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- physicians, nurses, and other health care professional and provider organizations;
- health plans, health systems, health care organizations, hospitals and integrated health care delivery systems;
- health care teaching institutions;
- health care information service departments;
- health care teaching institutions;
- health care information technology departments;
- medical specialty and professional societies;
- researchers;
- federal, state and local government health care policy makers and specialists; and
- employee benefit managers.

This ICSI Health Care Protocol should not be construed as medical advice or medical opinion related to any specific facts or circumstances. If you are not one of the expert audiences listed above you are urged to consult a health care professional regarding your own situation and any specific medical questions you may have. In addition, you should seek assistance from a health care professional in interpreting this ICSI Health Care Protocol and applying it in your individual case.

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Foreword

Scope and Target Population

The primary and specialty care clinicians can use this order set to create or complement a palliative plan of care for adult patients with a potentially life-limiting, life-threatening or chronic, progressive illness throughout the continuum of care. The order set is appropriate for patients who still desire curative or life-prolonging treatments, those needing active symptom management, or patients who are imminently dying.

This order set pertains to those orders for palliative care in adults in either the inpatient, extended care or home care setting. This order set will not include admission, discharge or other orders specific to the patient's condition outside of palliative care. These orders exclude patients in a hospice program as hospice agencies have their own orders.

Clinical Highlights and Recommendations

• The goal of palliative care is to improve the comfort of the patient. Palliative care should neither hasten or prolong death.

• Patients undergoing life-prolonging therapies may, in fact, have better clinical outcomes when distressing symptoms are aggressively identified and treated.

Priority Aims

1. Improve the management of pain symptoms in adult patients with a potentially life-threatening or chronic, progressive illness in a specifically defined disease population.

2. Improve the management of distressing symptoms such as, but not limited to, shortness of breath, seizures and constipation in adult patients with a potentially life-threatening or chronic, progressive illness in a specifically defined disease population.

3. Improve patient/family satisfaction with regards to control of distressing symptoms in adult patients with a potentially life-threatening or chronic, progressive illness in a specifically defined disease population.

Related ICSI Scientific Documents

Related Guidelines
• Assessment and Management of Acute Pain
• Assessment and Management of Chronic Pain
• Major Depression in Adults in Primary Care
• Palliative Care

Patient and Family Guidelines
• Palliative Care for Patients and Families

Order Sets
• Skin Safety Order Set: Risk Assessment and Prevention of Pressure Ulcers
Disclosure of Potential Conflict of Interest

ICSI has adopted a policy of transparency, disclosing potential conflict and competing interests of all individuals who participate in the development, revision and approval of ICSI documents (guidelines, order sets and protocols). This applies to all work groups (guidelines, order sets and protocols) and committees (Committee on Evidence-Based Practice, Cardiovascular Steering Committee, Women's Health Steering Committee, Preventive & Health Maintenance Steering Committee, Respiratory Steering Committee and the Patient Safety & Reliability Steering Committee).

Participants must disclose any potential conflict and competing interests they or their dependents (spouse, dependent children, or others claimed as dependents) may have with any organization with commercial, proprietary, or political interests relevant to the topics covered by ICSI documents. Such disclosures will be shared with all individuals who prepare, review and approve ICSI documents.

No work group members have potential conflicts of interest to disclose.

Introduction to ICSI Document Development

This document was developed and/or revised by a multidisciplinary work group utilizing a defined process for literature search and review, document development and revision, as well as obtaining and responding to ICSI members.


Evidence Grading System

A. Primary Reports of New Data Collection:
   - Class A: Randomized, controlled trial
   - Class B: Cohort study
   - Class C: Non-randomized trial with concurrent or historical controls
     - Case-control study
     - Study of sensitivity and specificity of a diagnostic test
     - Population-based descriptive study
   - Class D: Cross-sectional study
     - Case series
     - Case report

B. Reports that Synthesize or Reflect upon Collections of Primary Reports:
   - Class M: Meta-analysis
     - Systematic review
     - Decision analysis
     - Cost-effectiveness analysis
   - Class R: Consensus statement
     - Consensus report
     - Narrative review
   - Class X: Medical opinion

Citations are listed in the guideline utilizing the format of (Author, YYYY [report class]). A full explanation of ICSI's Evidence Grading System can be found at http://www.icsi.org.
Order Set

This order set pertains to those orders for palliative care in adults in either the inpatient, extended care or home care setting. This order set will not include admission, discharge or other orders specific to the patient’s condition outside of palliative care. These orders exclude patients in a hospice program as hospice agencies have their own orders.

Many of the medication orders include a range for dose and interval. Dosages may vary for many reasons, including the patient’s underlying illness and comorbidities, nutritional status, previous exposure to a particular medication, and particularly with opioids, prior history of chemical dependence. There is little literature regarding maximal safe doses for many medications, including opioids. Ranges are suggested for initiation of therapy, and dosages can be titrated to meet individual comfort needs. The clinician must carefully monitor the patient’s response to treatment. Consult with a pharmacist or, when available, a palliative care specialist.

Is the patient in a hospice program? □ No □ Yes, coordinate orders with hospice agency.

Patient Information (Two are required.)

Last Name: __________________________
First Name: __________________________
Date of Birth: __ / __ / ______
Patient’s age: _______
ID #: __________________________

Diagnosis
Primary diagnosis: __________________________
Secondary diagnosis: __________________________
Attending physician: __________________________
How to contact: __________________________

Condition
□ Stable □ Unstable □ Other __________________________

Code Status
□ Full Code □ DNR

Allergies/Adverse Drug Reactions
□ None
□ Yes, Name: __________________________ Type of reaction: __________________________
_____________________________________ Type of reaction: __________________________
_____________________________________ Type of reaction: __________________________

Nursing Orders

Agitation, Anxiety, Delirium and Depression Management (Annotations #2, 4, 7, 8)
□ Reduce sensory stimulation in environment
□ Restore/reorient routines and environment
□ Use patient’s adaptive devices (eyeglasses, hearing aids, etc.)
□ Calm fears for agitation, anxiety
□ Educate patient and family about the use of guided imagery and relaxation techniques
□ Psychological consult
□ Social services consult
□ Spiritual/religious consult
Anorexia/Cachexia Management (Annotation #3)
- Dietary consult
- Perform patient and family education that includes:
  - Exploration of the meaning of feeding
  - Types of appealing foods and drinks
  - Use of small plates in small portions
  - Artificial hydration/nutrition considerations
  - Alcoholic drinks
  - Minimize odors that suppress appetite

Constipation Management/Bowel Care (Annotation #5)
- Educate patient and family including:
  - Increasing fluids, juices, foods high in fiber
  - Encouraging more physical activity such as walking
  - Ensuring sufficient privacy for bowel movements
- Obtain orders for constipation management/bowel care if opioids are prescribed

Cough Management (Annotation #6)
- Head of bed set at 30 degrees
- Add room humidifier

Dry Eyes/Dry Nose Management (Annotation #10)
- Add a room humidifier as needed for dry eyes and nose

Dyspnea Management (Annotation #11)
- Half-sitting position, as comfortable for patient
- Add a fan in room for dyspnea
- Oxygen 2 liters per minute by nasal canula as needed. Titrate up for comfort (use caution with COPD patients)
- Perform testing evaluations only if results will change the therapy
  - oximetry
  - pulmonary function tests
  - chest imaging
  - other diagnostic test _________

Fatigue Management (Annotation #12)
- Educate patient and family including:
  - Promote adaptation and prioritization of activities
  - Encourage mild activity and exercise
  - Schedule rest periods

Fever Management (Annotation #13)
- Call physician if temp does not subside or reaches _______degrees

Hiccups Management (Annotation #14)
- Perform patient and family education on non-pharmacologic treatments for hiccups

Nausea/Vomiting Management (Annotation #15)
- Educate patient and family including:
  - Avoid smells that trigger nausea
  - Incorporate relaxation techniques
- Apply acupuncture/acupressure techniques for nausea
Oral Care Management (Annotation #16)
- Educate patient and family including:
  - Use of soft toothbrush
  - How to clean dentures
  - Food preparation: lukewarm, nothing very cold or hot, mildly spiced, soft foods
- Dental consult
- Lip balm as needed for cracked, dry lips
- Apply artificial saliva every hour and as needed for dry mouth
- Mouth moisturizer gel as needed for dry mouth
- Salt solution (1 teaspoon salt in 240 mL/1 cup of water) 15-30 mL. Swish and spit 4 times a day as needed for mouth pain

Pain Management (Annotation #17)
- When pain control is achieved, obtain orders to transition to long-acting opioids

Secretion Management (Annotation #18)
- Cough and deep breath every hour while awake
- Chest physiotherapy 1-2 times/day for secretions
- Encourage fluids for hydration
- Add a room humidifier
- Suction secretions as needed for removal of troublesome secretions (oral, not deep, suctioning)

Skin and Wound Care Management (Annotation #20)
(Consider overall goals of care regarding risk assessments and treatments. Refer to institution’s protocol for pressure ulcer prevention and treatment.)
- Implement skin safety protocol based on risk assessment
- Appropriate pressure-relieving mattress
- Heel protection
- Evaluate chairs, wheel chairs, etc., for appropriate pressure-relieving surfaces
- Perform patient and family education that includes:
  - Causes and risks for pressure ulcers
  - Mobilization
  - Minimize friction and sheer
  - Control moisture
  - Frequent repositioning
  - Nutrition and hydration
  - Techniques to control odor
  - Wound cleaning and irrigation

Pressure ulcers and malignant wounds
- Premedicate with short-acting opioid analgesic before wound cares and dressing changes
- Cleanse by gentle irrigation with preservative-free normal saline or non-cytotoxic wound cleaner

To control odor:
- Kitty litter, coffee grounds or activated charcoal; place in dish or tray under bed for odors
- Peppermint oil or other aromatherapy products for odors

For low to moderate amounts of exudate in stage 2 or 3 wounds:
- Hydrocolloid dressings; change every 3 to 5 days
- Foam dressing; change every 3 to 5 days

For copious exudate:
- Alginite (Avoid in bleeding wounds.) Apply topically within wound borders; change every 2 to 4 days
- Ostomy appliance to contain drainage from fungating wound
To prevent bleeding:
- Use non-adherent absorbing dressing
- Moisten dressings with normal saline before removal

To manage active bleeding:
- Apply gauze saturated with 1:1,000 solution epinephrine
- Apply firm pressure to wound

Pruritus
- Over-the-counter moisturizing lotion as needed for discomfort

Sleep Disturbance/Insomnia Management (Annotation #21)
- Perform patient and family education that includes:
  - Good sleep environment
  - Relaxation therapies
  - Avoid stimulants

Urinary Incontinence and Retention Management (Annotation #22)
- Rectal examination to rule out impaction
- Insert smallest diameter catheter with smallest balloon available

Medications

Agitation, Anxiety, Delirium, Depression (Annotations #2, 4, 7, 8)

<table>
<thead>
<tr>
<th>Medication options:</th>
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<tbody>
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<td>Alprazolam</td>
</tr>
<tr>
<td>Citalopram*</td>
</tr>
<tr>
<td>Escitalopram</td>
</tr>
<tr>
<td>Haloperidol*</td>
</tr>
<tr>
<td>Methylphenidate*</td>
</tr>
<tr>
<td>Mirtazapine</td>
</tr>
<tr>
<td>Sertraline*</td>
</tr>
<tr>
<td>*See multi-symptom medications for specific orders</td>
</tr>
</tbody>
</table>

- Alprazolam ___ mg (0.25-0.5 mg) by mouth 3 times daily as needed for anxiety
- Escitalopram ___ mg (5-10 mg) by mouth daily for depression
- Mirtazapine ____ mg (7.5-15 mg) by mouth daily for depression

Anorexia/Cachexia Management (Annotation #3)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Dexamethasone*</td>
</tr>
<tr>
<td>Megestrol acetate*</td>
</tr>
<tr>
<td>Metoclopramide*</td>
</tr>
<tr>
<td>*See multi-symptom medications for specific orders</td>
</tr>
</tbody>
</table>

Constipation Management/Bowel Care (Annotation #5)

- Docusate ____ mg (100-400 mg) by mouth twice daily for constipation (maximum dose is 800 mg per day)
- Senna _____ tablet(s) (1-4 tablets) by mouth twice daily for constipation
- Docusate/Senna ____ tablet(s) (1-4 tablets) twice daily for constipation
- Bisacodyl ___ mg (5-10 mg) by mouth as needed for constipation (maximum dose is 10 mg per day)
- Sorbitol (70%) ____ mL (15-30 mL) by mouth daily as needed for constipation
- Glycerin rectal suppository 1 every day as needed for constipation
- Magnesium hydroxide (Milk of Magnesia®) 30 mL by mouth daily as needed for constipation
- Obtain orders for constipation management/bowel care if opioids are prescribed
Cough Management (Annotation #6)

- Benzonatate
- Guaifenesin + dextromethorphan*
- Guaifenesin + codeine*
- Lidocaine

*See multi-symptom medications for specific orders

☐ Benzonatate 200 mg by mouth 3 times a day as needed for cough
☐ Lidocaine ____mg (20 mg in 2 mL premixed) by nebulizer every 4 hours as needed for cough (Do not give within 2 hours of eating to decrease risk of aspiration.)

