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Other Resources:

- Visit the Lupus Canada website for more lupus information, lupus fact sheets and local resources – www.lupuscanada.org
- The Arthritis Society – www.arthritis.ca
- Lupus Foundation of America – www.lupus.org

lupus  **FACT SHEET**

**NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDs)
AND COX-II INHIBITORS (COXIBs)**

NSAIDs are commonly used to treat the pain, swelling and inflammation of arthritis that occurs with systemic lupus erythematosus. They can also be used in combination with stronger anti-inflammatory and immunosuppressive drugs to treat serious inflammation of major organs. Consult your doctor before taking any NSAID. He or she will consider all the factors, including your medical history and other medications you are taking, that may influence the risks and benefits of taking an NSAID.

Types of NSAIDs

Patients with lupus along with their physicians can choose from several prescription or over-the-counter types of NSAIDs. Cox-II inhibitors (COXIBs) are a new chemical class of NSAIDs. Responses will vary from person to person as each medication has a different chemical formula. The action of each drug will vary depending on disease involvement and dose. NSAIDs are used primarily in pill form and taken by mouth. They can also be applied as creams or given in a suppository. Consider effectiveness, cost, side effects and ease of use when choosing an NSAID.

The action of NSAIDs

These medications work by blocking enzymes known as cyclo-oxygenase enzymes (COX). There are different types of COX enzymes. COX-I

enzymes produce prostaglandins that protect normal body organ functions, such as maintenance of a protective stomach lining and ensuring normal blood flow in the kidneys. COX-II enzymes produce the prostaglandins that accompany the immune response and inflammatory process. The prostaglandins produced by COX-II enzymes cause the pain, swelling and redness of inflammation. Traditional NSAIDs block COX-I and COX-II enzymes. The newer COXIBs primarily block COX-II enzymes.

The effects of taking an NSAID can sometimes be felt after a few hours or sometimes it may take several days

Old vs. new

ASA (Aspirin, or acetylsalicylic acid) is one of the oldest NSAIDs in use. Over the past two decades, several other types of NSAIDs have been introduced. Some of these can have undesirable gastrointestinal side effects due to their COX-I blocking effect. Examples of these medications are indomethacin, ibuprofen, naproxen and diclofenac. Today, in addition to the greater number of standard NSAID and dosing choices, the newer COXIBs may have less risk of gastrointestinal side effects. Some COXIBs have recently been withdrawn from the market because of an increased risk of cardiovascular events, such as heart attack and stroke. Researchers continue to study their safety and effectiveness.

What to expect

As all NSAIDs are chemically different, your doctor will advise you what dosage and how often to take each medication. NSAIDs should reduce pain and swelling associated with lupus arthritis. The effects of taking an NSAID can sometimes be felt after a few hours or sometimes it may take several days. If no positive effects are felt after several weeks, the drug may not be of much benefit. You should not take more than one type of NSAID at any time. NSAIDs and COXIBs are generally not combined.

Sometimes your doctor may recommend taking additional medications, such as acetaminophen or corticosteroids, to manage the pain associated with active inflammation. Always discuss additional medication use, including over-the-counter drugs and herbal medicines, with your doctor. He or she may recommend that you take NSAIDs only when your lupus arthritis is flaring and not take them when in remission. NSAIDs do not suppress the immune system and should not be used as the only treatment for severe lupus disease. People who have an allergy to sulfa drugs should not take the COXIB called Celebrex, (celecoxib). At this time, most rheumatologists are cautious about recommending certain NSAIDs and COXIBs, to those at high risk for cardiovascular events.

If you are a woman who is taking NSAIDs and considering pregnancy, check with your doctor before becoming pregnant or as soon as you know you are pregnant. Some NSAIDs may be safely continued if you are pregnant, so notify your physician.

Side effects

Common side effects associated with NSAIDs are stomach upset, bloating, stomach pain and heartburn. Sometimes, stomach irritation can lead to bleeding from ulcers in the gastrointestinal tract. The bleeding may be obvious – red blood passed from the bowel or through vomiting – or it may be slower and revealed through dark or black bowel movements. NSAIDs taken with corticosteroids

can sometimes mask the pain and discomfort of an inflamed and irritated stomach, so discuss with your doctor other symptoms to be aware of that might indicate you are experiencing stomach inflammation. Adding a stomach-protecting medication to your regime can also help prevent the stomach

from producing too much acid. Always take an NSAID with food. People who have had an ulcer in their stomach or bowel should avoid NSAIDs.

NSAIDs can affect kidney function, and nephritis (inflammation of the kidneys) is a common manifestation of lupus. An NSAID can aggravate kidney problems and therefore its use should be monitored closely, which could include regular urine tests to check kidney function. NSAIDs can also start or worsen existing high blood pressure, so you and your doctor will discuss how to obtain regular blood pressure measurements. Home blood pressure kits can be purchased in most retail pharmacies. It is important to know what your responsibilities will be regarding how often to measure your blood pressure and when to report high measurements to your doctor. Your doctor may also ask you to be alert to other physical signs

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and symptoms. Fluid retention is also another relatively common side effect of NSAIDs and COXIBs.

People with a history of congestive heart failure should avoid NSAIDs, as they can precipitate worsening of this condition. Abnormal liver tests have sometimes been reported, and your doctor may order liver monitoring blood tests after starting an NSAID.

Rarely, skin rashes or hives may appear. This may indicate an allergic reaction, and should be reported to your doctor right away. NSAIDs should not be used by people with asthma who experience increased wheezing or worsening of asthma symptoms.

Summary

NSAIDs are generally well tolerated by people with lupus. Remember to take them exactly as prescribed. Take NSAIDs with food to reduce some of the minor stomach side effects. More serious gastrointestinal bleeding side effects may be decreased with the use of a medication to protect the lining of the stomach.

Some NSAIDs may be safely continued if you are pregnant. Notify your doctor if you become pregnant while taking NSAIDs.

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Here are some helpful tips on how to manage and get the most from your NSAIDs:

- Try to take your medication at the same time each day, and try not to miss a dose
- Know more about which side effects are considered serious enough to require immediate medical attention
- Do not adjust dosages without the input of a physician and do not stop taking your medication because you are feeling better. Speak with your physician first
- Use a days-of-the-week pill container to organize all your medications. This will help you notice when you have missed a dose. Transfer your medications into a portable pillbox on a day when you're eating out or traveling.

Systemic Lupus Erythematosus is an autoimmune disease that affects thousands of Canadians, mostly women in their child-bearing years. Symptoms vary greatly from patient to patient and treatment is highly individualized. Patients are urged to contact their physician or health professional with any questions or concerns they might have. Opinions expressed on these fact sheets do not reflect those of Lupus Canada. To learn more about lupus, read the other fact sheets produced by Lupus Canada.

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