

## STUDY OF ARTHRITIS IN YOUR COMMUNITY

Arthritis Study Update

March 2004



Our interviewers (left to right): Shirley, Jack and Jean

**Many of you attended one of our community luncheons which were held in Woodstock and East York during the fall of 2003. We enjoyed meeting you. You had many questions for us. As promised, over the next few months we will address each of the many topics in our study newsletter. This month we will address an issue that is near and dear to everyone's heart - pain relievers.**

### **Pain Relievers: an overview**

Persistent joint pain that lasts six weeks or more without improving requires professional help. So the first thing to do is see your doctor, who can diagnose the reason for your pain, and whether you have symptoms of joint inflammation; if so, you'll be prescribed an anti-inflammatory medication. Your doctor will also prescribe medication for immediate pain relief. But let's be blunt: 'relief' doesn't mean a complete absence of pain; eliminating pain completely only masks its source, and you may be tempted to overuse the joint, causing real damage. The goal is to reduce your pain levels so that you can start moving again.

If you have inflammatory arthritis or are going through a periodic inflammatory phase of osteoarthritis, you'll need to be patient. It usually takes from two to four weeks at least before the anti-inflammatory medication starts relieving the real source of your pain: joint inflammation. For more severe forms of inflammatory arthritis, a disease-modifying drug may also be prescribed. Typically, these are slow-acting medications, taking anywhere from two to six months to achieve benefits.

The best approach to reducing pain will incorporate a number of different strategies: medication, of course, but also a variety of non-medicinal management techniques to provide safe and effective pain relief. You'll need to discover what works for you, dovetailing different approaches to prolong pain relief. Ask your doctor for a referral to other health professionals, such as a physiotherapist, who can devise an individual exercise program for you that will help to prevent muscle wastage and reduce pain by strengthening, and increasing the joint's range of motion. Another pain management specialist available on referral is an occupational therapist (OT). OTs can make or have custom splints and orthotic devices made to help keep affected joints properly aligned and protected from further injury. They're also an excellent resource for all kinds of other practical strategies for avoiding injury and reducing pain.

The three major pain relievers - acetaminophen (Tylenol, Panadol, Exdol, etc.), ASA (Aspirin, Entrophen, Anacin, Novasen, etc.) and ibuprofen (Advil, MotrinIB, etc.) - are all available without a prescription and are all about equally effective and

well tolerated - provided you're not already taking a prescription non-steroidal anti-inflammatory drug (NSAID) for your arthritis: ASA and ibuprofen are also classified as anti-inflammatory medications and should not be taken in addition to your prescription NSAID, because of a slightly higher risk of side effects. Acetaminophen has no anti-inflammatory properties and consequently has none of the common side effects of ASA or ibuprofen. Thus acetaminophen becomes the preferred choice, because it can be safely mixed with a prescription NSAID for increased pain relief or for headaches and fever.

### Acetaminophen

Acetaminophen is safe and effective but has its limits: You can take regular-strength tablets (325 mg each) every four hours to a maximum of 12 tablets in a 24-hour period, or extra-strength tablets (500 mg each) every six hours up to a maximum of eight tablets in a 24-hour period. If you find yourself repeatedly taking acetaminophen more frequently than recommended, be careful: A serious overdose can cause liver damage. Consult your doctor about a stronger pain medication.

Acetaminophen is also available in combination preparations, with codeine or muscle relaxants or both, for more pronounced pain relief. It's also found in many cold remedies to relieve fever and aches and pains. Typically, the acetaminophen content in one dose of these combination medications or cold remedies equals two regular-strength tablets (325 mg each) of acetaminophen. If you wish to take just acetaminophen later in the day, remember to keep track of your earlier acetaminophen intake via combination drugs or cold remedies so as not to exceed the limit of 4000 mg in 24 hours.

### ASA

Since it was first mass-produced in the late 19th century, ASA (Aspirin, Entrophen, Anacin, Novasen, etc.) has become one of the world's most widely used medications, known as a 'Miracle Drug' for its ability to swiftly relieve pain and lower fevers. Long-term research has shown that one regular-strength 325-mg ASA tablet taken every other day can also help

reduce the risk of heart disease by subtly altering the blood's clotting abilities.

At increased doses, ASA reveals its darker nature: Common side effects include nausea, vomiting, ringing in the ears and decreased hearing. With regular or prolonged use, there is high risk - particularly among seniors and people with a previous history of stomach troubles - of gastrointestinal (GI) bleeding and ulcers. Many ASA formulations made specifically for arthritis have buffers against hyperacidity or are coated so that they dissolve in the less-acidic environment of the intestinal tract. Still, virtually everyone taking ASA in high doses experiences minor blood loss through the bowel as a result of gastrointestinal irritation.

ASA isn't recommended when you have a viral infection, chicken pox or high fevers, because of the possibility of a rare complication that affects vital organs and the nervous system called Reyes syndrome. Children under 18 years of age appear to be at higher risk for this complication.

In spite of the risks, ASA is still prescribed for mild **osteoarthritis (OA)** pain. If you are taking a prescription non-steroidal anti-inflammatory drug (NSAID) for your arthritis, remember that ASA, because of its anti-inflammatory properties, is also classified as an NSAID. ASA shouldn't be taken in addition to your prescription NSAID because of a slightly higher risk of side effects. Under these circumstances, acetaminophen becomes the preferred choice, because it can be safely mixed with a prescription NSAID for increased pain relief or for headaches and fever.

ASA is also available in combination preparations, with codeine or muscle relaxants or both, for more pronounced pain relief, and it too is found in cold remedies. Typically, the ASA content in one dose of these combination medications or cold remedies equals two regular-strength tablets (325 mg each) of ASA. If you wish to

take just ASA later in the day, remember to keep track of your earlier ASA intake via combination drugs or cold remedies so as not to exceed the limit of 7800 mg in 24 hours.