Diarrhea Management (Annotation #9)

- Cholestyramine*
- Loperamide

*See multi-symptom medications for specific orders

☐ Loperamide 4 mg by mouth initially; then 2 mg after each loose stool (Maximum dose is 16 mg daily)

Dry Eyes/Dry Nose Management (Annotation #10)

☐ Artificial tears, 1-2 drops in each eye as needed for dry eyes
☐ Saline nasal spray in each nostril as needed for dry nose

Dyspnea Management (Annotation #11)

- Albuterol
- Morphine*
- Furosemide
- Oxycodone*
- Ipratropium
- Opioid Reversing Agent
- Lorazepam*
- Naloxone*

*See multi-symptom medications for specific orders

If rales are present:
☐ Furosemide ____mg by mouth sublingual every hour as needed for dyspnea (maximum dose is 40 mg/hour)

If wheezing present:
☐ Albuterol 2.5 mg in 3 mL by nebulizer every 4 hours as needed for wheezing
☐ Ipratropium 0.5 mg in 3 mL by nebulizer every 4 hours as needed for wheezing
☐ Albuterol + Ipratropium (Duoneb®) 3 mL (premixed) by nebulizer every 4 hours as needed for wheezing

Fatigue Management (Annotation #12)

- Dextroamphetamine
- Methylphenidate*
- Dexamethasone*
- Prednisone
- Megestrol acetate*

*See multi-symptom medications for specific orders

☐ Dextroamphetamine 5 mg by mouth twice daily for fatigue (Maximum dose is 60 mg per day). Evaluate in 7 days
☐ Prednisone ____mg (7.5-10 mg) by mouth daily for fatigue. Evaluate in 7 days
Fever Management (Annotation #13)

- Acetaminophen*
- Ibuprofen*
*See multi-symptom medications for specific orders

If neither of the above is effective, alternate ibuprofen dose with acetaminophen 650 mg by mouth every 4 hours for fever (Consider if ibuprofen and/or acetaminophen is prescribed for pain management. Maximum dose ibuprofen is 3,200 mg per day. Maximum dose acetaminophen is 4,000 mg per day.)

Hiccups Management (Annotation #14)

- Chlorpromazine ____mg (25-50 mg) by mouth or IV every 6 hours as needed for hiccups
- Baclofen 5 mg by mouth every 8 hours as needed for hiccups (Reduce dose for patients with renal dysfunction)

Nausea/Vomiting Management (Annotation #15)

- Droperidol ____mg (0.625-1.25 mg) IV every 6 hours as needed for nausea/vomiting
- Prochlorperazine ____mg (5-10 mg) by mouth 4 times daily 30 minutes before meals and at bedtime as needed for nausea/vomiting
- Prochlorperazine ____mg by rectal suppository every 12 hours as needed for nausea/vomiting
- Promethazine ____mg (6.25-25 mg) by mouth or IV every 6 hours as needed for nausea/vomiting

Oral Care Management (Annotation #16)

- Topical viscous lidocaine 2% 5mL every 4 hours by mouth. Swish and spit as needed for mouth pain
- Magic mouthwash/hematology mouthwash (viscous lidocaine 2% - 60 mL, diphenhydramine elixir 60 mL, aluminum hydroxide/magnesium hydroxide 60 mL) 1-2 tsp by mouth. Swish and swallow or swish and spit 3-4 times/day as needed for mouth pain

Candida Treatment

- Clotrimazole 10 mg troche, dissolve in mouth 5 times a day for candida. Discontinue after 14 days of treatment
- Nystatin (100,000 units/1 mL) 5 mL for candida. Swish and swallow 4 times a day for 7 days, then evaluate
- Fluconazole 200 mg by mouth initially for candida, then 100 mg by mouth daily for 7 days, then evaluate
## Pain Management (Annotation #17) (Titrate for comfort except where noted)

<table>
<thead>
<tr>
<th>Mild pain medication options:</th>
<th>Malignant bone pain medication options:</th>
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<td>Ibuprofen*</td>
<td>Naproxen*</td>
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<tr>
<td>Tramadol</td>
<td>Dexamethasone*</td>
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<th>Neuropathic pain medication options:</th>
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<tr>
<td>Oxycodone/Acetaminophen</td>
<td>Desipramine</td>
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<td>Fentanyl</td>
<td>Gabapentin</td>
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<tr>
<td>Hydromorphone*</td>
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</tr>
<tr>
<td>Morphine*</td>
<td></td>
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<tr>
<td>Oxycodone*</td>
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<table>
<thead>
<tr>
<th>Opioid reversing agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naloxone*</td>
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</tbody>
</table>

*See multi-symptom medications for specific orders

- □ Tramadol ____ mg (25-100 mg) by mouth 4 times daily as needed for pain *(Reduce dose in patients with renal dysfunction. Caution: May cause delirium. Maximum dose is 400 mg/day.)*
- □ Hydrocodone 5 mg/acetaminophen 500 mg 1-2 tablets by mouth every 4 hours as needed for moderate pain *(Consider if acetaminophen is prescribed for fever control; maximum dose is 4,000 mg per day.)*
- □ Oxycodone 5 mg/acetaminophen 325 mg ____ (1-2 tablets) by mouth every 4 hours as needed for moderate pain *(Consider if acetaminophen is prescribed for fever control; maximum dose is 4,000 mg per day.)*

- ☑ Obtain orders for constipation management/bowel care if opioids are prescribed

### Opioid Medications

- □ Fentanyl 20 mcg IV every 15 minutes as needed for severe pain. Evaluate after each dose
- ✔ Obtain orders for constipation management/bowel care if opioids are prescribed

### Neuropathic Pain Medications

- □ Amitriptyline ____ mg (10-25 mg) by mouth daily at bedtime as needed for neuropathic pain *(Avoid use in elderly patients.)*
- □ Nortriptyline ____ mg (10-25 mg) by mouth daily at bedtime as needed for neuropathic pain *(Avoid use in elderly patients.)*
- □ Desipramine ____ mg (10-25 mg) by mouth daily at bedtime as needed for neuropathic pain *(Avoid use in elderly patients.)*
- □ Gabapentin *(Reduce dose in patients with renal dysfunction.)*
  - □ For elderly patients, 100 mg by mouth daily at bedtime. Titrate up to 100 mg twice daily and then 100 mg 3 times a day as needed for comfort
  - □ For non-elderly patient, 100 mg by mouth daily at bedtime. Titrate up to 300 mg twice daily and then 300 mg 3 times a day as needed for comfort
- □ Pregabalin 50 mg by mouth 3 times daily for neuropathic pain. Evaluate in 7 days. *(Reduce dose in patients with renal dysfunction.)*
- □ Transdermal lidocaine patch *(1-3 patches) for neuropathic pain. Apply for 12 hours, remove for 12 hours*
Secretion Management (Annotation #18)

Atropine 1% ophthalmic drops 1-4 drops sublingual every 2 hours as needed for excessive secretions
Glycopyrolate 1-2 mg by mouth sublingual every 8 hours as needed for secretions
Hyoscyamine 0.125-0.25 mg sublingual every 6 hours as needed for excessive secretions
Scopolamine 1.5 mg transdermal patch behind the ear every 72 hours as needed. May increase up to 3 patches in 72 hours for secretions.

Seizure Management (Annotation #19)

Diazepam 5-10 mg IV every 10-15 minutes up to 30 mg as needed for seizures
Diazepam 0.2 mg/kg rectally as needed for seizures. May repeat once in 4 hours as needed to stop seizure (maximum is one treatment course every 5 days)

Skin and Wound Care Management (Annotation #20)

To control pain:
Hydromorphone*  
Morphine*  
Oxycodone*

To control odor:
Metronidazole  
Silver sulfadiazine cream

*See multi-symptom medications for specific orders

Pruritus

Hydroxyzine 10-25 mg by mouth every 6 hours as needed for irritation
Doxepin 10-25 mg by mouth at bedtime for pruritus. Use daily for 7 days, then evaluate
Paroxetine 10-20 mg by mouth daily for pruritus
Diphenhydramine 25 mg by mouth every 4 hours as needed for itching. Avoid in elderly (Maximum dose is 300 mg/day)

Camphor/menthol lotion (Sarna®) applied as needed for irritation
Hydrocortisone 1% cream or lotion applied 2-3 times per day as needed for irritation
Triamcinolone 0.1% cream applied 2-3 times per day as needed for irritation
## Sleep Disturbance/Insomnia Management (Annotation #21)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorazepam*</td>
<td>□ Temazepam 15 mg by mouth at bedtime as needed for sleep. May repeat 1 dose</td>
</tr>
<tr>
<td></td>
<td>□ Trazadone ___ mg (25-100 mg) by mouth at bedtime. May repeat 1 dose (Maximum is 200 mg/day.)</td>
</tr>
<tr>
<td></td>
<td>□ Zolpidem ___ mg (5-10 mg) by mouth at bedtime as needed for sleep</td>
</tr>
</tbody>
</table>

*See multi-symptom medications for specific orders

## Urinary Incontinence and Retention Management (Annotation #22)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belladonna/opium</td>
<td>□ Belladonna/opium suppository rectally ____ (2-4) times daily as needed for bladder spasms</td>
</tr>
<tr>
<td>Oxybutynin</td>
<td>□ Oxybutynin 2.5 (2.5-5 mg) by mouth ____ (2-4) times daily as needed for bladder spasms (Maximum dose is 200 mg/day.)</td>
</tr>
</tbody>
</table>

