

UPMC Health System

PALLIATIVE CARE AND HOSPICE NEWSLETTER

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NEW JCAHO PAIN MANAGEMENT STANDARDS ESTABLISHED

The Joint Commission on Accreditation of Healthcare Organizations began implementing new standards for pain management in January of this year. Under the new standards, organizations will be required to:

1. Recognize patients' rights to assessment and management of pain;
2. Assess the nature and intensity of pain in all patients;
3. Establish safe medication prescription and ordering procedures;
4. Ensure staff competency and orient new staff in pain assessment and management;
5. Monitor patients postprocedurely and reassess patient problems appropriately;
6. Educate patients on the role of pain management in treatment;
7. Address patients' needs for symptom management in the discharge planning process; and
8. Collect data to monitor performance.

[Joint Commission Perspectives, Sept/Oct 1999]

To help improve the assessment and treatment of pain in UPMC patients, the Comprehensive Palliative Care Service has developed a set of guidelines for opioid therapy. The pharmacology of pain management is being advanced rapidly, and it is difficult for physicians to keep abreast of medication options and dosing levels which become available to them and their patients. In *Improving Care for the End Of Life* (Oxford University Press, 2000), Lynn, Schuster, and Kabcenell describe examples of the successful use of equianalgesic charts in hospitals. **The UPMC Pain Management: Opioid Therapy Guidelines chart is reproduced on pages 2 and 3 of this newsletter.** It is also available to you free of charge in a somewhat smaller, laminated version that will fold into pocket size, a useful bedside resource. You may obtain one of these cards by calling **692-4834**. The guidelines are also available in pdf format on our Web site at www.upmc.edu/palliativeCare/resources.htm.

LHAS FORMS SHALOM NETWORK

The Ladies Hospital Aid Society of Western Pennsylvania has sponsored the LHAS Shalom Network, which is dedicated to weaving Jewish tradition with individual commitment, offering emotional and spiritual care to all those coping with illness and loss. The mission of this network is to foster collaboration between lay people and professionals, enabling them to share resources and provide opportunities for supporting those in need through education and pastoral care. The Co-Directors are Rabbi Larry Heimer, D.Min. and Gayle Rosner Abrams, Ph.D. For further information, call 648-6129.

MEDICAL STUDENT WORKSHOP

UPMC Hospice, Forbes Hospice, South Hills Family Hospice, and Hospice of Preferred Choice worked cooperatively to create a volunteer training program for medical students interesting in learning more about end of life care. The inaugural program trained 25 students who were then assigned to the involved hospices for volunteer opportunities. These medical students gained valuable insight into quality end of life care and the need for early referrals. The students were a welcome addition to the UPMC volunteer ranks; not only by the hospice professionals, but also by the terminally ill patients they were able to help.

DEPARTMENT NAME CHANGE

The Department of Medical Ethics and Supportive Services at Shadyside Hospital has changed its name to the Department of Medical Ethics and Palliative Care. The director remains Dr. Beth Chaitin.

PAIN MANAGEMENT: OPIOID THERAPY GUIDELINES (April, 2001)

Pain Scale

0	1	2	3	4	5	6	7	8	9	10
No Pain										
Worst pain imaginable										

None = 0; Mild = 2.5; Moderate = 5; Severe = 7.5; Excruciating = 10

General Principles of Pain Management

- a) **Assess pain using a standardized pain scale.** Pain is a subjective feeling: ask the patient. If the patient is unable to communicate, assess pain based on behavioral cues. Frequency of assessment: at the time of the initial interview; every eight hours, and PRN (at least every two hours when pain is severe).
- b) Short acting opioids (morphine, hydromorphone, and oxycodone) should be used to control acute, moderate or severe pain. Long acting preparations (MS Contin, Kadian, Oxycontin, transdermal Fentanyl - Duragesic) should be started after the pain is controlled by short acting opioids.
- Never use long acting opioids to control acute pain.**
- c) Titrate the opioid dose at least every 24 hours when the pain is moderate and as often as every 2 hours when the pain is severe. Increase the dose by **25-50%** for moderate pain and **50-100%** for severe pain. For equivalent dose purposes: rectal = oral; SQ = IM = IV route.
- d) Manage breakthrough pain (acute pain in patients with otherwise controlled pain) with short acting opioids using **1/3** of the single dose amount (e.g., patient on long acting morphine 90 mg q 12h, breakthrough morphine dose = 30 mg q3hr prn) or **5-15%** of the total daily dose. **Use Around The Clock** pain medicine for ongoing pain not prn. Use the KISS principle – Keep It Same and Simple (e.g., use the same opioid for short and long term pain control.)
- e) Manage opioid side effects. Constipation must be treated prophylactically (see bowel protocol).
- f) Naloxone should be used **only** for life-threatening opioid induced respiratory depression, an exceedingly rare occurrence in patients on chronic, stable opioid doses. In order to minimize symptoms of opioid withdrawal (agitation, fever, emesis and pain), when naloxone is needed, dilute 1 vial (0.4 mg) in 10 cc of NS and administer 1cc every minute PRN. This careful titration will reverse respiratory depression without causing withdrawal symptoms. The **half-life of naloxone (ONE HOUR)** is shorter than the half-life of opioid agonists; therefore careful monitoring and additional doses of naloxone might be needed. Please see *UPMC Naloxone Guidelines*.

