

## **Common Gastrointestinal Problems**

*A Consumer Health Guide*

### **Common GI Problems in Women: The Dangers of Aspirin & NSAIDs**

#### **What should I know about Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)?**

The second major cause for ulcers is irritation of the stomach arising from regular use of non-steroidal anti-inflammatory drugs, or NSAIDs. NSAIDs are available over-the-counter (OTC) and by prescription.

If you are taking over-the-counter pain medications on a regular basis, you will want to talk with your physician about the potential for ulcers and other GI side effects. NSAID-induced gastrointestinal side effects can be reduced by using alternative therapy. Your doctor may recommend that you change the medication you are using; or add some other medication in conjunction with your pain medication.

#### **What are the Complications of Ulcers?**

*Bleeding:* Internal bleeding in the stomach or the duodenum.

*Perforation:* When ulcers are left untreated, digestive juices and stomach acid can literally eat a hole in the intestinal lining, a serious medical problem that requires hospitalization, and often surgery.

*Obstruction:* Swelling and scarring from an ulcer may close the outlet of the stomach, preventing food to pass and causing vomiting and weight loss.

#### **How are Ulcers Diagnosed?**

The two tests most commonly used to evaluate for ulcer are an X-ray known as an Upper GI Series or UGI, and a procedure called an Endoscopy or EGD.

*Endoscopy:* This test involves insertion of a small lighted flexible tube through the mouth into the esophagus, stomach, and small intestine (duodenum) to examine for abnormalities and remove small tissue samples (biopsy). The test is usually performed using medicines to temporarily sedate you.

*Upper GI Series:* Alternately, there is an X-ray test where you are given a chalky material (barium) to drink while X-rays are taken to outline the anatomy of the upper digestive tract.

#### **NSAIDs — Issues that May Arise with Regular Use of NSAIDs**

At one time aspirin was virtually the only non-prescription pain reliever available. It has always had excellent pain relief benefits, but it was also recognized that, when used regularly, it could cause digestive problems for some patients. Some modified versions of aspirin came onto the market in an effort to achieve the benefits of aspirin while “buffering” the prospect for stomach discomfort. Acetaminophen achieves similar benefits of pain relief, with minimal, if any, impact on the stomach lining.

New NSAID medications became available in prescription form that also offered excellent pain relief, but like aspirin, these new prescription medications also had the potential to promote the development of ulcers and bleeding in the GI tract. Since they were being administered under a doctor’s prescription, any such effects could be monitored.

NSAIDs became more popular as prescription remedies, and the FDA has approved several for sale to consumers without a prescription. A partial list of NSAIDs that are available over-the-counter and recommended maximum daily doses is below.

#### **Some Health Benefits Associated with Aspirin and NSAIDs**

The main benefit recognized early on for aspirin was the relief of pain and the reduction in fever. Other important health benefits from aspirin have also come to be recognized. One of the more important of these is the use of aspirin in helping to prevent heart attack and perhaps stroke. The benefit stems from aspirin’s role as a platelet inhibitor. Studies have shown that these benefits can be obtained with a relatively small daily dose of aspirin. NSAIDs were found to have an additional benefit of reducing inflammation, and so helped alleviate not only the symptom of pain, but also served to reduce the actual cause of the pain, for example, reducing joint inflammation in arthritis.

# What Everyone Should Know About Aspirin & NSAIDs

## Balancing Pain Relief and Concerns with Side Effects

Adverse side effects can accompany the benefits in a portion of patients taking any medication. No drugs escape the need for this kind of risk-benefit evaluation. It has become necessary to balance the benefits of analgesia, platelet inhibition, and anti-inflammatory effect from NSAIDs and aspirin against potential adverse effects on the stomach and digestive system. For patients who are dependent on regular use of pain relievers, this can mean determining whether there are alternate ways to achieve pain relief, without risking ulcers or GI bleeding which may accompany regular use of aspirin and NSAIDs.

In this regard, aspirin and NSAIDs have been found to cause damage to the lining (or mucosa) of the digestive tract primarily in the stomach and upper intestine. This damage can result in an ulcer or intestinal bleeding. Although this can happen to an individual who is an infrequent user of aspirin or NSAIDs, it is of a much greater concern in frequent users, and those consuming higher dosages of these medications.

## Personal Medical History is Important

As with any other risk-benefit analysis, the determination of the risk associated with a particular patient's use of NSAIDs requires a careful look at the patient's medical history. Here are some key issues:

*Age:* Has been identified as a risk factor in several studies. Older patients also often require pain medications more often or in larger doses, further increasing their risk.

*Previous Ulcer:* A history of an ulcer or an ulcer complication have been identified in several studies as risk factors for complications due to aspirin or NSAIDs use.

*Alcohol:* Alcohol, taken alone can cause irritation of the GI tract. There have been some indications that patients who consume alcohol at the same time they are taking aspirin or NSAIDs have an increased risk of damage to the intestinal lining, including ulcers and GI bleeding. There have been some reports that chronic heavy alcohol users may be at increased risk of liver toxicity from excessive acetaminophen use. Individuals who consume large amounts of alcohol should not exceed recommended doses of acetaminophen. In 1993, FDA Advisory Committees recommended that all OTC pain relievers contain an alcohol warning—to date, some, but not all OTC pain relief products have complied with that recommendation.