## Multi-Symptom Medications

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>□ Acetaminophen 1,000 mg by mouth ____ (3-4) times a day as needed for mild pain or fever (Consider if acetaminophen is prescribed for fever control. Maximum dose is 4,000 mg per day.)</td>
</tr>
<tr>
<td>Acetaminophen</td>
<td>□ Acetaminophen 650 mg rectal suppository every 4 hours as needed for fever or mild pain (Consider if acetaminophen is prescribed for pain management. Maximum dose is 4,000 mg per day.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citalopram</td>
<td>□ Citalopram ___ mg (10-40 mg) by mouth daily for anxiety</td>
</tr>
<tr>
<td></td>
<td>□ Citalopram ___ mg (10-40 mg) by mouth daily for depression</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholestyramine</td>
<td>□ Cholestyramine 4 grams by mouth daily for pruritus. May titrate up to 8 gms twice a day. Evaluate after 7 days</td>
</tr>
<tr>
<td></td>
<td>□ Cholestyramine 4 grams by mouth ____ (3-4) times daily for diarrhea (Maximum dose is 16 g daily.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dexamethasone</td>
<td>□ Dexamethasone ___ mg (3-12 mg) by mouth ____ (2-3) times daily for bone pain. Evaluate after 7 days</td>
</tr>
<tr>
<td></td>
<td>□ Dexamethasone ___ mg (1-4 mg) by mouth daily for pruritus. Evaluate after 7 days</td>
</tr>
<tr>
<td></td>
<td>□ Dexamethasone 1 mg by mouth daily as needed for fatigue. Evaluate after 7 days</td>
</tr>
<tr>
<td></td>
<td>□ Dexamethasone ___ mg (2-6 mg) by mouth daily for anorexia/cachexia (Maximum dose 6 mg per day.) Evaluate after 7 days</td>
</tr>
<tr>
<td></td>
<td>□ Dexamethasone ___ mg (1-20 mg) by mouth daily for nausea/vomiting (May be in divided doses.) Evaluate after 7 day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guaifenesin</td>
<td>□ Guaifenesin + dextromethorphan 5 mL by mouth every 2 hours as needed for cough (100 mg guaifenesin/10 mg dextromethorphan per 5 mL dose. Maximum dose is 10 mL every two hours.)</td>
</tr>
<tr>
<td></td>
<td>□ Guaifenesin with codeine 5 mL by mouth every two hours as needed for cough (100 mg guaifenesin/10 mg codeine per 5 mL dose. Maximum dose is 10 mL every two hours.)</td>
</tr>
<tr>
<td></td>
<td>□ Guaifenesin ___ mg (200-400 mg) (100 mg guaifenesin/5 mL liquid) by mouth every 4 hours as needed to thin secretions</td>
</tr>
<tr>
<td></td>
<td>□ Guaifenesin ___ mg (600-1,200 mg) extended release tablet by mouth every 12 hours as needed to thin secretions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloperidol</td>
<td>□ Haloperidol 0.5 mg ☐ by mouth ☐ subcutaneous ☐ IV Titrate up to 5.0 mg every hour until a daily requirement is established and then administered in 2-3 divided doses per day as needed for agitation, anxiety, physical aggression with potential to cause harm, or for hallucinations or delusions that are causing the patient distress (Maximum dose is 30 mg/day.) Evaluate after each dose</td>
</tr>
<tr>
<td></td>
<td>□ Haloperidol 1 mg ☐ by mouth ☐ subcutaneous ☐ IV twice daily as needed for nausea/vomiting</td>
</tr>
<tr>
<td>Order Set</td>
<td>Palliative Care</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>□ Hydromorphone 2 mg by mouth every 60 minutes as needed for <strong>severe pain</strong>. Evaluate after each dose</td>
<td>Committee on Evidence-Based Practice/May 6, 2008</td>
</tr>
<tr>
<td>□ Hydromorphone 0.1 mg IV every 15 minutes as needed for <strong>severe pain</strong>. Evaluate after each dose</td>
<td></td>
</tr>
<tr>
<td>□ Hydromorphone ____ mg (2-4 mg) by mouth every hour as needed for <strong>wound pain</strong>. Evaluate after each dose</td>
<td></td>
</tr>
<tr>
<td>□ Ibuprofen ____ mg (400-800 mg) by mouth ____ (3-4) times daily for <strong>bone pain</strong> (Consider if ibuprofen is prescribed for fever, maximum dose is 3,200 mg per day.)</td>
<td></td>
</tr>
<tr>
<td>□ Ibuprofen ____ mg (400-800 mg) by mouth every 4 hours as needed for <strong>mild pain</strong> (Consider if ibuprofen is prescribed for fever control. Maximum dose is 3,200 mg per day.)</td>
<td></td>
</tr>
<tr>
<td>□ Ibuprofen 400 mg by mouth every 4 hours as needed if <strong>temperature</strong> greater than 37.5°C (99.5°F).</td>
<td></td>
</tr>
<tr>
<td>□ Alternate ibuprofen dose with acetaminophen 650 mg by mouth every 4 hours for <strong>fever</strong> (Consider if ibuprofen and/or acetaminophen is prescribed for pain management. Maximum dose ibuprofen is 3,200 mg per day. Maximum dose acetaminophen 4,000 mg per day.)</td>
<td></td>
</tr>
<tr>
<td>□ Lorazepam ____ mg (0.25-2 mg) ☐ by mouth ☐ sublingual ☐ IV every 4 hours as needed for <strong>anxiety</strong></td>
<td></td>
</tr>
<tr>
<td>□ Lorazepam 0.25 mg ☐ by mouth ☐ sublingual every 2 hours as needed for <strong>dyspnea</strong> (maximum dose is 1 mg every 2 hours). Evaluate patient response every 1-2 hours</td>
<td></td>
</tr>
<tr>
<td>□ Lorazepam _____ mg (0.25-2 mg) ☐ by mouth ☐ sublingual ☐ IV every 4 hours as needed for <strong>nausea/vomiting</strong></td>
<td></td>
</tr>
<tr>
<td>□ Lorazepam _____ mg (0.5-2 mg) ☐ by mouth ☐ sublingual ☐ IV at bedtime for <strong>sleep</strong>. May repeat dose in 1-2 hours (Maximum dose is 8 mg in 12 hours.)</td>
<td></td>
</tr>
<tr>
<td>□ Lorazepam ____ mg (2-4 mg) IV as needed for <strong>seizures</strong>. May repeat in 15 minutes as needed if seizures continue (Maximum 8 mg in 12 hours.)</td>
<td></td>
</tr>
<tr>
<td>□ Megestrol acetate 160 mg by mouth as needed for <strong>anorexia/cachexia</strong> (Maximum dose 800 mg per day.)</td>
<td></td>
</tr>
<tr>
<td>□ Megestrol acetate 160 mg by mouth three times a day for <strong>fatigue</strong>. Evaluate in 7 days</td>
<td></td>
</tr>
<tr>
<td>□ Methylphenidate ____ mg (5-10 mg) by mouth twice daily 30 minutes before breakfast and lunch for <strong>fatigue</strong> (Maximum dose is 20 mg per day.) Evaluate in 7 days</td>
<td></td>
</tr>
<tr>
<td>□ Methylphenidate 5 mg by mouth twice daily at 30 minutes before breakfast and lunch for <strong>depression</strong> (Avoid taking in the evening or at bedtime.)</td>
<td></td>
</tr>
<tr>
<td>□ Metoclopramide ____ mg (10-20 mg) ☐ by mouth ☐ IV 4 times daily 30 minutes before meals and at bedtime as needed for <strong>nausea/vomiting</strong></td>
<td></td>
</tr>
<tr>
<td>□ Metoclopramide ____ mg (10-20 mg) by mouth 30 minutes before meals and at bedtime for <strong>anorexia/cachexia</strong> (Maximum dose 80 mg every 24 hours.)</td>
<td></td>
</tr>
<tr>
<td>□ Morphine 0.5 mg IV every 15 minutes as needed for <strong>severe pain or dyspnea</strong>. Evaluate after each dose</td>
<td></td>
</tr>
<tr>
<td>□ Morphine 1 mg in 1 gram hydrogel applied to cover wound surface daily for <strong>wound pain</strong></td>
<td></td>
</tr>
<tr>
<td>□ Morphine 10 mg by mouth every hour as needed for <strong>severe pain and wound pain</strong>. Evaluate after each dose</td>
<td></td>
</tr>
<tr>
<td>□ Morphine 2.5 mg ☐ by mouth ☐ sublingual every hour as needed for <strong>dyspnea</strong> (Maximum dose is 10 mg/hour.) Evaluate after each dose</td>
<td></td>
</tr>
<tr>
<td>□ Naloxone 0.4 mg diluted with 9 mL normal saline; give 1 mL IV every 1-2 minutes until respirations improve. Repeat as needed for <strong>reversal of respiratory depression</strong></td>
<td></td>
</tr>
<tr>
<td>□ Naproxen 250 mg by mouth twice a day for <strong>bone pain</strong> (Maximum dose is 1,500 mg per day.)</td>
<td></td>
</tr>
<tr>
<td>□ Naproxen 250 mg by mouth twice a day as needed for <strong>mild pain</strong> (Maximum dose is 1,500 mg per day.)</td>
<td></td>
</tr>
</tbody>
</table>
☐ Oxycodone ____mg (2.5-10 mg) ☐ by mouth ☐ sublingual every hour as needed for dyspnea
(Maximum dose is 10 mg/hour.) Evaluate after each dose
☐ Oxycodone ____mg (5-10 mg) by mouth every hour as needed for pain. Evaluate after each dose

☐ Sertraline 25 mg (25-200 mg) by mouth daily for anxiety
☐ Sertraline 25 mg (25-200 mg) by mouth daily for depression

Consults
☐ Palliative care specialist
☐ Pain specialist
☐ Pharmacist
☐ Certified wound care specialist

Authorized Prescriber Signature______________________________

Printed Name______________________________________________

Date & Time of Orders: _____/_____/_____ _____:__________
Annotations

Introduction

The goal of clinicians is to manage pain and other symptoms based upon the best available evidence, which is skillfully and systematically applied. Treatment of distressing symptoms and side effects incorporates pharmacological, non-pharmacological, and complementary/supportive therapies. Approach to the relief of suffering is comprehensive, addressing physical, psychological, social and spiritual aspects (National Consensus Project for Quality Palliative Care, 2004 [R]).

Patients may be unable to articulate symptoms of pain and discomfort. Non-verbal indicators of physical distress may include tachypnea, dyspnea, tachycardia, diaphoresis, grimacing and restlessness.

Even when the goal of treatment is curative, it is important to effectively alleviate symptoms caused by the disease or treatment. These recommendations may be used when applicable (Finnish Medical Society Duodecim, 2005 [R]).

This order set does not specifically address the process of discussing goals of care and treatment preferences with patients. Individual organizations may use specific language to translate these into orders.

Treatment and Symptom Control

The team may opt to employ clinical order set/pathway or treatment algorithms for each priority problem (e.g., pain management, dyspnea, nausea and vomiting, anorexia, dehydration, anxiety, depression). Some institutions have developed standing order forms for major order sets and pathways. However, many palliative care clinical practice guidelines are in early stages of development. Pain management guidelines are one example of well-defined evidence-based practices.

In many cases, patients will achieve good relief with medications administered via the oral or sublingual route. If intravenous access is available, this route of administration is useful, particularly for the patient with nausea or diminished sensorium. Generally the provider will not need to create intravenous access if it is not already present. Many medications for palliation can be administered via the subcutaneous route; consult with a pharmacist or palliative care team for guidance.

1. Pre-Checked Orders

ICSI order sets utilize two types of boxes for orders. One is the open box that clinicians will need to check for the order to be carried out. The second box is a pre-checked box and are those orders that have strong evidence and/or are standard of care and require documentation if the clinician decides to "uncheck" the order.

There is increasing evidence that pre-checked boxes are more effective in the delivery of care than physician reminders, even within the computerized medical record environment (Dexter, 2004 [A]). Organizations are recognizing the benefit of using pre-checked boxes for other orders to promote efficiency. Organizations are encouraged, through a consensus process, to identify those orders to utilize pre-checked boxes to increase efficiency, reduce calls to clinicians, and to reduce barriers for nursing and other professionals to provide care that is within their scope.
2. Agitation Management

Also see Annotation #7, "Delirium Management."

Agitation refers to an unpleasant state of extreme arousal, increased tension, and irritability usually outwardly seen as restless behavior. Extreme agitation can be associated with confusion, hyperactivity and outright hostility. Agitation can come on suddenly or gradually. It can last for just a few minutes or for weeks and even months. Pain, stress and fever can all increase agitation. Agitation by itself may not have much clinical significance, but, if viewed with other symptoms, it can be a good indicator of a disease state. Agitation can be associated with anxiety and depression, bipolar disorder, and schizophrenia, as well as with dementia, but can occur in patients with no diagnosis of mental illness (Elsayem, 2003 [R]; Inouye, 2006 [R]).

