PAIN MANAGEMENT

☐ **BEVERLY ANESTHESIA ASSOCIATES**
978.304.8690
480 Maple Street, Suite C233A
Danvers, MA
- Kenneth Branton, MD
- Charles Ho, MD
- Jonathan Jaques, MD
- Anthony Lomonaco, DO
- Gary Roark, MD

☐ **NORTH SHORE PAIN MANAGEMENT**
978.927.7246
900 Cummings Ctr., Suite 221U
Beverly, MA
- Richard Field, MD
- Minesh Patel, MD

☐ **SPORTS MEDICINE NORTH**
978.818.6350
1 Orthopedics Drive
Peabody, MA
- Joseph Evans, DO

☐ **PAIN CENTER OF THE NORTH SHORE**
978.532.2650
84 Newbury Street
Peabody, MA
- Emad Younan, MD

Please call our office back with the date of your appointment so we can process your insurance referral

PHARMACIST'S LETTER

PL Detail-Document #291207
–This PL Detail-Document gives subscribers additional insight related to the Recommendations published in–
PHARMACIST'S LETTER / PRESCRIBER'S LETTER
December 2013

PRESCRIBER'S LETTER

Treatment of Acute Low Back Pain

Guidelines for the treatment of acute low back pain recommend conservative non-drug measures and non-opioid analgesics.[1] In the absence of red flags such as neurologic symptoms, or suspicion of cancer, vertebral fracture, ankylosing spondylitis, or infection, imaging within the first six weeks is discouraged.[1,3,5] Indiscriminate use of imaging can lead to unnecessary or even harmful procedures and increased costs.[5,6] Despite these recommendations, there has been an increase in the use of opioids, imaging, and specialist referrals, along with a decrease in the use of NSAIDs and acetaminophen, for back pain.[1] Benzodiazepine use is increasing too.[1] Unnecessary use of opioids is of particular concern given the current public health crisis involving these medications.[1] Appropriate treatment of acute back pain may decrease the risk of chronic back pain.[2] The chart below covers non-drug and drug therapy of acute back pain. The goal of these interventions is to reduce pain and its effect on daily function, not necessarily complete pain relief.[9] Patients should be given an optimistic message as to the expected course of their back pain, advised to remain active, and provided self-care information.[3,11] To this end, get our customizable *PL Patient Education Handout, What I Need to Know About Acute Low Back Pain.* If pain is not gone or substantially improved within two to four weeks, be on the lookout for the 10% to 15% who will develop chronic low back pain.[3,10] These are typically patients with poor general health, severe pain, poor coping skills, and a depressed mood.[14] The **STarT Back Screening tool** (http://www.keele.ac.uk/sbst/) can be used to help identify high-risk patients so you can intervene early with physical therapy, psychosocial support, and treatment of comorbid depression.[10,14]

Medication or Intervention	Comments
NON-DRUG THERAPY	
First-Line	
Remain active.	• Continue normal activities to the extent possible.[9]
Apply heat[4] (or cold if patient prefers[15])	• Use a heating pad, heated blanket, or cold pack.[3,15] • May alternate heat and cold.[15] • Caution patients about risk of thermal injury, especially those with sensory deficits. Do not apply directly to skin, and not for longer than 15 to 20 minutes at a time.[15]
Spinal manipulation	• If self-care options are ineffective.[3]
Second-Line	
Physical therapy	• If pain lasts more than four weeks.[4] • For patients at moderate or high risk of developing chronic back pain (See STarT Back Screening tool at http://www.keele.ac.uk/sbst/).[11,14]
Yoga, exercise therapy, massage, acupuncture.	• If pain lasts more than four weeks.[3]

More. . .

