

CONNECT PROTECT²

NSAIDs and GI Risks

Non-steroidal anti-inflammatory drugs, or NSAIDs, are among the most widely used drugs in the world. Every day, more than 30 million Americans use NSAIDs for pain from headaches, arthritis, and other conditions.¹ In the United States, approximately five billion dollars are spent annually on prescription NSAIDs and an additional two billion dollars are spent on over-the-counter NSAIDs.²

NSAIDs work by blocking cyclooxygenase (COX) enzymes and inhibiting the synthesis of prostaglandins throughout the body which cause inflammation and pain. However, the non-selective inhibition of COX enzymes and subsequent inhibition of systemic prostaglandin synthesis leads to an impairment of the mucosa of the stomach and upper gastrointestinal (GI) tract. Impaired mucosa creates susceptibility to serious GI complications such as bleeding, ulceration and perforation, often without warning to the patient.^{3,4}

There are a number of factors that may increase a patient's risk for NSAID-associated GI ulcers and their complications. Risk factors include age, history of GI complication, concomitant corticosteroids or anticoagulants, cardiovascular disease, use of multiple NSAIDs, chronic use of NSAIDs and high-dose NSAIDs.⁵ Patients taking low-dose aspirin for cardiovascular protection in addition to another NSAID have a two- to four-fold increased risk of gastrointestinal bleeding - a major and potentially life-threatening complication - compared with those not taking these medications.⁶

By the Numbers – Impact of NSAID-associated GI side effects:

- An estimated 60 million Americans use NSAIDs regularly
- It is estimated that more than 60 million Americans use NSAIDs regularly, resulting in clinically significant upper GI events in one to two percent of users.⁷
- Over 80 percent of patients with serious GI complications have no prior symptoms or warning signals.⁸
- It is estimated that GI hemorrhages due to NSAID use account for approximately 60,000-120,000 hospital admissions annually.⁹
- Though difficult to quantify, available reports suggest that deaths from NSAID-related GI events vary from 3,200 to more than 16,500 per year in the United States^{10,11}
- Annual direct costs associated with NSAID toxicities are estimated at over two billion dollars.¹²

For people with arthritis, the risks are greater:

- More than 14 million arthritis patients consume NSAIDs regularly and up to 60 percent will develop NSAID-associated GI side effects.¹³
- More than 10 percent of arthritis patients will stop taking recommended NSAID medications because of troublesome GI symptoms.¹⁴

Individuals taking NSAIDs can avoid the dangerous risks of GI complications by learning how to manage the risks.

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