

# Pain Relief Connection

## The Pain Information Newsletter

Provided by MGH Cares About Pain Relief



Archived issues are available at <http://www.MassGeneral.org/PainRelief>

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### In the News: Vioxx Fallout

- Following the withdrawal of Vioxx from the market last month because of apparent cardiac toxicity associated with long-term use, the other Cox-2 inhibitors are also coming under scrutiny. According to the FDA, it [remains unclear](#) whether the cardiotoxicity seen with Vioxx is characteristic of the COX-2 inhibitor class of NSAIDs, and focused research is required.
- Leading medical journals have published scathing editorials about the roles of both the manufacturer and the FDA.
- Pfizer was criticized for not publicizing cardiac events associated with Celebrex that unexpectedly surfaced in a clinical trial on postoperative use of their drug. Pfizer has now announced the first large [clinical trial](#) to specifically look at the issue of cardiac toxicity in high-risk osteoarthritis patients.
- The NSAID [prescribing dilemma](#) now facing clinicians is highlighted in [AMNews](#).
- The Massachusetts General Physicians Organization (MGPO) has created a package of information to help clinicians address patients' concerns about the Vioxx recall. The package (*available only on MGH computers*) includes an [MGPO analysis](#) and advice to clinicians about alternative therapeutic strategies, and a [patient information sheet](#). The information is also available from the PCOI intranet page (Start – Partners Applications).

### Other News

In the [August issue](#) we reported that the Drug Enforcement Administration (DEA) and some of the nation's top pain experts had released a consensus document intended to provide guidance for prescribing controlled substances for pain. The DEA has now [withdrawn its support](#) of the document, saying that it contained errors and had not been officially approved.

### Patient Resources

Information on pain medications from the [American Cancer Society Consumers Guide to Cancer Drugs](#) is available free on the [CancerSource](#) web site.

### Department of Error

- Cutting edge technology has provided pain relief not previously available to people with certain types of chronic pain. But the interface between the human operator and the machine must be designed to promote safe use and prevent error. [Medtronic](#) and the FDA recently [recalled a computer card](#) for some of Medtronic's devices that adjust doses for [implanted analgesic pumps](#) following reports of data entry errors. Bolus doses had been entered into the 'minutes' rather than the 'hours' field. Replacement software provides clear labels and instructions.
- The October issue of the [ISMP](#) Medication Safety Alert [Nurse AdvisERR](#) highlights 2 safety issues:
  - Design problems with electronic medication administration records that can potentially lead to medication errors
  - The imperative to educate patients to not crush or chew extended release opioid analgesics. This applies to all brands.

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**Journal Watch** (journal titles followed by [M] have full text free access on MGH computers)

- Skipper GE, Fletcher C, Rocha-Judd R, Brase D. **Tramadol Abuse and Dependence Among Physicians.** *JAMA* Oct 20, 2004;292(15):1818-1819.
- Voss JA, et al. **Sedative music reduces anxiety and pain during chair rest after open-heart surgery.** *Pain.* 2004 Nov;112(1-2):197-203. [M]
- Lussier D, Huskey AG, Portenoy RK. [Adjuvant Analgesics in Cancer Pain Management](#) (CME & free full text)

## Pain-Related Education Opportunities

- Nov 5 – 7 (Fri – Sun): **Oncology Nursing Society's 5<sup>th</sup> Annual Institutes of Learning.** This year's event features a half-day mini-institute on Pain. Learn more or register online at <http://onsopcontent.ons.org/Meetings/IOL2004/Index.shtml>
- Nov 19 – 20 (Fri – Sat): **Pain Management Strategies for the Primary Care Practitioner.** 7th annual CME-accredited meeting. This program will present a primer of the latest developments in the pathophysiology, diagnoses and treatments of pain. Each talk will focus on specific topics directly relevant to the practical problems that a primary care specialist may encounter when confronted with a pain patient. NYU Medical Center, Farkas Auditorium, New York City. For more information contact Leticia Banuchi, tel: 646-459-8516, email: [Leticia.Banuchi@nyumc.org](mailto:Leticia.Banuchi@nyumc.org).
- Nov 4- 6 (Thu – Sat). **American Society of Addiction Medicine (ASAM) Review Course in Addiction Medicine,** Sheraton Centre Toronto, Ontario, Canada, November 4-6, 2004.
- **Master of Science in Pain Research, Education, and Policy,** Tufts University Medical School. An interdisciplinary postgraduate program. For info call 617-636-8541 or e-mail [jconnolly@tufts-NEMC.org](mailto:jconnolly@tufts-NEMC.org).
- **Coordinating Care at the End of Life: The Role of Hospice.** The [American Hospice Foundation](#) announces a new electronic (CD-ROM) CE course with contact hours for nurses, social workers and case managers. Contact Marsha H. Nelson, ACSW, MBA at 202-223-0204, Ext. 206 or [mnelson@americanhospice.org](mailto:mnelson@americanhospice.org).