Medication or Intervention	Comments
NON-DRUG THERAPY, Second-Line, continued	
Psychosocial support	• For patients at high risk of developing chronic back pain (See STarT Back Screening tool at http://www.keele.ac.uk/sbst/).[11,14]
PHARMACOTHERAPY	
First-Line	
Acetaminophen or NSAID	• Acetaminophen (3000 to 4000 mg total daily dose) has a better safety profile than NSAIDs.[3,11] • NSAIDs (e.g., ibuprofen up to 800 mg three times daily, naproxen 500 mg twice daily) may be more effective than acetaminophen.[3,11] • Scheduled dosing preferred.[15] Around-the-clock use may be more effective than "as needed" use.[16] • Avoid NSAIDs in chronic renal disease, hypertension, heart failure, high gastrointestinal or cardiovascular risk.[11-13] • A two- to four-week trial is suggested before moving to a second-line agent.[11]
Second-Line	
Skeletal Muscle Relaxants (e.g., cyclobenzaprine, tizanidine)	• No proof they are more effective than acetaminophen or NSAIDs.[8] • High incidence of central nervous system adverse effects (e.g., sedation).[8] • Avoid in patients at risk of falls (e.g., elderly).[11] • Limit use to seven days.[11] • Avoid baclofen or dantrolene due to lack of evidence for low back pain.[3] • Dantrolene, tizanidine, and chlorzoxazone carry hepatotoxicity risk.[3] • Benzodiazepines, carisoprodol, and meprobamate have abuse potential.[3] Avoid.[11]
Gabapentin	• For sciatica.[3] • Titrate to total daily dose 900 to 3600 mg.[4]
Third-Line	
Tramadol or *short-acting* opioid	• For pain not controlled by acetaminophen or an NSAID.[3] • Not more effective than NSAIDs for low back pain.[7] • Avoid tramadol in patients with a history of seizures or taking a serotonergic drug (e.g., SSRI).[11] • Use the minimum effective dose for a limited duration (e.g., one to two weeks).[10]

Users of this PL Detail-Document are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

Project Leader in preparation of this PL Detail-Document: Melanie Cupp, Pharm.D., BCPS

