

PHYSICIANS EDUCATION GRAM[®]

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Treatment Options in Acute Pain

Use short-acting, short-duration analgesics to treat acute pain. Short-acting analgesics are only effective for acute pain. They are not useful for treating chronic pain since they will not provide long-lasting analgesia.

Somatic Pain Treatment	Visceral Pain Treatment	Neuropathic Pain Treatment
<ul style="list-style-type: none"> Acetaminophen Cold Packs Corticosteroids Local Anesthetic NSAIDs Opioids Tactile Stimulation 	<ul style="list-style-type: none"> Corticosteroids Intraspinal Local Anesthetic Agents NSAIDs Opioids 	<ul style="list-style-type: none"> Anticonvulsants Corticosteroids Neural Blockade NSAIDs Opioids Tricyclic Antidepressants

Institute for Clinical Systems Improvement (ICSI). Assessment and Management of Acute Pain. March 2006. p 67

Summary Points Regarding Major Drug Classes

Analgesic Class	Dosage	Comment
Acetaminophen	15-20mg/kg Q4-6h; Max 4g/day	Underused for acute pain; Minimal side effect profile
Aspirin	325-650mg Q4-6h up to 4g/day	
NSAIDs	Ibuprofen: 200-400mg Q4-6h ; max 1.2g/day	400mg safest, inexpensive choice; No evidence that any one NSAID is more effective than another; Can decrease GI disturbances with misoprostol 800mcg, H2 blockers, and PPIs
	Naproxen: 250mg Q6-8h; max 1250 mg/day	
Opioids	No ceiling dose; greater analgesia can be obtained by increasing the dosage with no limit except those imposed by side effects	Recommended: Oxycodone, Hydrocodone Not Recommended for acute pain: Codeine, Propoxyphene, Pentazocine
Tramadol (Ultram)	50-100mg Q4-6h (max 400mg/day)	Can cause serious neurotoxicity in quantities just 5x the usual dose
COX-2 Inhibitor {Celebrex (Celecoxib)}	200mg BID	Black Box Warning: associated with an increased risk of adverse cardiovascular events

Recommendation:

- Acetaminophen in doses up to 1,000 mg is the initial choice for most mild to moderate acute pain
- The first-line NSAID for safety, efficacy, and cost is ibuprofen in doses of 400mg
- For moderate to severe pain, consider narcotic acetaminophen or narcotic ibuprofen combination
- Opiates
 - No evidence to support the fact that other narcotics have greater efficacy or fewer side effects than morphine (Duramorph).
 - Hydrocodone generally is considered the most potent oral narcotic analgesic that does not require specialized prescribing documentation.
 - There is no evidence comparing hydrocodone with any other oral narcotic
- Tramadol has inferior efficacy and no clear benefit regarding safety compared with other alternatives; it should not be a first-line oral analgesic.
- Tramadol, propoxyphene, and codeine provide inferior analgesia to other recommended agents.

References:

Lexi-complete drug database (www.lexi.com)

Sachs, Carolyn. Oral Analgesics for Acute Nonspecific Pain. American Family Physician. March 2005, Volume71:5.

Merck manuals Online Medical Library. www.merck.com/mmpe/index.html

Institute for Clinical Systems Improvement (ICSI). Assessment and Management of Acute Pain. 2006 March

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