AVAILABLE OPIOID FORMULATION/STRENGTHS

Drug	Short Acting (mg)	Long Acting (mg)
Morphine	Tab s (15, 30) Cap s (15, 30) Oral Solution (10mg/5ml; 20mg/5ml; 20mg/ml) Supp (5, 10, 20, 30)	Ms Contin (bid) (15,30,60,100,200) Kadian (q 24 hr) (20, 50,100)
Oxycodone	Tab s and Cap s (5, 15, 30 mg) Oral Solution (5/5ml) (Oxyfast 20mg/ml)	Oxycontin (q 12 hr) (10,20,40,80,160)
Hydromorphone (Dilaudid)	Tab s (2, 3, 4, 8) (brand scored) Oral Solution (1/ml) Supp (3mg)	
Codeine	Tab s (15, 30, 60), Elixir 15mg/5ml	
Fentanyl		Transdermal Patch (mcg/hr) (25, 50, 75, 100)

COMBINATION OPIOIDS

Drug (3)	Formulation/Strength
Lorcet (Hydrocodone/acetaminophen)	Tab s 5/500, 7.5/650, 10/650 mg
Lortab (Hydrocodone/acetaminophen)	Tab s 2.5/500, 5/500 (brand scored), 7.5/500, 10/500 mg Elixir 2.5/167 mg per 5ml
Percocet (Oxycodone/acetaminophen) (1)	Tab s 5mg/325 mg
Percodan (Oxycodone/ASA)	Tab s 2.5/325 mg, 5/325mg, 7.5/500mg, 10/650mg
Roxicet (Oxycodone/acetaminophen)	Tab s 5/325 mg. Cap lets 5/500 mg. Oral Solution 5/325 mg per 5 ml
Tylenol with Codeine (acetaminophen/codeine)	Tab s 15/300 (#2), 30/300 (#3), 60/300 (#4), Elixir 12mg/120mg per 5ml
Vicodin (Hydrocodone/acetaminophen) (2)	Tab s 5/500, 7.5/750, 10/660 mg
Vicoprofenn (Hydrocodone/ibuprofen)	Tab s 7.5/200mg

- (1) Other brand name with oxycodone/acetaminophen: Tylox (2) Other brand names with Hydrocodone/acetaminophen: Anexsia, Norco, Zydone.
 (3) Maximum daily dose of acetaminophen is 4 Grams.

Oral and Parenteral Opioid Analgesic Equivalencies and Relative Potency of Opioids as Compared with Morphine*

When converting from one opioid to another, you may use 50-75% of the equivalent dose. Allow for incomplete cross-tolerance between different opioids (may need to titrate up rapidly and use prn dose to ensure effective analgesia for the first 24 hours). Avoid IM injections because of inconsistent absorption and patient discomfort.

Opioid Agonists	Parenteral mg (2)	Oral mg (3)	Duration of Effect
Morphine	10	30	3-4 hours
Oxycodone		20-30	3-4 hours
Hydromorphone	1.5	7.5	3-4 hours
Meperidine (1)	75	300	3 hours
Fentanyl	0.1		1-2 hours
Codeine	130	200	3-4 hours
Hydrocodone		25-30	

* These are rough approximations; individual patients may vary.

Meperidine is not a first line opioid. It should not be used longer than 48 hours nor more than 600mg/24 hours. Contraindicated with MAOIs. Please see UPMC Meperidine Guidelines before prescribing.