References

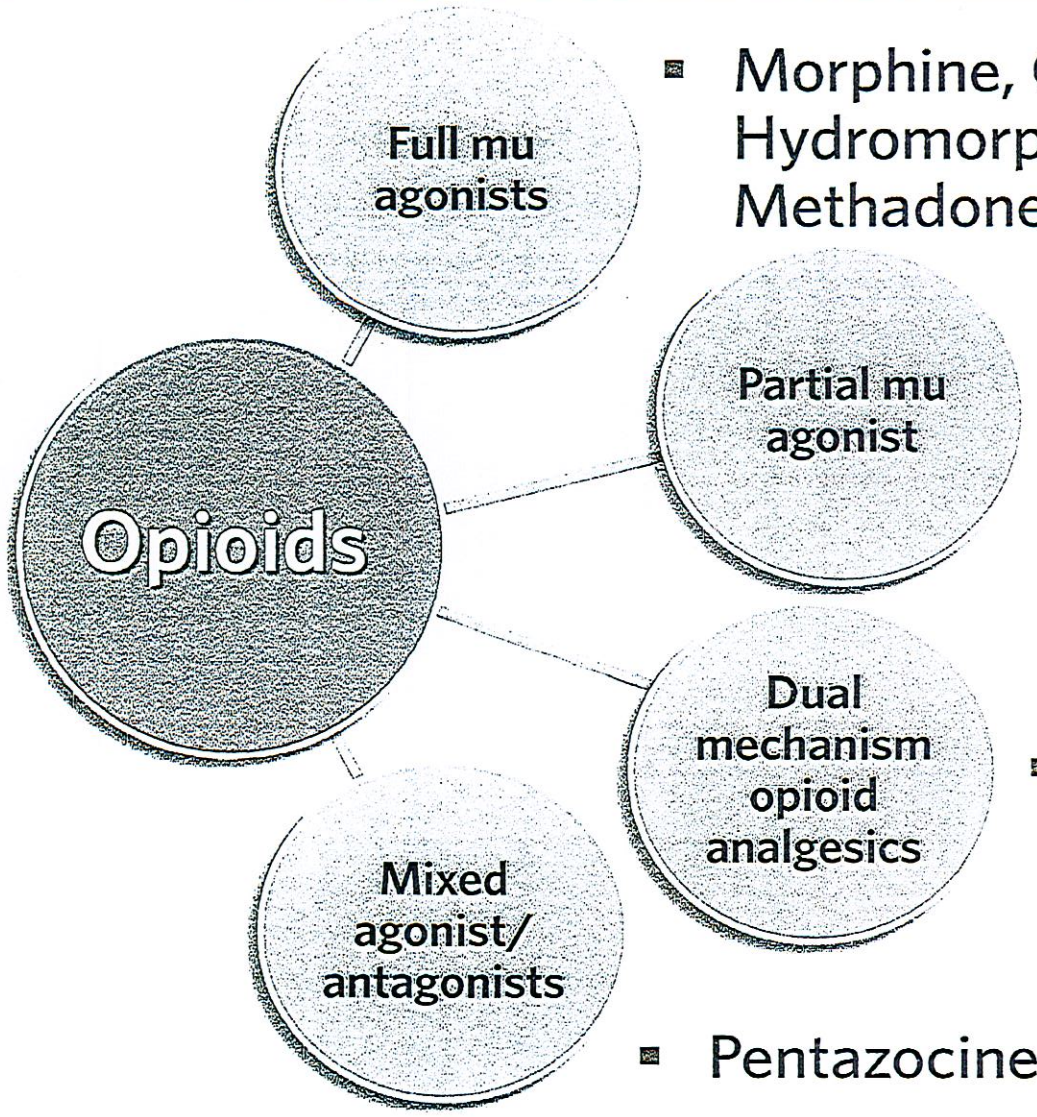
1. Mafi JN, McCarthy EP, Davis RB, Landon BE. Worsening trends in the management and treatment of back pain. *JAMA Intern Med* 2013;173:1573-81.
2. Clark MR. Chronic pain perspectives: targeting systemic inflammation in patients with obesity-related pain: how best to prevent acute pain from becoming chronic? *J Fam Pract* 2013;62:S3-9.
3. Chou R, Qaseem A, Snow V, et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Ann Intern Med* 2007;147:478-91.
4. Pinto RZ, Maher CG, Ferreira ML, et al. Drugs for relief of pain in patients with sciatica: systematic review and meta-analysis. *BMJ* 2012;344:e497.
5. Choosing Wisely. American Academy of Family Physicians. Fifteen things physicians and patients should question. http://www.choosingwisely.org/doctor-patient-lists/american-academy-of-family-physicians/. (Accessed October 31, 2013).
6. Choosing Wisely. Imaging tests for lower-back pain: when you need them and when you don't. April 2012. http://www.choosingwisely.org/doctor-patient-lists/imaging-tests-for-lower-back-pain/. (Accessed October 31, 2013).
7. Chaparro LE, Furlan AD, Deshpande A, et al. Opioids compared to placebo or other treatments for chronic low-back pain. *Cochrane Database Syst Rev* 2013;8:CD004959.
8. Van Tulder MW, Touray T, Furlan AD, et al. Muscle relaxants for non-specific low back pain. *Cochrane Database Syst Rev* 2003;2:CD004252.