As with other troublesome symptoms, identify any specific causative or contributing factors. These may include pain, hypoxia, metabolic/electrolyte abnormalities, and infection. Urinary retention and constipation are common causes. Trauma, sleep and sensory deprivation also contribute to agitation. Medications can lead to agitation, including intoxication and withdrawal states associated with alcohol and recreational drugs. Disruption of usual routines and familiar surroundings along with psychological, emotional and spiritual distress may contribute to agitation (Palliative Care Pocket Consultant, 2001 [R]).

The safety of antipsychotic medications, both older agents and newer "atypical" drugs, has been the subject of increasing debate. Most studies describe an increased risk of mortality associated with the introduction of these drugs in patients with dementia. As with all interventions, the clinician must weigh the potential risks against possible benefits, in the context of the patient's overall status and goals of care (Barnett, 2006 [B]; Gill, 2007 [B]; Schneider, 2005 [M]).

Orders

- Use patient's adaptive devices, including eyeglasses, hearing aids, etc.
- Avoid physical restraints if at all possible
- Haloperidol 0.5 to 5 mg by mouth, IM or subcutaneous every 30 minutes as needed. Maximum dose of 30 mg per day
- Lorazepam 0.5 to 2 mg by mouth or sublingual as needed
  - Useful for patients withdrawing from alcohol or benzodiazepines
  - May be useful for patients who can clearly articulate symptoms of anxiety
  - May cause paradoxical agitation in older patients

(Quijada, 2002 [R]; Watson, 2005 [R]; Weissman, 2005 [R])

3. Anorexia and Cachexia Management

Anorexia refers to the loss of desire to eat, while cachexia refers to weight loss, which may significantly impair the patient's ability to continue with further therapy. Both these symptoms are found in many severe medical conditions, including cancer, AIDS, chronic obstructive pulmonary disease, congestive heart failure, chronic liver and kidney disease, and infections.
Treatable causes of anorexia and cachexia should be identified and addressed. Causes may include pain, depression, gastrointestinal tract dysfunction, and cognitive impairment. Loss of appetite may also be caused by advancing disease, oral candida or dry/sore mouth. The early feeling of satiety from constipation, tumor or ascites may also decrease one's appetite and ability to eat, as well as nausea and vomiting, chemotherapy and other medications. Depression and unpleasant surroundings to eat contribute to emotional changes in eating (Finnish Medical Society Duodecim, 2005 [R]).

Treatments

Treat contributing causes when possible, considering the patient's goals of care, comorbidities and life expectancy.

- Educate patient and family; explore the meaning of feeding
- Offer cold, appealing foods and drinks
- Minimize dietary restrictions
- Small portions/small plates
- Decrease odors
- Alcoholic drinks in moderation
- Medications
  - Dexamethasone 2-6 mg by mouth daily
  - Megestrol acetate 160 mg up to 800 mg/day by mouth (Loprinzi, 1993 [A]; Salacz, 2003 [R])
  - Metoclopramide 10-20 mg by mouth 30 minutes before meals and at bedtime if nausea occurs (Watson, 2005 [R])
- Treat with anabolic steroids if patient also has chronic obstructive pulmonary disease (COPD) or AIDS
- Help patient/family understand that dehydration and malnutrition/starvation do not cause suffering, but that they are a part of the normal dying process. It may be an emotional experience for the family, but it is the disease itself that is the underlying cause of death (Lee, 2002 [R]).
- Artificial hydration and/or nutrition (TPN or enteral nutrition) (Tomko, 2001 [R])
  a) If the treatment is not medically futile
  b) For a time-limited trial with an endpoint
  c) To honor patient/family wishes if risks, benefits, outcomes and goals of care are understood

(Center for Advancement of Palliative Care, 2007a [R]; Kaye, 1999 [R]; Watson, 2005 [R])

4. Anxiety Management

Anxiety can contribute to suffering and decreased quality of life. The anxiety may be due to medications, social, psychological, or unidentifiable reasons, fears or pain. Anxiety may result in insomnia, gastrointestinal upset, dysphagia, fatigue, palpitations, diaphoresis, fear and isolation, and may escalate as disease progresses. Patients with a history of panic disorder, phobia, obsessive-compulsive disorder, generalized anxiety disorder or other anxiety disorders will have an increased risk of symptoms of anxiety. Causes of anxiety should be identified and treated if possible. Physical and emotional issues should be addressed. Social and spiritual
resources should be utilized. Non-pharmacologic approaches may include guided-imagery and relaxation, music, prayer and massage. Frank discussions of fears may help alleviate anxiety. Well-designed studies of medications used in the palliative treatment of anxiety are not available. Benzodiazepines are often helpful in the treatment of anxiety. A significant minority of individuals manifest a paradoxical reaction to benzodiazepines, becoming more agitated. Chronic anxiety frequently responds to the use of serotonin-specific or serotonin-norepinephrine re-uptake inhibitors. (Barraclough, 1997 [R])

Orders

Lorazepam 0.25-2 mg by mouth, sublingual or IV every 4 hours as needed for anxiety or restlessness
Alprazolam 0.25-0.5 mg 3 times daily by mouth as needed for anxiety or restlessness
Sertraline 25-50 mg daily by mouth daily
Citalopram 10-40 mg daily by mouth daily

5. Constipation Management

Constipation is the infrequent, difficult passage of hard stool. Constipation may be associated with pain, discomfort and flatulence, and may result in anorexia, nausea and vomiting, confusion and urinary dysfunction. Assessment of constipation should be contrasted against what was the normal pattern of bowel movements. Limited mobility and lack of privacy may exacerbate constipation. Other causes of constipation may include hypercalcemia, poor nutrition, poor fluid intake, drugs (opioids, anticholinergic agents, aluminum-containing drugs) and other diseases (anal fissure, hemorrhoids, tumor). Pain due to severe constipation secondary to opioids will be exacerbated by additional opioid therapy; evacuation of the rectum/colon may result in significant relief. Constipation may also be a signal of impending spinal cord compression. Bulk forming laxatives should be avoided in patients on opioids because they can cause significant flatulence, bloating and discomfort, which may result in noncompliance with a necessary bowel program (Fallon, 1997 [R]).

If scheduled opioids are started, a bowel program should be started, as well. All opioids will result in constipation. A stool softener by itself is insufficient; a stimulant laxative should be added.

Non-pharmacologic orders

Prunes
Hydration

Pharmacologic orders

- **Hard stools: stool softener**
  - Docusate 100-400 mg by mouth twice daily
  - Glycerin suppositories 1 daily
- **Stimulants:**
  - Senna 1-4 tablets by mouth twice daily
  - Bisacodyl 5-10 mg by mouth daily, as needed
  - Magnesium hydroxide (Milk of Magnesia®) 30 mL by mouth daily
  - 70% Sorbitol 15-30 mL by mouth daily

(Hallenbeck, 2005 [R])
6. Cough Management

Identify the cause, when possible. Pain may prevent the patient from coughing effectively. Poorly controlled congestive heart failure and chronic obstructive pulmonary disease can cause or aggravate cough. Gastro-esophageal reflux disease, postnasal drainage from chronic sinusitis and aspiration of liquids from dysphagia are other conditions that can produce or worsen cough. Treat underlying conditions to the extent possible, considering goals of care and comorbidities (Estfan, 2004 [R]).

Orders

- Guaifenesin with dextromethorphan (100 mg/10 mg per 5 mL), 5 to 10 mL by mouth every 2 hours as needed
- Guaifenesin with codeine (100 mg/10 mg per 5 mL), 5 to 10 mL by mouth every 2 hours as needed
- Benzonatate 200 mg by mouth 3 times a day
- Lidocaine 20 mg in 2 mL (premixed), nebulized, every 4 hours as needed cough (avoid administration within 2 hours of eating to decrease risk of aspiration)

7. Delirium Management

Delirium is an acute confusional state. The incidence rises with age. While it occurs in other settings, including long-term care facilities and end-of-life settings, it is a common problem in patients, occurring in up to 50% of individuals during the hospitalization. Some settings present an even greater risk, including postoperatively and in the intensive care unit (Inouye, 2006 [R]).

Delirium is a clinical syndrome, not a disease in itself. Its etiology is usually multi-factorial and includes central nervous system lesions, drugs, fluid and electrolyte abnormalities, hypoxia and other metabolic abnormalities. Functional dependence, polypharmacy, sensory impairments and the existence of chronic health problems are factors increasing the risk for delirium.

Patients with dementia are particularly susceptible to delirium. The extent of the evaluation will depend on multiple factors, including the overall goals of care, as well as patient and family preference. Generally the causes of delirium are multifactorial. Although the onset of delirium is rapid, full clearance of symptoms can take weeks or longer. Delirium is a poor prognostic factor.

Manifestations of delirium include poor concentration, misinterpretations, rambling incoherent speech, impaired consciousness, and impaired short-term memory. Paranoid ideas, restlessness, disorientation and hallucinations may also be observed. Patients with noisy and/or aggressive behavior may also be exhibiting signs of delirium. Delirium may also present as lethargy or diminished sensorium. This may not require any specific treatment for the patient's comfort, but the presence of hypoactive delirium also warrants evaluation to identify treatable problems.

Causes of delirium include hypercalcemia, hypoglycemia, hyponatremia and renal failure. Drug-related sources include opioids, corticosteroids with withdrawal, alcohol withdrawal, benzodiazepine with withdrawal, SSRI withdrawal, nicotine withdrawal, digoxin and lithium. Cerebral tumor, stroke or transient ischemic attack may be contributing factors, as well as anxiety and depression. Other treatable conditions causing delirium include infection, hypoxia, pain, constipation and dehydration. Patients with underlying disorientation with preexisting dementia, thiamine (vitamin B1) deficiency, non-convulsive status epilepticus or multi-system organ failure may show signs of delirium, as well (Palliative Care Pocket Consultant, 2001 [R]).
There are no specific tests, but evaluation should include review of all medications; general physical evaluation, including vital signs, hydration status and oxygenation; pain and recent alcohol or drug use. Particularly in elders, delirium may be the only harbinger of serious illness or complications.

Haloperidol remains the first drug of choice, with the best evidence base supporting effectiveness. Lower doses are recommended in the elderly. There is little evidence supporting the use of other antipsychotic agents. Benzodiazepines are not recommended for monotherapy because of the risk of paradoxical stimulation, oversedation and prolongation of delirium. No good evidence exists for the use of other psychotropic drugs for delirium (Weissman, 2005 [R]).

The safety of antipsychotic medications, both older agents and newer "atypical" drugs, has been the subject of increasing debate. Most studies describe an increased risk of mortality associated with the introduction of these drugs in patients with dementia. As with all interventions, the clinician must weigh the potential risks against possible benefits, in the context of the patient's overall status and goals of care (Barnett, 2006 [B]; Gill, 2007 [B]; Schneider, 2005 [M]).

Treatments

- Underlying cause(s)
- Calm fears, reduce noise and unfamiliar surroundings
- Reorientation of routine and environment – include family
- Medications
  - Haloperidol, initial dose of 0.5 mg with titration from 0.5-5.0 mg every hour until a total daily requirement is established, which is then administered in 2-3 divided doses per day. Intravenous haloperidol may cause less extrapyramidal symptoms than oral haloperidol. Maximum 30 mg/day.

The U.S. Food and Drug Administration (FDA) informed health care professionals that the WARNINGS section of the prescribing information for haloperidol has been revised to include a new cardiovascular subsection regarding cases of sudden death, QT prolongation and torsades de pointes (TdP) in patients treated with haloperidol, especially when given intravenously, or at doses higher than recommended.