Parenteral opiate: onset of action, 5 minutes; peak, 15 min.

Oral opiate: onset of action, 15 – 30 minutes; peak, 45 – 60 min.

Please refer to *APS Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain* (1999); *AHCPR Guidelines – Management of Cancer Pain* (1994).

PATIENT CONTROLLED ANALGESIA (PCA)

Patient Controlled Analgesia (PCA) is a safe and effective modality for delivery of opioids for pain that is expected to resolve (e.g. post-operative pain) and for acute exacerbations of chronic pain (e.g. pathological fracture in a patient with chronic pain from metastatic bone cancer). The patient self-delivers fixed doses of opioid by pressing a button. Overdose is very infrequent. The patient must be alert to press the button.

EDUCATE FAMILIES THAT THEY MAY NOT PUSH THE PCA BUTTON.

The following are examples of starting a PCA. Like all opioid orders, doses must be individualized, Call the pain service with any questions.

Typical Initial Adult Orders (Individualize to Patient)	Starting Dose (1)	Dosage Range	Lockout Interval (2)	Loading (Administered separately from PCA)
Morphine (3)	1.0 mg	0.5 - 2.5 mg	8 min	2 - 4 mg q 15 min
Hydromorphone	0.2 mg	.05 - 4mg	8 min	0.3 - 0.5 mg q 15 min

Footnotes: 1. Quantity delivered when button is pushed. Reduce doses by 30-50% in elderly, liver disease, or sleep apnea syndrome. 2. How frequently demand dose can be activated. 3. Morphine is generally the opioid of choice for reasons of costs and efficacy. Side-effects may be increased in renal insufficiency.

Prior to initiating PCA, patients should receive an IV bolus (loading dose delivered by the clinician using the PCA infuser) of opioid titrated to achieve an adequate level of analgesia. In opioid naive patients, typical bolus doses are in the range of 2-4 mg of Morphine (0.3-0.5 mg hydromorphone) repeated every 15 minutes until patient is comfortable. In opioid tolerant patients, base initial dosing on the patient's chronic hourly opioid use (divide total 24-hour use by 24) and give roughly 50% every 8 minutes. Continuous infusion indicated for continuous pain. Caution in the elderly, in patients with altered mentation, sleep apnea, and in opioid naive patients. Calculate continuous infusion based on intermittent PCA use or previous opioid use prior to hospitalization. **Please use preprinted PCA order for all orders.**

For more information, see *UPMC Guidelines on Patient Controlled Analgesia*. or *UPMC House Officer's Guide on Patient Controlled Analgesia*

To Convert from PCA to Oral Opiate Regimen: 1. Calculate total PCA opiate use in the last 24 hours. 2. Convert this amount to 24 hour ORAL equivalent dose using the equianalgesic table above. 3. Give between 50-100% of 24 hour dose as equivalent long-acting opiate formulation around-the-clock, e.g., MS Contin (q 12h), Oxycotin (q 12h), Duragesic (fentanyl) transdermal patch (q 72 h) using equianalgesic table, along with short-acting oral opiate prn (morphine, oxycodone, dilaudid) for breakthrough pain using guidelines above. The exact percentage depends on how well the pain was controlled before the conversion, whether the pain is decreasing (post-op), whether the patient was previously on opiates and the amount of PCA use. One may need to titrate doses up or down since equalanalgesic doses are not exact. For more details, see the UPMC PCA conversion table.

To convert to Transdermal Fentanyl – Not used for acute pain or initial opioid therapy. Use for patients who are unable to take po or have chronic cancer pain. Determine the 24-hr parenteral morphine equivalent. Dose patch at 50-75% of the previous 24-hr opioid use. Prescribe a short acting opioid for breakthrough pain (5-15% of 24hr dose q 3 hours). Patch duration = 72hrs. Increase the patch dose based on the average amount of additional short acting opioid required in the previous 72 hrs. Allow patch at least 48hrs before adjusting the dose. For dosages of transdermal fentanyl over 100 mcg/hr multiple patches can be used. 24 HOUR ORAL MORPHINE EQUIVALENT DIVIDED BY 2 IS EQUAL TO FENTANYL PATCH DOSE IN MCG.