### **Ibuprofen**

During the 1980s, ibuprofen was only available as prescription-strength Motrin (500 mg per tablet), one of an emerging class of NSAIDs. Of all the conventional prescription NSAIDs currently available, ibuprofen is one of the best-tolerated. As a result of its effectiveness and excellent safety profile, it has become available as a non-prescription pain reliever (200 mg per tablet) under such brand names as Advil, MotrinIB, etc. Manufacturers claim (and clinical research tends to support their claims) that ibuprofen is gentler on the GI tract than ASA and that you need to take fewer pills per day than either ASA or acetaminophen for the same pain relief.

Ibuprofen is also available in combination preparations, with codeine or muscle relaxants or both, for more pronounced pain relief, and cold remedies. Typically, the ibuprofen content in one dose of these combination medications or cold remedies equals two regular-strength tablets (200 mg each) of ibuprofen. If you wish to take just ibuprofen later in the day, remember to keep track of your earlier intake via combination drugs or cold remedies so as not to exceed the limit of 1600 mg in 24 hours.

### **Codeine Preparations**

Codeine affects the central nervous system, reducing sensitivity to pain. It's most often available in combination with 325 mg of acetaminophen and 32 mg of caffeine (Tylenol 1, 2 and 3, or Exdol-8, -15, 30 or Atasol-8, -15, -30). The codeine in these preparations (regardless of brand) ranges from 8 mg per tablet (nonprescription) to 15 and 30 mg per tablet (prescription needed). Codeine is a narcotic, but the biggest problem associated with daily use isn't physical addiction but constipation, because it slows down the digestive tract. Six to eight tall glasses of water throughout the day will

help alleviate constipation.

Many people are worried that taking a narcotic in any quantity could lead to physical addiction, but clinical research shows that those who take a narcotic at an appropriate dose for their level of pain are at very low risk of becoming addicted. Why? Addiction is fuelled by psychological cravings for the euphoric effects of certain narcotics, such as the opiates. Although codeine is a narcotic, when it's used solely for pain relief, it rarely produces the 'high' that drug users crave. If anything, codeine tends to make life seem a little dull and colourless. In fact, codeine is the weakest of all the narcotic agents and can be taken for relatively long periods of time without fear of addiction, particularly if you decrease your daily dose as your pain decreases over time.

If you still need convincing, ask yourself these questions: If you're not in pain and you don't take the codeine, do you still feel a need for it? Do you require rapidly increasing doses to control the same level of pain? Do you get 'high' when you take codeine? Chances are, you answered 'no' to all these questions. If so, relax. You're not addicted.

Finally, remember that pain medications with codeine only make the pain more bearable: they're pain-relievers, not disease-modifying medications. Make sure you seek treatment for the real source of the pain.

### **Creams and Gels**

There are a wide variety of topical creams and gels available that provide temporary pain relief, including a prescription cream made from the active ingredient in hot chili peppers.

Some creams contain the active ingredient in ASA, which is absorbed through your skin and should be factored into your total daily dose if you're taking ASA or ibuprofen in tablet form. Since it's difficult to calculate just how much ASA you've absorbed in a cream, try to avoid using a cream and tablets on the same day. And keep in mind that all such creams are for pain relief only; they aren't effective as anti-

inflammatories.

The majority of creams and gels are counter-irritants; they use heat or cold to distract you from your pain by amplifying the nerve signals received by your brain's pain centres.

Overwhelmed by the influx of chemical messages, your brain temporarily 'switches' them off, thus providing pain relief. Heat, which is usually recommended for muscle pain, promotes blood circulation, which nourishes and detoxifies muscle fibres. Cold, on the other hand, soothes excited nerve cells and reduces swelling in an inflamed joint by constricting blood flow.

Both heat and cold have a role to play in arthritis pain management, particularly as supplements to other pain-control strategies. A hot-water bottle wrapped in a towel or a damp towel warmed in a microwave oven are other effective methods of applying heat, but avoid heating pads, since the dry heat they supply can burn your skin. Mentholated, alcohol-based gels are an ideal solution when you're travelling, but for the real numbing effect of cold, they can't replace an icepack. Gel packs that can be frozen, or heated in a microwave oven or boiling water, are a versatile approach to pain relief.

Capsaicin, the alkaloid that gives chili peppers their fire, has also been recruited as a counterirritant. Capsaicin's qualifications as a counterirritant are obvious to anyone who's ever felt the numbing effects of a spicy pepper on bare skin. Prescription creams that consist of as little as 0.025 to 0.075% capsaicin (a tube of cream may contain as much pure capsaicin as hundreds of chili peppers) can generate a feeling of warmth on the skin, although the effect is muted enough that you can apply the treatment several times a day.

Capsaicin appears capable of reaching past surface pain to the molecular level by affecting Substance P (SP), a chemical that transmits pain impulses to the central nervous system. Several multicentre clinical trials of topically applied capsaicin have shown it to be an effective therapy for people suffering from the pain of arthritis, diabetes and herpes. According to this research, capsaicin first stimulates neurons to release SP, then prevents the neurons from producing more. Once depleted of their essential transmitter, the neurons can no longer relay pain signals.

source: [www.arthritis.ca](http://www.arthritis.ca)

## **RHEUMATOID ARTHRITIS**

**The Arthritis Society has recently produced a brochure outlining new advances for rheumatoid arthritis. This brochure is available free of charge from The Arthritis Society. Call them at 1-800-321-1433**

TO REACH US:

### **Study of Arthritis In Your Community**

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