## MGH Pain Calendar

- Nov 8 (Mon) 11:00am – 12:00N **Coping with Cancer Pain** (for patients and families), featuring Annabel Edwards, ANP. Cancer Resource Room, Cox 1<sup>st</sup> floor. Sponsored by HOPES Program.
- Dec 10 (Fri) 2:00pm **Methadone as an Analgesic.** Pharmacy Conference Room
- Mar 15 (Tue) 8:00am – 8:00pm **Pain Knowledge and Skills Day.** Walcott Conference Room, Wang 1.
- April 21-22 (Thu – Fri) 7:30am – 4:30pm **Annual Pain Relief Champions Course.** Walcott Conference Room, Wang 1.

**Chronic Pain Rounds are held Mondays at 12:00N in the Clinics 3 amphitheatre. Of Note:**

- Nov 8 "Irritable Bowel Syndrome" Braden Kuo, M.D., MGH Gastroenterology
- Nov 29 "The Biology of Migraine" Zahid Bajwa, M.D., BWH Pain Center

**Cancer Pain Rounds are held Wednesdays at 12:00N in the Cox 8 Conference Room.**

**Palliative Care Grand Rounds are held Wednesdays at 8:00am in the Ether Dome**

### MGH Pain Resources:

PainRelief web site: <http://www.massgeneral.org/painrelief/>

Previous issues of *Pain Relief Connection*: <http://www.massgeneral.org/painrelief/Newsletter>

Previous Pain Topics articles: [http://www.massgeneral.org/painrelief/Pain%20Topics/mghpain\\_paintopics\\_index.htm](http://www.massgeneral.org/painrelief/Pain%20Topics/mghpain_paintopics_index.htm)

Patient Care Services Pain Resource Center: [http://pcs.mgh.harvard.edu/Secure/Clinical\\_Resources/Pain\\_Resources.asp](http://pcs.mgh.harvard.edu/Secure/Clinical_Resources/Pain_Resources.asp)

CCPD educational offerings: [http://pcs.mgh.harvard.edu/CCPD/Educational\\_Offerings/cpd\\_offerings\\_calendar.asp](http://pcs.mgh.harvard.edu/CCPD/Educational_Offerings/cpd_offerings_calendar.asp)

Treadwell Library (Magic): <http://magic.mgh.harvard.edu/>

MGH Formulary (includes patient teaching handouts in 16 languages): <http://www.crlonline.com/crlsql/servlet/crlonline>

Partners Handbook: <http://is.partners.org/handbook/>

Primary Care Office InSite (PCOI) (Clinician and patient information): [http://oi.mgh.harvard.edu/pcoi/frontpage\\_frames.asp](http://oi.mgh.harvard.edu/pcoi/frontpage_frames.asp)

URL notes: **Hold your cursor over the link for a second to see the URL.** If you are reading this in hard copy, this month's links are:

Uncertainty about COX-2 cardiotoxicity as a class: [http://www.medscape.com/viewarticle/491611\\_print](http://www.medscape.com/viewarticle/491611_print)

Pfizer Celebrex clinical trial: [http://www.pfizer.com/are/news\\_releases/2004pr/mn\\_2004\\_1018.html](http://www.pfizer.com/are/news_releases/2004pr/mn_2004_1018.html)