9. National Institute for Health and Care Excellence. Low back pain. Early management of persistent non-specific low back pain. NICE clinical guideline 88. May 2009. http://www.nice.org.uk/nicemedia/live/11887/44343/44343.pdf. (Accessed October 31, 2013).
10. Goertz M, Thorson D, Bonsell J, et al. Institute for Clinical Systems Improvement. Adult Acute and Subacute Low Back Pain. Updated November 2012.
11. Intermountain Healthcare. Care process model. Primary care management of low back pain. March 2013. https://intermountainhealthcare.org/ext/Dcmnt?ncid=522579081. (Accessed October 31, 2013).
12. Choosing Wisely. Choosing a pain reliever. August 2012. http://www.choosingwisely.org/doctor-patient-lists/choosing-a-pain-reliever/. (Accessed October 31, 2013.
13. Antman EM, Bennett JS, Daugherty A, et al. Use of nonsteroidal antiinflammatory drugs: an update for clinicians: a scientific statement from the American Heart Association. *Circulation* 2007;115:1634-42.
14. Hill JC, Whitehurst DG, Lewis M, et al. Comparison of stratified primary care management for low back pain with current best practice (STarT Back): a randomised controlled trial. *Lancet* 2011;378:1560-71.
15. Toward Optimized Practice. Guideline for the evidence-informed primary care management of low back pain. 2nd edition. 2011. http://www.topalbertadoctors.org/cpgs/?sid=65&cpg_cats=90. (Accessed November 1, 2013).
16. Roelofs PD, Deyo RA, Koes BW, et al. Non-steroidal anti-inflammatory drugs for low back pain. *Cochrane Database Syst Rev* 2008;1:CD000396.