(Elsayem, 2000 [R]; Inouye, 2006 [R]; Quijada, 2002 [R]; Watson, 2005 [R]; Weissman, 2005 [R])

8. Depression Management

Seriously ill patients may already have many of the vegetative symptoms of depression, e.g., fatigue, anorexia and sleep disturbance. Sadness, anhedonia, guilt, irritability and hopelessness are examples of affective symptoms that can be present in depression. When physical symptoms fail to improve despite optimal interventions, consider coexisting depression requiring additional treatment.

Optimal treatment for depression generally involves a combination of modalities, including medications and non-pharmacologic approaches. The patient's expected clinical course will influence choice of modalities in general and specific drugs in particular. Many antidepressant medications can take weeks to achieve full therapeutic effect. A psychostimulant, such as methylphenidate, may provide improvement of mood and appetite within days. If a psychostimulant produces a good result, add an antidepressant, unless the patient is expected to die within days to weeks. Serotonin-specific reuptake inhibitors are generally well tolerated. Choice of a specific agent depends on provider preference and formulary limitations. Tricyclic antidepressants generally have more side effects, especially anticholinergic, and may be difficult to use in patients with cardiac problems. In general, use lower starting doses in elderly patients.

Consider referral to a counselor or therapist.
Medications

- Serotonin-specific reuptake inhibitors (Doses may be titrated upward as needed, usually no more frequently than once a week.)
  - Escitalopram, 5-10 mg by mouth daily
  - Citalopram, 10-40 mg by mouth daily
  - Sertraline, 25-50 mg by mouth daily
- Psychostimulant
  - Methylphenidate, 5 mg by mouth 30 to 60 minutes before breakfast and lunch
- Other
  - Mirtazapine, 7.5-15 mg by mouth daily may be helpful in patients with poor appetite. Doses may be titrated upward as needed, usually no more frequently than once a week (Theobold, 2002 [D])

The Food and Drug Administration (FDA) has requested manufacturer’s of antidepressants include a warning statement regarding antidepressants increasing the risk compared to placebo of suicidal thinking and behavior (suicidality) in children, adolescents, and young adults in short-term studies of major depressive disorder (MDD) and other psychiatric disorders. The full warning statement can be found at: http://www.fda.gov/cder/drug/antidepressants/default.htm

9. Diarrhea Management

Diarrhea can have a significant impact on quality of life and result in dehydration and electrolyte abnormalities.

The primary treatment of diarrhea should be to treat the underlying cause. Causes of diarrhea may include: drugs (such as laxatives, antibiotics, chemotherapy, antacids, magnesium supplements), malignancy, fistula, ileal resection, gastrectomy or colectomy, and other diseases (such as inflammatory bowel disease, AIDS). Diarrhea due to Clostridium difficile must be excluded. The presence of diarrhea does not exclude the possibility of bowel impaction as the effect of gut flora on fecal material can cause liquefaction and subsequent passage of loose stool.

Symptomatic relief may be achieved with loperamide. If opioid therapy is going to be initiated, caution should be exercised when also adding in antidiarrheal therapy so constipation does not occur. Consider consultation if intractable diarrhea is present.

Orders

- Cholestyramine 4 grams by mouth 3 to 4 times daily
- Loperamide 4 mg initially, then 2 mg after each loose stool (maximum daily dose is 16 mg)

(Alderman, 2003 [R]; Fallon, 1997 [R])
10. Dry Eyes/Dry Nose Management

Drying of eyes and nose are common symptoms in palliative care. Contribution factors include dry air, medications, dehydration and oxygen use. It is important not to overlook these details for a patient's comfort.

**Treatments**

**Dry eyes:**
- Humidity in room
- Medication
  - Artificial tears, drops or ointment as needed

**Dry nose:**
- Humidify O₂ if in use
- Humidify room air
- Medication
  - Saline nasal spray or gel as needed

(Kaye, 1999 [R]; Watson, 2005 [R])

11. Dyspnea Management

Dyspnea is the subjective sensation of difficult breathing. It is a common finding in patients with cancer, cardiac disease, advanced respiratory disease and AIDS. **When addressing dyspnea, the provider should focus on treating or ameliorating the underlying cause, when possible, and managing symptoms.**

Examples of causes include, but are not limited to, obstructing tumors, pulmonary embolism, pleural effusions, infections, heart failure, abdominal ascites and superior vena cava syndrome.

Oxygen may be used. Monitor effectiveness by patient's subjective report, as there is no correlation between respiratory rate and/or oxygen saturation levels and comfort. Most patients find that oxygen delivered by nasal cannula is more comfortable than by facial mask (Phillip, 2006 [A]; Weissman, 2005 [R]).

Opioids are the medication of first choice for relieving symptoms of dyspnea. Morphine sulfate is the best studied. Other opioids likely have a similar mechanism of action and can be used if morphine is contraindicated. Respiratory suppression is a potential side effect. Careful titration of the opioid dose to patient symptoms usually avoids this problem. Careful administration of naloxone can reverse respiratory depression without precipitating opioid withdrawal.

Benzodiazepines may be helpful when there is a significant component of anxiety causing dyspnea.

Evidence for the use of nebulized morphine for a variety of conditions is mixed; therefore, this order set does not recommend this route of administration (Baydur, 2004 [D]; Bruera, 2005 [A]; Foral, 2004 [M]).

The benefits of these and other approaches must be weighed against their potential burdens, and treatment should be tailored to the patient's individual circumstances, including goals of care, comorbidities and life expectancy.

**Orders**
- Perform oximetry, pulmonary function tests, chest imaging and other diagnostic evaluations only if the results would change therapy
• Nasal oxygen 2 liters/minute via nasal cannula as needed. May titrate upwards as needed based on patient's symptoms
• Fan
• Morphine 2.5 to 10 mg by mouth or sublingual every hour as needed
• Oxycodone 2.5 to 10 mg by mouth or sublingual every hour as needed
• Lorazepam 0.25 to 1 mg by mouth or sublingual every 2 hours as needed
• If rales present
  - Furosemide 20-40 mg by mouth or sublingual once, and monitor response
• If wheezing present
  - Nebulized albuterol, every 4 hours as needed
  - Nebulized ipratropium, every 4 hours as needed
• Albuterol and ipratropium can be combined (e.g., Duoneb®)

(*Del Fabbro, 2006 [R]*)

• If respiratory depression occurs with opioid use
  - Close observation of the patient while the drug is metabolized may be sufficient; as the patient clears the drug, the respiratory suppression will abate
  - If rapid reversal of respiratory suppression is necessary, dilute a 0.4 mg (1 mL) ampule of naloxone in normal saline to a total volume of 10 mL, and administer one mL every 1 to 2 minutes until the respiratory rate improves

(*von Gunten, 2005a [R]*)

12. Fatigue Management

Fatigue may be defined as decreased vitality in physical and/or mental functioning. Patients may identify increased tiredness, and state that rest fails to resolve the fatigue.

There are assessment tools for fatigue; some examples include the Memorial Symptom Assessment Scale, the Edmonton Functional Assessment Tool, the Multidimensional Fatigue Symptom Inventory, and the Profile of Mood States.

Medications that may make the patient more tired should be administered at bedtime rather than in the morning. Conversely, stimulating agents should be administered in the morning. Due to significant side effects, corticosteroids should be reserved for terminally ill patients who may also have nausea and vomiting.

Causes of fatigue may include infection, hypoxemia and anemia. Sedating medications and electrolyte abnormalities (e.g., sodium, potassium, magnesium, calcium) may be causative factors. Fatigue may result from nutritional imbalance/impairment, cachexia and anorexia, deconditioning and weakness. Sleep disturbance, depression and emotional or psychological distress contribute to fatigue. Uncontrolled pain, as well as progression of the underlying disease, which may be seen in significant organ dysfunction (e.g., heart, liver, kidney, lung) or cancer and/or treatments may be directly linked to fatigue (*Reisfield, 2007 [R]; Watson, 2005 [R]*).
Treatments

- Treat underlying causes
- Optimize function
- Promote adaptation and prioritize activities
- Modify daily activities
- Schedule rest periods with mild exercise for brief periods

Drug Therapy

There is little good data for non-specific drug therapy. Time-limited trials may be useful, but the patient should be monitored closely for evidence of benefit.

- Methylphenidate 5 mg by mouth before breakfast and before lunch (maximum dose is 20 mg/day)
- Dextroamphetamine 5-60 mg by mouth in 2-3 divided doses daily
- Prednisone 7.5-10 mg by mouth daily
- Dexamethasone 1-2 mg by mouth daily
- Megestrol acetate 160 mg by mouth 3 times daily

(Kaye, 1999 [R]; Palliative Care Pocket Consultant, 2005 [R])

13. Fever Management

An elevated temperature may cause significant discomfort for the patient. Acetaminophen is a relatively nontoxic method to decrease fever and enhance comfort. Daily doses in excess of 4 grams per day have been associated with liver toxicity. For fever that is unresponsive to acetaminophen, a non-steroidal anti-inflammatory drug (NSAID) may be added in between each dose of acetaminophen. NSAIDs should be used cautiously in patients with renal impairment and history of gastrointestinal bleeding. To decrease the risk of NSAID-induced gastrointestinal bleeding, a proton-pump inhibitor may be prescribed.

(Center for Advancement of Palliative Care, 2007a [R]; Center for Advancement of Palliative Care, 2007b [R])

Orders

- Acetaminophen 1,000 mg by mouth as needed (maximum dose if 4,000 mg/day)
- Acetaminophen 650 mg rectal suppository every 4 hours as needed (maximum dose 4,000 mg/day)
- Ibuprofen 400 mg by mouth every 4 hours (alternating with acetaminophen) as needed (maximum dose 3,200 mg/day)

14. Hiccups Management

Hiccups that last less than 48 hours are considered acute, while greater than 48 hours in duration are considered persistent. The preferred treatment of hiccups is to correct or remove the underlying cause. When the cause cannot be determined and treated, non-pharmacologic treatments may be tried, and if unsuccessful, pharmacologic treatment may be instituted. Numerous case reports with varying agents are in the literature. Many of the therapies work by blocking dopamine in the hypothalamus. Chlorpromazine is the only FDA-approved drug for hiccups. In a single study, baclofen did not eliminate hiccups, but it did provide...
symptomatic relief for some patients. Non-pharmacologic treatments include breath holding, breathing into a paper bag, biting a lemon, swallowing sugar, long and slow drinks of water, compression of the nose while swallowing, acupuncture, and valsava maneuver (Farmer, 2003 [R]; Smith, 2003 [R]).

Orders

Non-pharmacologic:

Swallowing sugar, long and slow drinks of water, compress the nose while swallowing

Pharmacologic:

Chlorpromazine 25-50 mg by mouth or IV every 6 hours as needed for hiccups

Baclofen 5 mg by mouth every 8 hours as needed for hiccups (adjust dose in patients with renal dysfunction)

(Center for Advancement of Palliative Care, 2007a [R]; Farmer, 2003 [R]; Smith, 2003 [R])

15. Nausea/Vomiting Management

Nausea and vomiting can have a significant impact on quality of life, as well as physical and mental function. Causes of nausea and vomiting may include drugs, gastrointestinal obstruction, uremia, psychological distress and vestibular stimuli. Triggers, such as smells and drugs, should be eliminated if possible. Non-pharmacologic treatment may include relaxation, acupuncture/acupressure, and transcutaneous electrical wave stimulation. Pharmacologic therapy is based on the neurotransmitters of nausea and vomiting centrally (dopamine, serotonin, histamine and substance P), while peripherally, mechanoreceptors and chemoreceptors located in the gut, liver and visceral play an important role (Baines, 1997 [R]; Hallenbeck, 2000 [R]).

