

# Making OTC Analgesic Recommendations for Elderly Patients

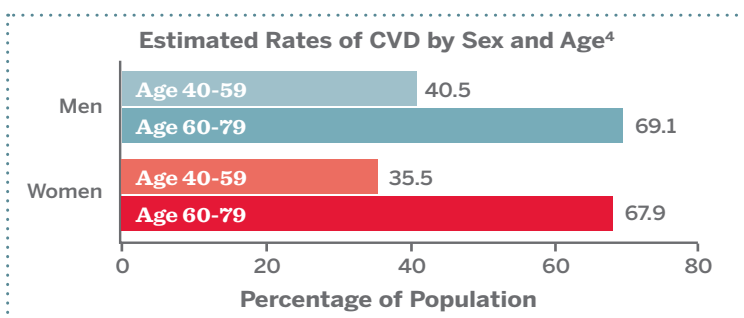
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## Pain Considerations for Elderly Patients

Elderly patients ( $\geq 65$  years of age) often experience persistent pain, which is typically associated with musculoskeletal disorders such as arthritis.<sup>1,2</sup> Over-the-counter (OTC) analgesics may help provide pain relief. However, when making OTC analgesic recommendations, healthcare providers (HCPs) must remember that elderly patients with pain should be evaluated as a unique population.<sup>1,2</sup> As patients age, their pathophysiologic profile changes; for example, elderly patients are more likely to experience a decline in organ function, particularly of the kidneys and liver, affecting a medication's pharmacokinetic properties.<sup>2</sup> The American Geriatric Society recommends acetaminophen as first-line treatment for pain in elderly patients.<sup>1</sup>

## Coexisting Medical Conditions in Elderly Patients

When HCPs make OTC analgesic recommendations, they must consider conditions that are more prevalent in elderly patients, including cardiovascular disease (CVD; see figure below) and gastrointestinal (GI) conditions.<sup>1</sup> Cardiovascular risks, such as coronary artery disease and hypertension, can be escalated by the use of nonsteroidal anti-inflammatory drugs (NSAIDs).<sup>3</sup>



In patients over 60 years of age, the risk of acute renal failure increases with NSAID use, particularly if they have diabetes.<sup>5,6</sup> In patients predisposed to GI complications, NSAID-associated GI toxicity increases in frequency and severity with age.<sup>7</sup> Additionally, the risk of GI bleeding increases with the use of multiple NSAIDs, such as ibuprofen, aspirin, and naproxen.<sup>1,7</sup>

## Concomitant Medication Use by Elderly Patients

Elderly patients frequently take multiple medications, and HCPs should be aware of interactions with certain OTC analgesics.

In some cases, drug-drug interactions may increase the risk of adverse events, such as cardiovascular complications, GI bleeding,

and hepatic damage (see table below). Additionally, patients on low-dose aspirin heart therapy may experience decreased benefit if they take ibuprofen, which may compete with aspirin to occupy platelet cyclooxygenase type 1 receptors, compromising the cardioprotective benefit of aspirin.<sup>8,9</sup>

### Drug-Drug Interaction

### Adverse Event

• Ibuprofen and low-dose aspirin<sup>10</sup>

May inhibit the cardioprotective benefit of aspirin

• NSAIDs and low-dose aspirin<sup>11</sup>  
• NSAIDs and anticoagulants<sup>11</sup>  
• NSAIDs and steroids<sup>12</sup>  
• Multiple NSAIDs<sup>13</sup>

May increase the risk of GI bleeding

• Multiple acetaminophen-containing products<sup>14</sup>

May increase the hepatic risk

## Educating Elderly Patients About OTC Analgesics

HCPs need to tailor education to meet the needs of elderly patients. Patients should be educated on the maximum daily dose of their OTC analgesic. HCPs should help ensure that patients understand how to read medication labels to identify ingredients in all products in which they appear. To help communicate effectively with elderly patients, HCPs should avoid language that may be perceived as patronizing (“elderspeak”) and should use visual aids, such as pictures and diagrams, to help clarify and reinforce comprehension of key points.<sup>15</sup>

Patients may not mention all of the medications they are taking. To help address this problem, HCPs should consider having patients bring a bag containing **all of the health products** they are using—including supplements, OTC and prescription medications, and “natural” and homeopathic preparations—so that they can be examined and discussed.

## Conclusions

When making OTC analgesic recommendations for elderly patients, HCPs need to consider coexisting medical conditions and concomitant medications. To help ensure safe use of OTC analgesics by elderly patients, HCPs should explain why they selected a particular OTC analgesic and educate patients on how to read medication labels and properly use the products.

Visit **GetReliefResponsiblyProfessional.com** for a variety of tools to assist HCPs in educating their patients.

**References:** 1. American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons. *J Am Geriatr Soc*. 2009;57(8):1331-1346. 2. Taylor R Jr, et al. *Curr Gerontol Geriatr Res*. 2012;2012:196159. 3. Bavyr AA, et al. *Am J Med*. 2011;124(7):614-620. 4. Mozaffarian D, et al. *Circulation*. 2015;131(4):e29-e322. 5. Tsai HJ, et al. *Diabet Med*. 2015;32(3):382-390. 6. Bush TM, et al. *West J Med*. 1991;155(1):39-42. 7. American College of Gastroenterology. Ulcers and gastrointestinal bleeding: protecting your health: what you should know about the safe and appropriate use of common pain medications. <http://s3.gi.org/patients/pdfs/ulcerprotect.pdf>. Accessed January 28, 2015. 8. Catella-Lawson F, et al. *N Engl J Med*. 2001;345(25):1809-1817. 9. MacDonald TM, et al. *Lancet*. 2003;361(9357):573-574. 10. US Food and Drug Administration. Concomitant use of ibuprofen and aspirin: potential for attenuation of the anti-platelet effect of aspirin [science paper]. <http://www.fda.gov/downloads/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM161282.pdf>. September 8, 2006. Accessed April 18, 2016. 11. Bhatt DL, et al. *Circulation*. 2008;118(18):1894-1909. 12. García Rodríguez LA, et al. *Arthritis Res*. 2001;3(2):98-101. 13. Clinard F, et al. *Eur J Clin Pharmacol*. 2004;60(4):279-283. 14. US Food and Drug Administration. Acetaminophen overdose and liver injury—background and options for reducing injury. <http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/DrugSafetyandRiskManagementAdvisoryCommittee/UCM164897.pdf>. 2009. Accessed August 21, 2014. 15. The Gerontological Society of America. Communicating with older adults: an evidence-based review of what really works. [http://aging.arizona.edu/sites/aging/files/activity\\_1\\_reading\\_1.pdf](http://aging.arizona.edu/sites/aging/files/activity_1_reading_1.pdf). 2012. Accessed June 15, 2016.