Parenteral Morphine Equivalent (mg/24 hours)	Transdermal Fentanyl Equivalent (mcg/hr)
8 to 22	25
23-37	50
38-52	75
53-67	100
68-82	125
83-97	150

NOTE: PATCH TAKES 12-24 HRS TO ACHIEVE FULL EFFECT. WHEN REMOVING A PATCH, REMEMBER THE ANALGESIC EFFECT CAN STILL LAST 24 HRS.

BOWEL REGIMEN: With few exceptions **all patients on opioid therapy need an individualized bowel regimen.** Start with the step 1 regimen. When an effective regimen is found it must be continued for the duration of the opioid therapy.

Step 1 - Begin with a stool softener and laxative. The following are some suggestions:

- a. Docusate 100 mg po bid (or 200 mg po qd) +/- MOM 30cc po qd
 - b. Docusate 100 mg po bid (or 200 mg po qd) +/- Senna 1 tab po qd
- Step 2 - Docusate 100 mg bid (or 200 mg po qd) + Senna 2 tabs bid
 Step 3 - Docusate 100 mg bid (or 200 mg po qd) + Senna 3 tabs bid

If a patient has not been on a bowel regimen, the step 1 regimen should be started. If there is no response in 24 hours move to the next step. At any given time if there has been no bowel movement in 4 or more days a sodium phosphate or mineral oil enema should be administered. If this is not effective, a high colonic tap water enema should be administered. Be aware of the possibility of bowel obstruction or fecal impaction. A digital rectal exam should be performed prior to starting a bowel regimen and if no BM for 4 days.

- Step 4 - Docusate 100 mg bid (or 200 mg po qd) + Senna 4 tabs bid + Lactulose 15cc po bid
 Step 5 - Docusate 100 mg bid (or 200 mg po qd) + Senna 4 tabs bid + Lactulose 30 cc po bid
 Step 6 - Docusate 100 mg bid (or 200 mg po qd) + Senna 4 tabs bid + Lactulose 30 cc po qid

UPMC Pain Resources	
Pain and Symptom Management Service	647-7243, beeper 8511
Palliative Care Service at PUH/MUH	647-7243, beeper 8512
Shadyside Dept. of Medical Ethics and Palliative Care	623-3008, or beeper 263-9041
Perioperative/Trauma Pain	647-7243, beeper 7246
UPCI Cancer Pain Service	beeper 644-1724
Interventional Pain	784-4000 (UPMC St. Margaret Operator)
Magee Womens Hospital	641-2108, or beeper 917-9276
UPMC Hospice	473-5125

Questions or comments regarding this information, contact Bob Arnold MD (rabob@pitt.edu), 692-4834, beeper 2322

Author: Ray Paronish, NP with feedback from: Colleen Dunwoody, RN; Rowena Schwartz, DPharm; Linda King, MD; Paul Han, MD; and Bob Arnold, MD.

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VERSION 4 PAIN CARD

ONCOLOGY SERVICES WELCOMES PALLIATIVE CARE SPECIALIST TO MAGEE

Denise Stahl, RN, MSN, Palliative Care Specialist, is now on staff at Magee Womens Hospital. She will be facilitating a multi-disciplinary approach to end-of-life care working with physicians, nurses, social workers, pharmacists and other health care professionals. She is available to assist with pain and symptom management in patients with life limiting illnesses, advance care planning, end-of-life decision making, and family assessment and support. She is interested in seeing patients in both the in-patient and out-patient settings. She is available by consult for issues related to end-of-life care and/or complex symptom management via pager at: **917-9276**.

UPMC HOSPICE NEWS

UPMC Hospice, the UPMC Comprehensive Palliative Care Service, and the Penn State Cooperative Extension will co-sponsor a grief tele-conference: "Caregiving and Loss: Family Needs, Professional Responses." This tele-conference will be held April 18 on the UPMC campus in the Biomedical Science Tower, S100.

The UPMC Hospice has been growing rapidly. Monthly admissions have increased by 25% during the past six months. The offices have relocated to new quarters at 1370 Beulah Road, Pittsburgh, PA 15235. The telephone number for referrals is now **473-5125**.

We must all die. But that I can save him from days of torture, that is what I feel as my great and ever new privilege.
Albert Schweitzer (1875-1965)

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Comprehensive Palliative Care Program
MUH, Suite E-526
UPMC Health System
200 Lothrop Street
Pittsburgh, PA 15213
(412) 692-4888