Suggested Medications Based on Cause of Nausea and Vomiting

<table>
<thead>
<tr>
<th>Gastrointestinal Stimuli</th>
<th>Chemical Stimuli</th>
<th>Psychological Stimuli</th>
<th>Vestibular Stimuli</th>
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<tbody>
<tr>
<td>Metoclopramide</td>
<td>Metoclopramide</td>
<td>Benzodiazepines</td>
<td>Histamine antagonist</td>
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<td>Serotonin antagonist</td>
<td>Corticosteroids</td>
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<td>Dopamine antagonist</td>
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<td>Proton pump inhibitors</td>
<td>Olanzapine</td>
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<td></td>
<td>Serotonin antagonist</td>
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</tbody>
</table>


Orders

Prochlorperazine 5 to 10 mg by mouth 4 times daily 30 minutes before meals and at bedtime as needed

Prochlorperazine 25 mg rectally every 12 hours as needed

Promethazine 6.25 to 25 mg by mouth or IV every 6 hours as needed

Droperidol 0.625 to 1.25 mg IV every 6 hours as needed

Haloperidol 1 mg by mouth, IV* or subcutaneous twice daily as needed
Metoclopramide 10 to 20 mg by mouth or IV 4 times daily 30 minutes before meals and at bedtime

Lorazepam 0.25 to 2 mg by mouth, sublingual or IV every 4 hours as needed

Dexamethasone 1 to 20 mg by mouth daily; may be in divided doses

(Baines, 1997 [R]; Hallenbeck, 2000 [R]; Kris, 2006 [R])

* The U.S. Food and Drug Administration (FDA) informed health care professionals that the WARNINGS section of the prescribing information for haloperidol has been revised to include a new Cardiovascular subsection regarding cases of sudden death, QT prolongation and torsades de pointes (Tdp) in patients treated with haloperidol, especially when given intravenously, or at doses higher than recommended.

16. Oral Care Management

There are many causes of dry and sore mouth, and most are easily treatable. Dental issues may require immediate attention. Numerous medications, and infection, as well as decreased intake, are often culprits of this uncomfortable symptom (Henson, 2004 [R]).

Treatments

- Refer to dentist for oral health assessment, cleaning and specific dental treatment as indicated (Wiseman, 2006 [R])

- Oral hygiene: avoid lemon glycerin, use soft toothbrush, no strong mouth rinses or toothpastes, and well-fitted dentures/prostheses. Clean daily, remove dentures/prostheses at bedtime (Finnish Medical Society Duodecim, 2005 [R]; Henson, 2005 [R])

- Mouth moisturizer gel as needed

- Lip balm as needed

- Sore throat spray or throat lozenges as needed

- Artificial saliva every hour as needed

- Food preparation: lukewarm; nothing very cold or hot; mildly spiced, soft foods

- Medications

  Topical viscous lidocaine 2% – 5 mL every 4 hours, by mouth, swish and spit as needed

  Magic mouthwash/hematology mouthwash (viscous lidocaine 2%-60 mL, diphenhydramine elixir 60 mL, aluminum hydroxide/magnesium hydroxide 60 mL) 1 to 2 tsp, by mouth, swish and swallow or swish and spit 3 to 4x/day as needed (Center for Advancement of Palliative Care, 2007a [R]; Finnish Medical Society Duodecim, 2005 [R]).

  Salt solution (1 tsp of salt in 240 mL/1 cup of water) swish and spit 4 times a day as needed

  (Henson, 2004 [R]; Kaye, 1990 [R])

Treatments of candida

- Clotrimazole 10 mg troche, dissolve in mouth, 5 times a day x 14 days

- Nystatin suspension 100,000 units/mL 5 mL, swish and swallow 4 times a day for 7 days

- Fluconazole 200 mg initially, then 100 mg by mouth daily for 7 days

  (Center for Advancement of Palliative Care, 2007b [R]; Finnish Medical Society Duodecim, 2005 [R]; Palliative Care Annotations Committee on Evidence-Based Practice/May 6, 2008)
17. Pain Management

Pain is usually the first symptom that comes to mind when thinking about palliative care. While good pain management is a priority for many patients, it is important to establish with the patient the relative importance of complete pain control at the possible expense of mental clarity. The following is a brief overview of pain management. The reader is referred to the ICSI Assessment and Management of Acute Pain guideline and Assessment and Management of Chronic Pain guideline for more indepth discussion about treatment of pain.

The approach to initial pain management consists of two parts. During the initial assessment, the clinician should determine if the pain is visceral, somatic or neuropathic. At the same time, the clinician should be evaluating the location and intensity of the pain, along with aggravating/alleviating factors, and duration of pain. Pain is what the patient says it is; it is subjective. It is important to accept what the patient says the pain is, and to treat it, and continually reassess treatment and goals of therapy in conjunction with the patient. Barriers to good pain management in palliative care include discounting a patient's subjective measure of pain, difficulty in assessment of the cognitively impaired, myths believed by both practitioners and patients about opioid therapy, and fears of addiction and hastening death.

Patients need to be educated about medication compliance, addiction, tolerance, side effects and appropriate dosing of analgesics. Many patients, as well as family members, believe the use of opioids will create "addicts" and so are reluctant to use opioids for analgesia. All opioids will result in physical dependence, and sudden discontinuation of the opioid may result in symptoms of withdrawal. Physical dependence is not addiction. Addiction, as defined by the Federation of State Medical Boards of the United States, is "a primary, chronic neurobiologic disease … characterized by behaviors that include the following: impaired control over drug use, craving, compulsive use, and continued use despite harm." Pseudoaddiction may occur when analgesics are prescribed inadequately. When the interval between doses of opioids is too long, a patient's pain relief may wane, resulting in the need to ask for more medication. This request, sometimes perceived as "drug-seeking behavior," is actually a consequence of poor prescribing habits.

If the pain is mild (score of 1 to 3 on a 0 to 10 scale), acetaminophen may be initiated. Acetaminophen is well tolerated, especially by elderly patients. If the pain appears chronic in nature, scheduled acetaminophen may be all that is needed. Non-steroidal anti-inflammatory drugs (NSAIDs) can be considered but must be used with caution in elderly patients as well as patients, with renal dysfunction or history of gastrointestinal bleeding.

If the pain is moderate (score of 4 to 6 on a 0 to 10 scale), add an opioid to the scheduled acetaminophen or NSAID, such as morphine, hydromorphone or oxycodone. If the patient is on no analgesics, combination products of hydrocodone/acetaminophen or oxycodone/acetaminophen may be prescribed, however, the maximum total daily dose of acetaminophen of 4,000 mg should not be exceeded. If the patient is requiring multiple doses in a day, scheduled doses of long-acting opioids may result in less fluctuation in blood levels and may be more convenient for patients and caregivers.

Severe pain (score greater than 6 on a 0 to 10 scale) requires use of higher doses of opioids, such as morphine, hydromorphone, oxycodone, or fentanyl. Once the pain is controlled and stable and at the patient's pain goal, long-acting dosage forms of morphine, oxycodone, methadone or fentanyl may be initiated. Since the onset of analgesia for fentanyl patches is 12 hours, fentanyl patches should only be used for stable pain management. They can be useful in patients who cannot swallow or when there are concerns regarding adherence to the prescribed regimen.

When pain control is achieved, convert the patient to long-acting opioids. For oral morphine and oxycodone,
add total daily dose of opioid. Administer 50% to 75% of the total daily dose as the long-acting form of the same opioid, with the same dose of the immediate-acting opioid available for breakthrough pain. For instance, if the patient has received a total of 40 mg of immediate-release morphine orally in the previous 24 hours, administer long-acting morphine sulfate (MS Contin, others) at 15 mg twice a day, and continue immediate-release morphine at 5 mg every one hour as needed for breakthrough pain. Reevaluate the regimen every 24 hours for tolerability and analgesic effectiveness.

If the patient has been on parenteral opioids, or other oral opioids, consult with pharmacist or palliative care specialist for dose calculations.

Methadone is an old opioid that is being used for acute and chronic pain management. While the drug has a 24-hour-plus half-life that makes it suitable for methadone clinics, the duration of analgesia is only six to eight hours. Physicians may prescribe methadone for analgesia at six- to eight-hour dosing intervals. Methadone is available as a liquid that may be useful for patients with feeding tubes who need long-acting opioid therapy. If neuropathic pain is present, the clinician may consider methadone because of its ability to block the N-methyl-D-aspartate receptor, which may have a role in the treatment of neuropathic pain (Soares, 2005 [R]). Significant variability exists in the pharmacokinetics of methadone, so if the clinician is unfamiliar with methadone, a consultation with a palliative care or pain specialist is highly recommended. Since methadone needs to be titrated up slowly and carefully, it is not recommended for pain of short duration.

If neuropathic pain is assessed, a tricyclic antidepressant may be started for pain that is described as a continual burning sensation, or an anticonvulsant may be used for pain that is intermittent and radiating. Amitriptyline is the best studied of the tricyclic antidepressants, but many patients cannot tolerate the side effects. Nortriptyline and desipramine have fewer anticholinergic side effects and may be better tolerated. Gabapentin is the best studied for the treatment of neuropathic pain and is FDA-approved for post-herpetic neuralgia. Other agents with FDA-approved indications for neuropathic pain are pregabalin, duloxetine, lidocaine patches and carbamazepine. Lidocaine patches provide more localized treatment of post-herpetic neuralgia (Argoff, 2006 [R]; Dworkin, 2003 [R]; Stillman, 2006 [R]).

If the patient has bone metastases from cancer, add an NSAID. If there are contraindications to an NSAID, consider dexamethasone as an alternative. Continue bisphosphonate therapy if already in use and tolerated by the patient.

If the patient is having discomfort from tubes placed for drainage or feeding, lidocaine ointment can be applied sparingly around the tube site.

The oral route is the preferred route of administration. Intramuscular injections should be avoided because they hurt. Intravenous or subcutaneous opioid infusions may be used if patients are unable to take oral medications.

If the patient will be maintained on scheduled opioids, a bowel program must be initiated. The bowel program should consist of a stimulant (senna, bisacodyl, lactulose or sorbitol) and a stool softener given on a scheduled basis in order to prevent severe constipation.

In general, elderly patients should be started at the lowest dosages of medications and titrated up slowly.

Naloxone may be administered to reverse the respiratory depression effects of opioids. The recommended administration is to mix 0.4 mg (1 mL) of naloxone with 9 mL of normal saline. Cautious dosing is necessary in order to prevent withdrawal symptoms and excruciating pain. Repeated administration may be necessary if respiratory depression is due to long-acting opioid therapy (von Gunten, 2005 [R]).

Orders
Mild pain
Acetaminophen 1,000 mg by mouth or 650 mg rectally 3 to 4 times daily scheduled or as needed
Ibuprofen 400 mg by mouth every 4 hours scheduled or as needed
Naproxen 250 mg by mouth twice a day as needed
Tramadol 25 mg by mouth 4 times daily as needed

Combination medications – in addition to acetaminophen listed above, add one of the following:
Oxycodone/acetaminophen 1 to 2 tablets every 3 to 4 hours as needed for pain
Hydrocodone/acetaminophen 1 to 2 tablets every 4 to 6 hours as needed for pain

Opioid medications, evaluate after each dose:
Morphine 10 to 20 mg orally every 3 to 4 hours as needed for pain
Morphine 0.5 to 2 mg IV every 2 hours as needed for pain
Hydromorphone 2 to 4 mg orally every hour as needed for severe pain
Hydromorphone 0.1 to 0.3 mg IV every 15 minutes as needed for severe pain
Oxycodone 5 to 10 mg every 3 to 4 hours as needed for pain (with maximum daily dose of acetaminophen 4 grams)
Fentanyl 20 to 30 mcg IV every 2 hours as needed for pain

The U.S. Food and Drug Administration (FDA) advises that fentanyl transdermal (patch) may cause life-threatening adverse effects or death if the patient is overdosed, opioid-intolerant or exposed the patch to a heat source.