NSAID prescribing dilemma: <http://www.ama-assn.org/amednews/2004/10/25/hlsa1025.htm>

MGPO recommendations: [http://oi.mgh.harvard.edu/pcoi/practice\\_alert/FAQvioxx.asp?authenticationcode=1098975729312](http://oi.mgh.harvard.edu/pcoi/practice_alert/FAQvioxx.asp?authenticationcode=1098975729312)

MGPO patient info: [http://oi.mgh.harvard.edu/pcoi/patient\\_instructions/VioxxRecall.asp?authenticationcode=1098976154231](http://oi.mgh.harvard.edu/pcoi/patient_instructions/VioxxRecall.asp?authenticationcode=1098976154231)

DEA statement: [http://www.deadiversion.usdoj.gov/faq/pain\\_meds\\_faqs.htm](http://www.deadiversion.usdoj.gov/faq/pain_meds_faqs.htm)

ACS Guide to Consumer Drugs: <http://www.cancersourcern.com/drugdb2/index.cfm>

Medtronic recall: <http://www.medscape.com/viewarticle/490045?src=mp>; Medtronic: <http://www.medtronic.com/>

ISMP Nurse AdvisERR: <http://www.ismp.org/NursingArticles/list.htm>

Adjuvant Analgesics for Cancer Pain: <http://theoncologist.alphamedpress.org/cgi/content/full/9/5/571>

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# PAIN TOPICS

## Optimizing Postoperative Pain in the Opioid Tolerant Patient

Margaret Buckley, BSN, RN

Editor's Note: Margaret is a Graduate Student in the Clinical Nurse Specialist Program at the Connell School of Nursing at Boston College, and a PACU Nurse at Cambridge Health Alliance

### Introduction

People are living longer with more complex chronic illnesses. Attention to improved pain management has resulted in an increased use of opioid analgesics for non-cancer related pain. A growing number of patients are opioid tolerant when they present for surgery, whether from medically prescribed analgesics or illicit drug use. Providing optimal postoperative pain management can be challenging in the patient who is opioid tolerant. The purpose of this article is to suggest appropriate pain management considerations for surgical patients who are opioid tolerant. Preoperatively, the clinicians' assessment of the patient should provide accurate and timely identification of opioid tolerance and provide an opportunity for safely and effectively managing perioperative and postoperative pain concerns. Once identified as an issue, health care providers can collaborate with the patient to develop an appropriate, individualized pain management strategy that balances adequate pain relief with concerns for safety and abuse potential.

### Opioid tolerance

It is important to establish an operational definition of opioid tolerance. The consensus statement by the American Society of Addiction Medicine, American Academy of Pain Medicine, and the American Pain Society define tolerance as "a physiologic adaptation to the presence of a drug in the body such that increased doses are required to produce the pharmacologic effects initially resulting from smaller doses" (Savage, Joranson, Covington, Schnoll, Heit, & Gilson, 2003). Tolerance is a predictable pharmacologic adaptation and does not indicate an adverse reaction or loss of control (Wu, 2002). Tolerance to opioids can develop in days to weeks depending on the drug, route of administration, and dosing schedule. Opioid tolerant patients have been found to experience significantly increased hyperalgesia (increased pain sensitivity to otherwise non-noxious stimuli) which results in lower pain threshold, relative pain intolerance, and to require larger doses of opioids to achieve adequate plasma levels (Rapp, Ready, & Nessly, 1995; Mitra & Sinatra, 2004).

Historically, significant healthcare concerns related to under-treated pain prompted the Agency for Health Care Policy and Research (AHCPR) to develop guidelines for acute pain management in 1992. Implementation of these guidelines have expanded the use of opioid analgesics, once reserved for malignant disease states, into standard treatment practices for acute pain. Although recent recommendations in pain management have resulted in an increase in legitimate opioid consumption, long-term usage often connotes a social stigma and can raise concerns related to patient privacy and confidentiality. Although some patients may deny or minimize opioid use, patient self-report remains the best indicator.

### Assessment and planning

A comprehensive preoperative assessment should include direct and concrete questions related to patient use of alcohol, tobacco, and all drugs including prescribed and illicit/recreational. Accurate identification of opioid tolerance can minimize the perioperative risks of unintentional opioid withdrawal and inadequate analgesia.

