



## Management of Pain in the Older Patient



Pharmacologic Management of Persistent Pain in Older Persons American Geriatrics Society Panel on the Pharmacological Management of Persistent Pain in Older Persons

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#### Nonopioids

- Acetaminophen should be considered as initial and ongoing pharmacotherapy in the treatment of persistent pain, particularly musculoskeletal pain, owing to its demonstrated effectiveness and good safety profile (high quality of evidence, strong recommendation)
- Nonselective NSAIDs and COX-2 selective inhibitors may be considered rarely, and with extreme caution, in highly selected individuals (high quality of evidence, strong recommendation)

#### Nonopioids

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- Older persons taking nonselective NSAIDs should use a proton pump inhibitor or misoprostol for gastrointestinal protection (high quality of evidence, strong recommendation)
- Patients taking a COX-2 selective inhibitor with aspirin should use a proton pump inhibitor or misoprostol for gastrointestinal protection (high quality of evidence, strong recommendation)

#### Nonopioids

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- Patients should not take more than one nonselective NSAID or COX-2 selective inhibitor for pain control (low quality of evidence, strong recommendation)
- Patients taking aspirin for cardioprophylaxis should not use ibuprofen (moderate quality of evidence, weak recommendation).
- All patients taking nonselective NSAIDs and COX-2 selective inhibitors should be routinely assessed for gastrointestinal and renal toxicity, hypertension, heart failure and other drug-drug and drug-disease interactions (weak quality of evidence, strong recommendation)

# Benefits Associated With NSAID/Opioid Use

	Oral NSAIDs <sup>1</sup>	Topical NSAIDs <sup>2</sup>	Opioids <sup>3</sup>
Pain reduction	0.32	0.24	0.58
Physical functioning	0.22	?	0.45
Sleep improvement	?	?	0.87
Quality of life	?	?	?
Socialization	?	?	?

Effect sizes: 0.20-0.50 small, 0.50-

<sup>1</sup> Bjordal et al BMJ 2004 BMJ. 2004; 329(7478): 1317. <sup>2</sup>Biswal et al J Rheum 2006;33:1841-44. <sup>3</sup>Papaleontiou J Am Geriatr Soc 2010; 58:1353-69.

## Risk Associated With NSAID/Opioid Use

	Nonselective NSAIDs	Selective NSAIDs	Topical NSAIDs	Opioids
Renal				
–Acute kidney injury	$\uparrow \uparrow \uparrow$	$\uparrow \uparrow$	NR	-
–CKD progression	$\uparrow \uparrow \uparrow$	$\uparrow\uparrow$	NR	—
Cardiovascular				
–Stroke	$\uparrow \uparrow$	$\uparrow \uparrow \uparrow$	NR	—
-MI	$\uparrow \uparrow$	$\uparrow \uparrow$	NR	$\uparrow$
-Congestive hearthailure	$\uparrow \uparrow$	1	NR	1
–BP increase	$\uparrow \uparrow$	$\uparrow\uparrow$	NR	_

O'Neill et a . A J Geriatr Pharmacother 2012;10:331-42. Solomon et al. Arch Intern Med 2010;170:1968-78. Makris et al. J Rheumatol 2010;37:1236-43.

## Risks Associated With NSAID/Opioid Use

	Nonselective NSAIDs	Selective NSAIDs	Topical NSAIDs	Opioids
Falls/fractures	-	_	NR	$\uparrow \uparrow \uparrow$
GI				
–Ulceration/bleed	$\uparrow \uparrow \uparrow$	1	NR	-
–Dyspepsia	$\uparrow \uparrow \uparrow$	$\uparrow$	$\uparrow$	_
Hospitalization	$\uparrow \uparrow$	$\uparrow \uparrow$	NR	$\uparrow \uparrow \uparrow$

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## Guideline Recommendations Regarding Oral NSAIDs

EULAR 2003	AGS	ACR	BPS/BGS	OARSI
	2009	2012	2013	2014
Consider for use in those failing acetaminophen; if GI risk present use gastro-protective agent or selective NSAID	Nonselective & selective NSAIDs should be considered rarely and with extreme caution in highly selected individuals	Conditionally recommend use for hip & knee OA	Use with caution at lowest dose possible for shortest duration possible	Appropriate in those without comorbidities Inappropriate in those with high comorbidity

EULAR = European Union League Against Rheumatism; AGS = American Geriatrics Society, ACR = American College of Rheumatology; BPS/BGS = British Pain Society/British Geriatrics Society; OARSI = OA Research Society International

## Guideline Recommendations Regarding Topical NSAIDs

EULAR 2003	AGS	ACR	BPS/BGS	OARSI
	2009	2012	2013	2014
Have clinical efficacy and are safe	All patients with localized nonneuropathic pain may be candidates	Conditionally recommend for those with knee OA	May provide alternative to oral NSAIDs, particularly if pain is localized	Appropriate for those with knee OA; uncertain for those with multi-joint OA

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#### Adjuvant Analgesic Drugs

- All patients with neuropathic pain are candidates for adjuvant analgesics (strong quality of evidence, strong recommendations)
- Patients with fibromyalgia are candidates for a trial of approved adjuvant analgesics (moderate quality of evidence, strong recommendation)
- Patients with other types of refractory persistent pain may be candidates for certain adjuvant analgesics (e.g., back pain, headache, diffuse bone pain, temporomandibular disorder) (low quality of evidence, weak recommendation)





#### Adjuvant Analgesic Drugs

- Tertiary tricyclic antidepressants (amitriptyline, imipramine, doxepin) should be avoided because of higher risk for adverse effects (e.g., anticholinergic effects, cognitive impairment) (moderate quality of evidence, strong recommendation).
- Agents may be used alone, but often the effects are enhanced when used in combination with other pain analgesics and nondrug strategies (moderate quality of evidence, strong recommendation)





