

DYSPNEA

Dyspnea, similar to pain, is defined by the patient.
Ask: *Are you short of breath? How short of breath are you?*

NON-PHARMACOLOGIC MEASURES

****TREAT REVERSIBLE CAUSES****
Position of Comfort **Reassurance**
Relaxation techniques **Well-ventilated space**

PHARMACOLOGIC OPTIONS include:

Morphine or Hydromorphone IV/SC
Ativan SC/SL or Midazolam IV/SC
Chlorpromazine
Add Ventolin if wheezing present
Consider adding Dexamethasone 1-2 mg
Nebulized Opioids – controversial
Oxygen by nasal prongs may be useful intermittently or continuously, even though SAO2's are within normal limits

MANAGING UPPER RESPIRATORY SECRETIONS

Explain what is happening to the patient and family.
Avoid overhydration (i.e. Stop any IV or SC fluids)
Medication: Scopolamine 0.3 - 0.6 mg SC q4h prn
(Scopolamine patch may be useful in mild cases)
Glycopyrrolate 0.2 – 0.4 mg SC q3h prn

MANAGEMENT of ORAL PROBLEMS

Regular mouth care will help in the prevention and early detection of oral problems. Encourage family involvement.
Mouth care should occur minimally every 4 hours.
Mouth care BEFORE meals stimulates appetite and increases flow of saliva; AFTER meals prevents accumulation of debris.

Remove, clean and soak dentures. Brush teeth with a soft toothbrush.
Rinse (e.g. ½ tsp salt and ½ tsp baking soda in 1 cup water)
Protect the lips. Consider oral candidiasis.

DELERIUM

Common problem – may be Hyperactive or Hypoactive
Consider reversible causes: hypercalcemia, sepsis, hypoxemia, CNS metastases, medications – esp. opioid toxicity
Treat reversible causes as indicated; change the opioid.
If persists, consider Methotrimeprazine
If intractable, may require sedation

COMMUNICATION HINTS

- Prior to the visit, consider your own feelings
- Anticipate questions you may be asked
- Assure privacy
- Make sure the patient and you are comfortable.
- Find out what they know, and what they want to know
- Use language they can understand.
- Give any bad news sensitively.
- Be truthful.
- Acknowledge their feelings.
- Ask them to summarize what you told them.
- Allow time for questions.
- Provide psychological support.
- Set a time for the next visit.

Examples of Potentially Useful Questions:

What concerns you most about your illness?
What has been most difficult for you?
What are your hopes, expectations and fears for the future?
Is faith (spirituality, religion) important to you in this illness?
Is there someone you can talk to about spiritual issues?
What do you still want to accomplish during your life?
What might be left undone if you were to die today?
What do you want others to remember about you?

REMEMBER TOTAL SUFFERING

Pain, Other Physical Symptoms, Psychological Issues, Social Issues, Cultural Issues, Spiritual Issues all contribute to ***Total Suffering***

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Please note: Medicine is a constantly changing science. End-of-Life Care is frequently complex. Medications and doses suggested herein should be used in conjunction with other resources (e.g. product information, consultation), especially if their use is new or infrequent.