The individualized strategy for pain management is a collaborative effort between the health care providers, the patient, and with patient consent, family. The plan must consider the patient's baseline opioid requirement, the extent of the planned surgical intervention and anticipated pain response, a multimodal approach to aggressive pain management, and a strategy to taper opioid usage when no longer medically indicated (Mitra, et al, 2004). The verbal and or written plan should assist the patient to make informed decisions, utilize a consistent approach to pain assessment, planned intervention, evaluation of response, and adaptation of the plan as needed.

Preoperatively, the patient should continue their baseline opioid requirement or receive an equivalent loading dose.

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Administration of long-acting oral opioids preoperatively will reduce the need for perioperative re-dosing. Careful consideration of dose equivalencies and attention to steady plasma states will provide the patient's baseline need, but additional analgesics will be required to manage acute postoperative pain. Opioid doses may need to be increased 30 -100% higher than in opioid naive patients (Mitra, 2004). Analgesics should be selected and titrated based on assessment including pain severity, side effects, and function. Constant pain requires an around the clock dosing schedule (ASPMN, 2002). A multimodal approach to pain management combines opioid administration with multiple strategies potentially including:

- wound infiltration with a local anesthetic
- epidural or regional anesthesia
- peripheral nerve blocks
- balanced analgesia (use of adjunctive co-analgesic medications) e.g., non-steroidal anti-inflammatory drugs, ketamine, clonidine
- non-pharmacologic interventions e.g., acupuncture, heat/cold, relaxation, music (Mitra, 2002).

### **Additional considerations for the patient with a history of abuse**

Patients with a history of abuse who are currently abstinent may be hesitant to accept opioids. Relapse may be a valid fear, but inadequately treated pain is of greater, immediate concern. The clinician can reassure the patient that, despite a previous history of dependency, adequate pain control is achievable with minimization of relapse. Special considerations for the methadone maintenance patient include consultation with an addiction specialist, continuation of daily dose, and additional methadone or other opioid analgesic for acute pain around the clock. Patients maintained on opioid antagonists (naloxone, naltrexone) or mixed agonist-antagonist opioids (nalbuphine, buprenorphine, pentazocine) should discontinue these medications 24 hours before surgery to avoid acute opioid withdrawal symptoms.

### **Recap of important points**

#### Preoperatively

- accurate and timely identification of opioid tolerant patients
- patient/family education related to pain and treatment options
- multidisciplinary team/patient development of individualized pain management care plan
- continue baseline requirements or provide equivalent loading dose
- consider consultation with addiction specialist or pain service

#### Perioperatively

- multimodal/balanced analgesia – consider combining with epidural/intrathecal
- liberal doses of systemic opioids

#### Postoperatively

- continue multimodal/balanced analgesia to provide adequate comfort/function
- around the clock dosing (consider long-acting opioid) and break-through option
- switch to oral, long-acting medications as soon as indicated
- taper opioids when no longer medically indicated
- careful prescription monitoring if needed
- provide resources/support to manage difficulty weaning opioids when no longer indicated

**References** (journal titles followed by [M] have full text free access on MGH computers)

American Society for Pain Management Nurses. (2002). Position paper on pain management in patients with addictive disease. Pensacola, FL. <http://www.aspmn.org/html/PSaddiction.htm>

Mitra, S. & Sinatra, R. (2004). Perioperative management of acute pain in the opioid-dependent patient. *Anesthesiology* July;101(1):212-227. [M]

Rapp, S., Ready, B., & Nessly, M. (1995). Acute pain management in patients with prior opioid consumption: a case-controlled retrospective review. *Pain*;61(2):195-201. [M]

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- Wu, C., Casey, Z. (2002). Managing postoperative pain in the opioid-tolerant patient: careful planning provides optimal pain control, minimizes problems. *Journal of Critical Illness*, Nov 1. <http://www.highbeam.com/library/doc0.asp?DOCID=1G1:95198655&num=1&ctrlInfo=Round9%3AProd4%3ASR%3AResult&ao=>

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