Chronic heavy alcohol users should consult their physician for advice on when and how to take pain relievers.

*Steroids:* Patients taking NSAIDs who also are taking a prescription corticosteroid, medications like prednisone (in doses over 10 mg), have been found to have a seven fold increased risk of having GI bleeding.

*Anti-coagulants:* Similarly, patients who are taking NSAIDs at the same time they are taking oral prescription anti-coagulants (for example, medications like coumadin) have been found to have a 12-fold increased risk of bleeding.

## Magnitude of NSAID Use

Adverse effects associated with NSAIDs become more likely as the cumulative amount of NSAID increases, relating both to the size of each dose you take, as well as how frequently—how many times a day, how many days a week—you consume NSAIDs. The most important ground rule, however, is to follow the instructions on your medication. No medication—whether a prescription or over-the-counter drug—should be taken more frequently than is directed in the labeling.

Most NSAID ulcers heal easily if the NSAIDs are stopped. If the medication cannot be stopped, the dose may often be reduced. Even if your physician determines that continued administration of NSAIDs is needed, healing can still occur.

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**Asymptomatic Patients—Patients Can Have an Ulcer or GI Bleeding without any Obvious Symptoms**

An individual can develop damage to the intestinal lining without being aware of it—significant GI bleeding occurs frequently without any symptoms being present.

Of particular concern are patients with arthritic conditions. More than 14 million such patients consume NSAIDs regularly. Up to 60% will have gastrointestinal side effects related to these drugs and more than 10% will cease recommended medications because of troublesome gastrointestinal symptoms.

**Medications That May Be Taken to Inhibit or Reverse the NSAIDs-Induced Injury to the Intestinal Lining and GI Bleeding**

Conventional treatments for ulcers (classes of prescription ulcer drugs called H<sub>2</sub> blockers and proton pump inhibitors), have been found to have a beneficial effect in treating NSAID-induced ulcers and in preventing GI bleeding. These treatments often will be effective, particularly if NSAID use is stopped or reduced, although healing can occur in many cases where a patient receives these anti-ulcer medications, even when NSAID use continues.

Another medication, misoprostol, has been used effectively to prevent gastric and duodenal ulcers and has been shown to reduce the risk of bleeding in those that must continue using NSAIDs. As with all instances where patients are taking more than one prescription or over-the-counter medication, patients and their physicians need to evaluate any side effects, potential drug interactions, or other factors, for example limitations on use during pregnancy.

**What can you do if you are concerned about avoiding GI bleeding?**

If you are taking over-the-counter NSAIDs on a regular basis, you will want to talk with your physician about the potential for ulcers and other GI side effects. Most patients contact their family doctor, or primary care physician, when they experience GI problems. Many of these disorders, including *Helicobacter pylori* infection, can be treated readily by your primary care doctor. In the case of recurring or more serious problems, you may need to see a gastroenterologist, a physician who specializes in disorders and conditions of the gastrointestinal tract.

**Things to Remember about NSAIDs**

GI bleeding is an important, and potentially serious condition. It can arise initially with few if any symptoms. Ulcers can be promoted by the use of non-steroidal anti-inflammatory drugs, or NSAIDs. While some damage may occur with modest, short-term doses, problems are more likely to arise in regular NSAID users, and increase with the magnitude of use—more frequent use and/or higher dosages.

NSAIDs and aspirin have some very positive health benefits. Like all medications, care must be taken with their use. For example, they should not be taken with alcohol, as the combination can increase the risk of GI bleeding. Patients who need to use NSAIDs regularly should consult regularly with their physician to be alert for any potential GI effects. Since problems may arise with few, if any, symptoms, ongoing monitoring with your physician is important. If problems do arise, and are recognized early, there are a variety of ways to minimize or reverse any adverse effects, either by using alternatives to NSAIDs, or through your physician prescribing medications that can reduce any adverse effects.

## What Everyone Should Know About Aspirin & NSAIDs (cont.)

<b>Over-the-Counter NSAIDs</b>		
<b>OTC Brand Name</b>	<b>Generic Name</b>	<b>Dose</b>
Actron®	ketoprofen	1-6 pills/day, (up to 75 mg/day)
Advil®	ibuprofen	1-6 pills/day, (up to 1,200 mg/day)
Aleve®	naproxen sodium	1-3 pills/day*, (up to 660 mg/day)
Bayer®	aspirin	1-12 pills/day, (up to 4,000 mg/day)
Ecotrin®	aspirin	1-12 pills/day, (up to 4,000 mg/day)
Excedrin®	aspirin, acetaminophen, and caffeine	2-8 pills/day, (up to 2,000 mg/day aspirin, 2,000 mg/day acetaminophen, and 520 mg/day caffeine)
Motrin IB®	ibuprofen	1-6 pills/day, (up to 1,200 mg/day)
Nuprin®	ibuprofen	1-6 pills/day, (up to 1,200 mg/day)
Orudis KT®	ketoprofen	1-6 pills/day, (up to 75 mg/day)

\*2-pill limit for patients over age 65.

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