Bowel program (If opioids are prescribed, the bowel medications should be scheduled.)
Senna 1-3 tablets twice daily
Bisacodyl 5-10 mg by mouth daily
Milk of Magnesia® 30 mL by mouth daily
70% Sorbitol 15-30 mL daily

Neuropathic Pain
Amitriptyline 10-25 mg daily at bedtime. Increase dose as needed. (Most sedating; avoid in elderly.)
Nortriptyline 10-25 mg daily at bedtime. Increase dose as needed. (Avoid in elderly patients.)
Desipramine 10-25 mg daily at bedtime. Increase dose as needed. (Avoid in elderly patients.)
Transdermal lidocaine patch 1 to 3 patches applied for 12 hours, then off for 12 hours (Patches may be cut to shape.)
Gabapentin: elderly – 100 mg at bedtime, then increase to 100 mg twice daily, 100 mg 3 times daily; increase dose every several days as needed for comfort
Gabapentin: non-elderly – 100 mg at bedtime, increase to 300 mg twice daily, then 300 mg 3 times daily; as needed for comfort
Reduce dose in patients with renal dysfunction

Pregabalin: 50 mg twice daily. Adjust dose upwards for comfort. Evaluate in 7 days

Reduce dose in patients with renal dysfunction

**Bone Pain**

Ibuprofen 400-800 mg every 4 hours as needed (maximum dose 3,200 mg/day)

Naproxen 250 mg twice daily as needed (maximum dose 1,500 mg/day)

Dexamethasone 3-12 mg 2 or 3 times daily

---

18. Secretion Management

Identify cause, when possible. Respiratory infections and postnasal drainage from chronic sinusitis may increase sputum production, while medications and poor hydration may increase the thickness of secretions. Poorly controlled pain may prevent the patient from coughing effectively; be sure patient's pain is optimally managed.

Approaches to managing secretions can include the following strategies:

- **Improve clearance.** Patients who can cough effectively may benefit from measures to thin or mobilize secretions. Techniques include:
  - Hydration/humidification
  - Expectorants
  - Positioning
  - Chest physiotherapy
  - Suctioning – oral, not deep

  *(Bickel, 2004 [R])*

- **Decrease quantity.** This can be particularly helpful for patients who cannot clear secretions. Anticholinergic agents are the most commonly used, but side effects can be troublesome and may include dry mouth, urinary retention, confusion/sedation and mucus plugging.

**Orders**

- For thick secretions
  - Guaifenesin 200 mg (200-400 mg) (Guaifenesin 100 mg/5 mL liquid) every 4 hours or 600-1,200 mg extended release tablet every 1 to 2 hours, as needed for thick secretions

- For excessive secretions
  - Atropine 1% ophthalmic drops, 1 to 4 drops sublingual every 2 hours as needed
  - Hyoscyamine (Levsin®) 0.125 to 0.25 mg sublingual every 6 hours as needed
  - Scopolamine (Transderm-scop®) 1.5 mg transdermal patch, apply every 72 hours. May increase number of patches to three as needed. Apply behind ears.
  - Glycopyrrolate (Robinul®) 1 to 2 mg by mouth or sublingual every 8 hours as needed

  *(Bickel, 2004 [R]; Hsin, 2006 [R])*
19. Seizure Management

The goal of the acute management of seizures is to stop the seizure activity. Diazepam and lorazepam are drugs that are utilized for the acute control of seizures. Once the acute seizures are under control, then evaluation and further anticonvulsants may be initiated based on the seizure type.

Orders

Lorazepam 2 to 4 mg IV. Repeat in 15 minutes if necessary

Diazepam 5-10 mg IV or IM every 10-15 minutes up to total of 30 mg

Diazepam 0.2 mg/kg rectally. May repeat in 4 to 12 hours if necessary

(Cereghino, 2002 [B]; Collins, 2001 [R]; Pellock, 2004 [R])

20. Skin and Wound Care Management

Pressure Ulcers

Pressure ulcers may occur despite optimal care in a patient whose immunological and nutritional status is compromised. Overall goals of care will influence specific treatment approaches. In some patients, complete healing of pressure ulcers is an achievable outcome. Control of pain, drainage and odor are essential in all patients.

Emphasize prevention, when possible. Assess risk with a validated tool such as the Braden Scale. Address nutrition within the overall goals of care. Evaluate beds, chairs and other furniture the patient will use regularly, and provide appropriate pressure-relieving surfaces where needed (Nixon, 2006 [A]). Frequently changing the patient's position will relieve pressure on the skin, but must be balanced against possible discomfort such movement may cause. Good perineal care to manage incontinence of urine and stool is critical. Indwelling urethral catheters and rectal tubes may reduce skin irritation from moisture and fecal material, particularly if open areas are already present. Because skin integrity can be compromised within hours, caregivers must monitor the patient frequently (McDonald, 2006 [M]).

The use of doughnut-shaped cushions or devices is contraindicated for both pressure reduction and relief.

Do not massage pressure points; this further compromises circulation to the ischemic area.

In all cases, the clinician must accurately describe the wound, using accepted staging criteria, as these characteristics will define the best wound care regimen. The wound stage is not revised as a wound heals, although a worsening wound is reclassified.

Pressure ulcer staging

Stage 1: non-blanchable erythema, epidermis intact

Stage 2: partial thickness loss of epidermis or dermis

Stage 3: full thickness skin loss, into subcutaneous tissue, but not involving fascia

Stage 4: full thickness skin loss, involving fascia, muscle, bone, other supporting structures

(Oxford Textbook of Palliative Care Medicine, 2004 [R])

A wound whose base is completely covered by exudate or necrotic tissue is unstageable until the material is removed.

Pressure sores on the heels that are covered with dry eschar are unstageable.
Wound dressings serve several purposes:

- Protect the wound bed from trauma, infection
- Promote removal of exudate and necrotic tissue
- Provide moist healing environment

The appropriate dressing may change based upon the healing of the wound. See Appendix A, "Common Dressings for Pressure Ulcer Treatment."

**Approach to managing pressure ulcers**

- When skin is intact, relieve pressure and address other factors, within the context of the patient's goals of therapy.
- Premedicate with opioid analgesic before wound cares and dressing changes
- Short-acting systemic opioid for pain before wound cares and dressing changes
- Cleanse by gentle irrigation with preservative-free normal saline or with non-cytotoxic wound cleaner
  - 18 to 20 gauge angiocath on 30 to 60 mL syringe
- Distinguish between colonization and infection
  - Diagnosis of infection made based on clinical indicators, e.g., pain, induration, exudate, fever and leukocytosis
  - If infection present, culture results may guide appropriate antibiotic selection

**For a clean open area**

- Cover to keep wound base moist
- Loosely pack dressing material (e.g., hydrogel, alginate) into dead space to absorb exudate and maintain moist environment

**For a wound with necrotic or fibrinous material in the base, or eschar**

- Heel eschars can be left alone as long as eschar is intact, with no evidence of drainage or infection
- Other sites: Choose debridement method based on extent of wound, comfort of patient, and goals of therapy
- To control pain
  - Systemic opioids (see Annotation #17)
  - Morphine 1 mg in 1 gm hydrogel, apply directly to wound surface daily
To control exudate
- Autolysis: hydrocolloid dressings
- Enzymatic: applied to devitalized areas to accelerate debridement
- Mechanical: wet-to-moist dressings, whirlpool, irrigation
- Sharp: devitalized tissue removed manually either at the bedside or in the operating room

To control odor
- Kitty litter or activated charcoal: place in dish or tray under bed
- Peppermint oil or other aromatherapy products
- Metronidazole
  - Topical: apply 0.75% cream or gel or or sprinkle crushed tablet directly to wound daily for 7 days, then evaluate
  - Systemic: 500 mg by mouth three times daily for 7 days, then evaluate
- Silver sulfadiazine cream, apply to wound daily as needed
- Activated charcoal dressing (various manufacturers), use according to package directions

Consult wound care specialist or enterostomal nurse specialist for complicated or poorly responding wounds.

Malignant Wounds
Clarify specific goals for wound care; this will influence choice of treatments. In the patient with an expected survival of days to weeks, the clinician may choose to focus on palliation of distressing symptoms rather than wound healing. Complementary therapies such as music, acupuncture, visualization and guided imagery often enhance patient comfort (McDonald, 2006 [M]; Schim, 2005 [R]).

Orders
- Premedicate with short-acting opioid analgesic before wound cares and dressing changes
- Cleanse by gentle irrigation with preservative-free normal saline or with non-cytotoxic wound cleaner
  - 18 to 20 gauge angiocath on 30 to 60 mL syringe
- To control pain
  - Systemic opioids (see Annotation #17)
  - Morphine 1 mg in 1 gm hydrogel, apply directly to wound surface daily (Eisenbud, 2003)
- To control exudate
  - Hydrocolloid dressings
  - Foam dressing
  - Alginate (avoid in bleeding wounds)
  - Ostomy appliance
• To control odor
  - Kitty litter or activated charcoal: place in dish or tray under bed
  - Peppermint oil or other aromatherapy products
  - Metronidazole
    • Topical: apply 0.75% cream or gel or sprinkle crushed 500 mg tablet directly to wound daily for 7 days, then evaluate
    • Systemic: 500 mg by mouth three times daily for 7 days, then evaluate
  - Silver sulfadiazine cream 1%, apply to wound daily as needed
  - Activated charcoal dressing (various manufacturers), use according to package directions

• Bleeding
  - Prevention
    • Use non-adherent absorbing dressings
    • Moisten dressings with normal saline before removal
  - Active bleeding
    • Apply gauze saturated with 1:1,000 solution epinephrine
    • Apply firm pressure to the wound

(Oxford Textbook of Palliative Care Medicine, 2004 [R]; Seaman, 2006 [R])
• Consult wound care specialist or enterostomal nurse specialist for complicated or poorly responding wounds

Pruritus

Identify treatable causes, if possible. These may include but are not limited to dryness (xerosis), poor skin hygiene, underlying skin disease or lesions, medications, cholestasis, uremia, malignancy and hematologic conditions. Keep in mind the overall goals of care, as well as patient and family preference for evaluation and treatment.

Orders

• General
  - Meticulous skin care
  - Encourage fluid intake
  - Ensure comfortable room temperature and humidity
  - Trim fingernails if necessary to avoid excoriation
  - Oatmeal baths

• Topical
  - Over-the-counter moisturizing lotions
    • Camphor/menthol lotion (e.g., Sarna®) as needed
- Hydrocortisone 1% cream or lotion as needed
- Triamcinolone 0.1% cream as needed

- Systemic
  - Diphenhydramine 25 mg by mouth every 4 hours as needed. Avoid use in elderly.
  - Hydroxyzine 10 to 25 mg by mouth every 6 hours as needed
  - Doxepin 10 to 25 mg by mouth at bedtime
  - Dexamethasone 1 to 4 mg by mouth daily
  - Paroxetine 10 to 20 mg by mouth daily (Zylicz, 1998 [D])

  (Cholestyramine 4 grams daily, reevaluate after 7 days
  (Oxford Textbook of Palliative Medicine, 2004 [R])

Note that older patients are especially susceptible to side effects of antihistamines and anticholinergic drugs, including sedation and confusion, and these drugs should be used with caution and in lower doses (Glass, 2005 [M]; Miller, 2004b [R]).

21. Sleep Disturbance/Insomnia Management

Sleep disturbance is a generalized term to indicate changes from restful sleep, causing sleep deprivation. Insomnia is a symptom and not a disease. Insomnia is the difficulty in falling or staying asleep, the absence of restful sleep, or poor quality of sleep. Many things may disturb sleep and prevent adequate rest. Pain and restless leg syndrome are big contributors to sleep disturbance. Other causes include worsening of chronic medical conditions (e.g., heart failure, chronic obstructive pulmonary disease) or respiratory distress. Bladder or bowel disturbance, nausea or vomiting may interrupt a patient's sleep pattern and rest. Cognitive impairment disorders, an unfamiliar environment and altered bedtime routine may cause sleep disturbance or insomnia. Emotional/psychological distress such as depression or fear (e.g., fear of not waking up) greatly affect a patient's rest. Sleep disturbance may be cause by medications such as steroids, beta blockers, and psychostimulants, as well as alcohol and caffeine used in the evening.