#### Adjuvant Analgesic Drugs

- Therapy should begin with the lowest possible dose and increase slowly based and increase slowly based on response and side effects and side effects, with the caveat that some agents have a delayed onset of action and therapeutic benefits are slow to develop. For example, gabapentin may require 2 to 3 weeks for onset of efficacy (moderate quality of evidence, strong recommendation)
- An adequate therapeutic trial should be conducted before discontinuation of a seemingly ineffective treatment (weak quality of evidence, strong recommendation)

#### Other Drugs

- Long-term systemic corticosteroids should be reserved for patients with pain-associated inflammatory disorders or metastatic bone pain.
  Osteoarthritis should not be considered an inflammatory disorder (moderate quality of evidence, strong recommendation)
- All patients with localized neuropathic pain are candidates for topical lidocaine (moderate quality of evidence, strong recommendation)

#### Other Drugs

- Patients with localized nonneuropathic pain may be candidates for topical lidocaine (low quality of evidence, weak recommendation)
- All patients with other localized nonneuropathic persistent pain may be candidates for topical NSAIDs (moderated quality of evidence, weak recommendation)
- Other topical agents, including capsaicin or menthol may be considered for regional pain syndromes (moderate quality of evidence, weak recommendation)

#### Other Drugs

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 Many other agents for specific pain syndromes may require caution in older persons and merit further research(e,g., glucosamine, chondroitin, cannabinoids, botulinum toxin, alpha-2 adrenergic agonists, calcitonin, vitamin D bisphosphonates, ketamine) (low quality of evidence, weak recommendation)



# Quality Indicators for Pain Management in Vulnerable Elders

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JAGS 55:S403-S408, 2007





#### **Screening for Persistent Pain**

- IF a vulnerable elder (VE) presents for an initial evaluation, THEN a quantitative and qualitative assessment for persistent pain should be documented (if cognitively impaired, a standardized pain scale, behavioral assessment of proxy report of pain should be used);and
- ALL VE's should be screened for persistent pain annually; BECAUSE pain is common and under diagnosed in older patients, and routine assessment will result in better detection and treatment and less pain.

#### Cancer Pain

- IF a VE presents for a cancer-related physician visit, including visits for chemotherapy or radiation, THEN pain should be assessed, BECAUSE pain is common and underreported in patients with cancer, and identification of pain will result in the initiation of treatment and improvement of patient outcomes
- IF an outpatient VE with cancer presents with severe pain (score>5 on a 0-10 scale or similar quantifiable measurement), THEN an adjustment of pain treatment should occur, BECAUSE this will reduce pain



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• IF a hospitalized VE has a new complaint of moderate to severe pain, THEN the medical record should indicated that an intervention and follow-up assessment of the pain occurred within 4 hours, BECAUSE pain is often undertreated, and if follow-up is not provided, then therapeutic interventions to relieve pain cannot be modified appropriately.





#### **Education for Persistent Pain**

• IF a VE is new to a primary care practice and has persistent pain, THEN there should be documentation of patient education within 6 months that explains the likely cause of symptoms, and how to use medication or other therapies, BECAUSE a patient education program can significantly alleviate symptoms and improve compliance.

#### Preventing Constipation with Opioids

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 IF a VE with persistent pain is treated with opioids, THEN one of the following should be prescribed or noted: stool softener, laxative, increase fiber, stool-softening foods, or documentation of the potential for constipation or why bowel treatment is not needed, BECAUSE opiated analgesics cause constipation that may cause severe discomfort and may contribute to inadequate pain treatment because patients may then minimize medication use



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• IF a VE on a new opioid therapy for persistent pain, THEN efficacy and side effects should be assessed within 1 month, BECAUSE patients who require opioids have severe pain that requires reassessment, and the incidence of side effects from opioids is greater in VES.

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Outcomes Associated with Opioid Use in the Treatment of Chronic Noncancer Pain in Older Adults: A Systematic Review and Meta-Analysis

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- Of the 4 studies reporting abuse or misuse outcomes retained in the sample, one reported a prevalence rate of 3% whereas 3 found that older age was negatively associated with abuse and misuse behaviors. These results contrast with the higher prevalence of aberrant opioid medicationtaking behaviors (range 5-24%) reported in one review of nonelderly patients with chronic back pain
- Most studies were short term and a sizable majority excluded persons with a history of substance abuse, which is a recognized risk factor for opioid abuse.

#### Adverse Events

• Three studies assessed for possible age effects regarding adverse events. In one study, older patients were more likely than those younger than 65 to report constipation and anorexia. In a second study, older patients receiving opioid therapy reported higher rates of somnolence and vomiting. In the third study, complaints of somnolence in patients aged 65 and older were greater than those younger than 65.



### Efficacy Oucomes

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• Six studies assessed for age effects. All six studies reported that analgesic efficacy was independent of age and documented significant pain reductions in older (>65) and younger (<65) study patients.

## **Adherence Monitoring**

- Assess risk factors for opioid addiction
- Monthly physician visits
- Pill counts
- Required use of one pharmacy
- Home health to better supervise patient in home setting
- Documentation of pain-related outcomes
- Discussed risks of higher dose opioids
- Urine toxicology screening

Chou et al. Opioid treatment guidelines: Clinical guidelines for the use of chronic opioid therapy in chronic non-cancer pain. *The Journal of Pain* 2009; 10(2)

#### **Addiction Risk Factors**

- Personal or family history of alcohol and/or drug abuse
- Young age (16-45)
- History of preadolescent sexual abuse
- Psychological/psychiatric disease
  - ADD or OCD
  - Bipolar disorder or depression
  - Schizophrenia

#### Adherence Plan

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- Urine toxicology screening

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