Cite this document as follows: ***PL Detail-Document, Treatment of Acute Low Back Pain. Pharmacist's Letter/Prescriber's Letter. December 2013.***

PHARMACIST'S LETTER *Evidence and Recommendations You Can Trust...* PRESCRIBER'S LETTER

3120 West March Lane, Stockton, CA 95219 ~ TEL (209) 472-2240 ~ FAX (209) 472-2249

Opioid Choices with Examples



- Morphine, Oxycodone, Hydrocodone, Hydromorphone, Fentanyl, Methadone, Oxymorphone
- Buprenorphine
- Tramadol, Tapentadol
- Pentazocine

Abuse-Deterrent Opioids

- Formulations with ***agonist-antagonist combinations*** have an opioid antagonist (e.g., naloxone, naltrexone) to help prevent desirable effects of the opioid secondary to misuse. The antagonist may be active only with inappropriate manipulation and use of the product (e.g., crushing, dissolving and injecting).
- Formulations with ***aversion technology*** are made to produce an unpleasant effect when the product is misused, such as by snorting.
- ***Physical barriers*** may make chewing, crushing, cutting, or dissolving of a formulation more difficult.[2] Note that product labeling may not indicate that a formulation is abuse-deterrent..

Product	Mechanism for Abuse Deterrent[2,3]	Precautions Related to Formulation
Embeda capsules-U.S. only Morphine extended-release/naltrexone	Agonist-antagonist combination The naltrexone core is sequestered and is only released with crushing, chewing, or dissolving the pellets from the capsule	Capsules must be swallowed intact or contents may be sprinkled on applesauce and swallowed without chewing Co-ingestion of alcohol may cause an increase in blood levels of morphine and potentially fatal overdose Release of naltrexone from the pellets (e.g., by crushing, dissolving, or chewing them) may lead to withdrawal symptoms in patients who are physically dependent on opioids[4]
Exalgo tablets-U.S. only Hydromorphone extended-release	Physical barrier Tablet is difficult to crush and extract medication[3]	Tablets must be swallowed intact. Crushing, dissolving, or chewing can cause rapid release of a potentially fatal dose of hydromorphone. Due to the non-degradable tablet formulation, *Exalgo* should not be used in patients at risk for GI obstruction
Opana ER tablets-U.S. only Oxymorphone extended-release	Physical barrier Tablet is difficult to crush and extract medication, forming a gel if dissolved[3]	Tablets must be swallowed whole. Breaking, crushing, chewing can cause rapid release of a potentially fatal dose of oxymorphone. Co-ingestion of alcohol may cause an increase in blood levels of oxymorphone and potentially fatal overdose
(Oxaydo) Oxecta tablets-U.S. only Oxycodone immediate-release	Aversion Tablet breaks into chunks if crushed, forms a gel if dissolved, and contains ingredients that cause nasal discomfort with snorting[3]	Tablets must be swallowed whole and should not be crushed or dissolved Tablets should not be administered via feeding tubes as they may cause obstruction of the tube
OxyContin tablets-U.S. only Oxycodone controlled-release	Physical barrier Tablet is difficult to crush and extract medication, forming a gel if dissolved[3]	Tablets must be taken intact. Cutting, breaking, chewing, crushing, or dissolving can cause rapid release of a potentially fatal dose of oxycodone. Due to the non-degradable tablet formulation, *OxyContin* should not be used in patients at risk for GI obstruction
Suboxone sublingual film-U.S. only/sublingual tablets (U.S. [generic only] and Canada) Buprenorphine/naloxone	Agonist-antagonist combination Naloxone can have clinically significant effects if the drug is administered parenterally (no therapeutic effect with oral administration)	Films and tablets should not be cut, chewed, or swallowed Parenteral misuse can lead to opioid withdrawal symptoms in patients who are physically dependent on opioids
Zubsolv orally disintegrating tablets-U.S. only Buprenorphine/naloxone	Agonist-antagonist combination Naloxone can have clinically significant effects if the drug is administered parenterally (no therapeutic effect with oral administration)	Tablets should not be cut, chewed, or swallowed Parenteral misuse can lead to opioid withdrawal symptoms in patients who are physically dependent on opioids

U.S. product labeling used for the above chart: Embeda (November 2013); Exalgo (March 2013) Opana ER (December 2011); Oxecta (January 2014); OxyContin (July 2013); Suboxone (January 2012); Zubsolv (July 2013).Project Leader in preparation of this PL Detail-Document: Stacy A. Hester, R.Ph., BCPS, Assistant Editor

Instruction to Learners
Go to www.SCOPEofpain.com, register, and complete the three on-line modules (3 hours; can be done asynchronously).

THE TOOLKIT CONTENT

STEP 1:
The three on-line self-study modules of *SCOPE of Pain* take learners through the case of Mary Williar a 42 year-old with painful diabetic neuropathy and chronic low back pain on chronic opioid therapy, enhances the way they:

- Determine appropriateness of opioid analgesics
- Assess for prescription opioid misuse risk
- Counsel patients on opioid risks, safety and benefits
- Establish realistic pain and functional goals
- Monitor patients who have been prescribed opioids for adherence, benefit and harm
- Assess, diagnose and manage aberrant opioid taking behaviors
- Decide on starting, continuing, modifying or discontinuing opioid analgesics
- Safely discontinue opioids when there is too little benefit and/or too much risk

What is SCOPE of Pain? SCOPE of Pain is a series of continuing medical education/continuing nursing education activities designed to help you safely and effectively manage patients with chronic pain, when appropriate, with opioid analgesics. Our program consists of a free 3-module, case-based online activity and live conferences held around the US.

By following the case of Mary Williams, a 42 year old with painful diabetic neuropathy and chronic low back pain, you'll learn how to: 1) decide on appropriateness of opioid analgesics; 2) assess for opioid misuse risk; 3) counsel patients about opioid safety, risks and benefits; 4) competently monitor patients prescribed opioids for benefit and harm; 5) make decisions on continuing or discontinuing opioid analgesics; 6) safely discontinue opioids when there is too little benefit or too much risk and harm.

Offered in collaboration with the **Council of Medical Specialty Societies (CMSS) and the Federation of State Medical Boards (FSMB),** this program addresses the FDA mandate to manufacturers of extended release/long-acting (ER/LA) opioid analgesics, by providing comprehensive prescriber education in the safe use of these medications. It also addresses many key elements of the physician education component of the Obama Administration's prescription drug abuse prevention plan on prescriber education released in April 2011.