(Miller, 2003 [R]; Miller, 2004a [R]; Watson, 2005 [R])

Antihistamines are available without a prescription, and are widely available both as single drug preparations and in combination with other drugs such as acetaminophen and ibuprofen. While they can cause drowsiness with initial use, tachyphylaxis generally develops to the sedative effect and their effectiveness as long-term hypnotics is unproven.

Note that older patients are especially susceptible to side effects of antihistamines and anticholinergic drugs, including sedation and confusion, and these drugs should be used with caution and in lower doses (Glass, 2005 [M]; Miller, 2004b [R]).

Treatments

- Treat symptoms from an underlying medical disorder
- Quiet, comfortable environment
- Natural sounds/white noise
- Relaxation therapies
- Avoid stimulants

(Oxford Textbook of Palliative Medicine, 2004 [R])

Note that older patients are especially susceptible to side effects of antihistamines and anticholinergic drugs, including sedation and confusion, and these drugs should be used with caution and in lower doses (Glass, 2005 [M]; Miller, 2004b [R]).

Treatments

- Treat symptoms from an underlying medical disorder
- Quiet, comfortable environment
- Natural sounds/white noise
- Relaxation therapies
- Avoid stimulants
Medications

- Lorazepam 0.5-2 mg by mouth, sublingual or IV at bedtime and every 2 hours as needed
- Zolpidem 5-10 mg by mouth at bedtime as needed
- Temazepam 15 mg at bedtime as needed, may repeat 1 dose as needed

For elderly
- Trazadone 25-100 mg by mouth at bedtime, may repeat 1 dose as needed

22. Urinary Incontinence and Retention Management

Because indwelling urinary catheters can lead to infection and trauma to the urethra and bladder, their use is generally discouraged. In palliative care, however, the clinician and patient must balance the potential risks of catheter use against benefits. Indwelling catheters can help to prevent moisture in the perineal area, allowing an environment more conducive to healing pressure ulcers and other challenging skin problems. Patients too weak to use a commode may appreciate the ability to remain dry and free of distressing odor.

Patients with urinary retention need catheters in order to drain urine. Before using, however, assess for treatable causes of retention, including medication side effects and constipation.

Use the smallest diameter catheter with smallest balloon possible, to reduce leakage around the catheter as well as bladder spasm. Bladder spasms may respond to anticholinergic medications; use with caution in older patients because of the risk of delirium.

Orders

- Rectal examination to rule out impaction
- Use smallest diameter catheter with smallest balloon available
- For cramps or bladder spasms
  - Belladonna/opium suppositories, 1 twice daily to 4 times daily
  - Oxybutynin 2.5 to 5 mg by mouth twice daily to 4 times daily
### Appendix A – Common Dressings for Pressure Ulcer Treatment

<table>
<thead>
<tr>
<th>Dressing</th>
<th>Indications/Use</th>
<th>Contraindications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent film (eg, Bioclusive, Tegaderm, Op-site)</td>
<td>Stage I, II; Protection from friction; Superficial scrape; Autolytic debridement of slough; Apply skin prep to intact skin to protect from adhesive</td>
<td>Draining ulcers; Suspcion of skin infection or fungus</td>
</tr>
<tr>
<td>Foam island (eg, Allevyn, Lysofoam)</td>
<td>Stage II, III; Low to moderate exudates; Can apply as window to secure transparent film</td>
<td>Excessive exudates; Dry, crusted wound</td>
</tr>
<tr>
<td>Hydrocolloids (eg, DuoDERM, Extra thin film, Notoderm, Tegaderm, Replicare, Comfeel, Nu-derm)</td>
<td>Stage II, III; Low to moderate drainage; Good periwound skin integrity; Autolytic debridement of slough; Leave in place 3-5 days; Can apply as window to secure transparent film; Can apply over alginate to control drainage; Must control maceration; Apply skin prep to intact skin to protect from adhesive</td>
<td>Poor skin integrity; Infected ulcers; Wound needs packing</td>
</tr>
<tr>
<td>Alginate (eg, Sorbsan, Kaltostat, Algosteril, Algiderm)</td>
<td>Stage III, IV; Excessive drainage; Apply dressing within wound borders; Requires secondary dressing; Must use skin prep; Must control maceration</td>
<td>Dry or minimally draining wound; Superficial wounds with maceration</td>
</tr>
<tr>
<td>Hydrogel (amorphous gels) (eg, IntraSite gel, SoloSite gel, Restore gel)</td>
<td>Stage II, III, IV; Needs to be combined with gauze dressing; Stays moist longer than saline gauze; Changed 1-2 times daily; Used as alternative to saline gauze for packing deep wounds with tunnels, undermining; Reduces adherence of gauze to wound; Must control maceration</td>
<td>Macerated areas; Wounds with excess exudate</td>
</tr>
<tr>
<td>(gel sheet) (eg, Vigilon, Restore Impregnated Gauze)</td>
<td>Stage II; Needs to be held in place with topper dressing</td>
<td>Macerated areas; Wounds with moderate to heavy exudate</td>
</tr>
<tr>
<td>Gauze packing (moistened with saline) (eg, square 2 _ 2s, 4 _ 4s, Fluffed Kerlix, Plain NuGauze)</td>
<td>Stage III, IV; Wounds with depth, especially those with tunnels, undermining; Must be remoistened often to maintain moist wound environment</td>
<td></td>
</tr>
<tr>
<td>Silver dressings (silver with alginates, gels, charcoal) (eg, Silvercel, Silvdene, Aquecel Ag, Acticoat)</td>
<td>Malodorous wounds; High level of exudates; Wound highly suspicious for critical bacterial load; Periwound with signs of inflammation; Slow-healing wound</td>
<td>Systemic infection; Cellulitis; Signs of systemic side effects, especially erythema multiforme; Fungal proliferation; Sensitivity of skin to sun; Interstitial nephritis; Leukopenia; Skin necrosis; Concurrent use with proteolytic enzymes</td>
</tr>
</tbody>
</table>


www.icsi.org
*The next scheduled revision will occur as part of the Palliative Care Guideline in 2009. The Palliative Care Order Set was merged with the Palliative Care Guideline in May 2008.*

**Availability of references**

References cited are available to ICSI participating member groups on request from the ICSI office. Please fill out the reference request sheet included with your order set and send it to ICSI.

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Brief Description of Evidence Grading

Individual research reports are assigned a letter indicating the class of report based on design type: A, B, C, D, M, R, X.

A full explanation of these designators is found in the Foreword of the guideline.
References

Alderman J. Fast fact and concept #096: diarrhea in palliative care. Available at: http://www.eperc.mcw.edu. 2007. (Class R)


Barraclough J. ABC of palliative care: depression, anxiety, and confusion. BMJ 1997;315:1365-68. (Class R)

Baydur A. Nebulized morphine: a convenient and safe alternative to dyspnea relief? Chest 2004;125:363-65. (Class D)


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Fallon M, O'Neill B. ABC of palliative care: constipation and diarrhoea. BMJ 1997;315:1293-96. (Class R)


Hallenbeck J. Fast fact and concept #015: constipation. Available at: http://www.eperc.mcm.edu. 2nd Ed. August 2005. (Class R)


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Smith HS, Busracamwongs A. Management of hiccups in the palliative care population. Am J Hosp Palliat Care 2003;20:149-52. (Class R)


Watson MS, Lucas CF, Hoy AM, Back IN. In Oxford Handbook of Palliative Care. 2005. (Class R)


This section provides resources, strategies and measurement specifications for use in closing the gap between current clinical practice and the recommendations set forth in the order set.

The subdivisions of this section are:

- Priority Aims and Suggested Measures
- Knowledge Resources
- Resources Available
Priority Aims and Suggested Measures

1. Improve the management of pain symptoms in adult patients with a potentially life-threatening or chronic, progressive illness in a specifically defined disease population.

   Possible measures for accomplishing this aim:
   a. Percentage of patients who have a pain level greater than 4/10 or at an unacceptable level to the patient with documentation of an intervention to reduce pain. (*ICSI Assessment and Management of Acute Pain guideline measure*)
   b. Percentage of patients with documentation in the medical record indicating their personal pain management goal was met within one week of intervention.
   c. After 48 hours, the percentage of patients reporting pain at a level less than 4 or at an acceptable level to patient. (*ICSI Assessment and Management of Acute Pain guideline measure*)
   d. Percentage of patients reporting good or very good satisfaction with the approach to pain control. (*ICSI Assessment and Management of Acute Pain guideline measure*)

2. Improve the management of distressing symptoms such as, but not limited to, shortness of breath, seizures and constipation in adult patients with a potentially life-threatening or chronic, progressive illness in a specifically defined disease population.

   Possible measures for accomplishing this aim:
   a. For seizure activity, the percentage of patients with a decrease in the number of seizures following one week of intervention.
   b. Percentage of patients receiving a pain intervention with documentation that a bowel program has been implemented.
   c. For shortness of breath, the percentage of patients reporting an improvement in the severity of the symptom after 24 hours of intervention.

3. Improve patient/family satisfaction with regards to control of distressing symptoms in adult patients with a potentially life-threatening or chronic, progressive illness in a specifically defined disease population.

   Possible measures for accomplishing this aim:
   a. Percentage of patients reporting good or very good satisfaction with patients achieved level of comfort as reported by patient and/or family member.

At this point in development for this order set, there are no specifications written for possible measures listed above. ICSI will seek input from the medical groups on what measures are of most use as they implement the order set. In a future revision of the order set, measurement specifications may be included.
Knowledge Resources

Criteria for Selecting Resources

The following resources were selected by the Palliative Care Order Set guideline work group as additional resources for providers and/or patients. The following criteria were considered in selecting these resources.

• The site contains information specific to the topic of the guideline.
• The content is supported by evidence-based research.
• The content includes the source/author and contact information.
• The content clearly states revision dates or the date the information was published.
• The content is clear about potential biases, noting conflict of interest and/or disclaimers as appropriate.

Resources Available to ICSI Members Only

ICSI has a wide variety of knowledge resources that are only available to ICSI members (these are indicated with an asterisk in far left-hand column of the Resources Available table). In addition to the resources listed in the table, ICSI members have access to a broad range of materials including tool kits on CQI processes and Rapid Cycling that can be helpful. To obtain copies of these or other Knowledge Resources, go to http://www.icsi.org/knowledge. To access these materials on the Web site, you must be logged in as an ICSI member.

The resources in the table on the next page that are not reserved for ICSI members are available to the public free-of-charge.
# Resources Available

<table>
<thead>
<tr>
<th>*</th>
<th>Title/Description</th>
<th>Audience</th>
<th>Author/Organization</th>
<th>Web Sites/Order Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Web site provides clinical information to health care professionals regarding palliative care including various tools such as the Edmonton Symptom Assessment System (ESAS).</td>
<td>Health Care Providers</td>
<td>Palliative.org (Regional Palliative Care Program in Edmonton, Alberta)</td>
<td><a href="http://www.palliative.org/PC/ClinicalInfo/AssessmentTools/esas.pdf">http://www.palliative.org/PC/ClinicalInfo/AssessmentTools/esas.pdf</a></td>
</tr>
<tr>
<td></td>
<td>CAPC provides health care professionals with the tools and training necessary to start and sustain successful palliative care programs.</td>
<td>Health Care Providers</td>
<td>Center to Advance Palliative Care</td>
<td><a href="http://capc.org">http://capc.org</a></td>
</tr>
<tr>
<td></td>
<td>This Web site contains educational resource material for health care educators and providers. Materials include Fast Facts.</td>
<td>Health Care Providers</td>
<td>End of Life/Palliative Education Resource Center and the Medical College of Wisconsin</td>
<td><a href="http://capc.org">http://capc.org</a> <a href="http://www.eperc.mcw.edu">http://www.eperc.mcw.edu</a></td>
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