

NSAIDS are making your joints worse!

Americans take drugs like Tylenol, Advil, Naprosyn and Aspirin everyday for relief of joint pain. These drugs called NSAIDS- non-steroidal anti-inflammatory drugs work by blocking the formation of inflammatory substances like prostaglandin E2, cyclooxygenase (COX2) and 5-lipoxygenase (5-LOX) and other inflammatory cytokines that the body creates in response to tissue irritation and trauma.

Short-term use of these drugs is safe, however major problems arise when one uses these medications long-term. Here are some of the very disturbing side effects of these medications when taken everyday.

NSAIDS cause:

- Gastro esophageal and Ulcerative bleeding and death killing 17000 Americans last year and hospitalizing thousands more.
- Kidney damage and increased rate of end stage renal disease
- Liver toxicity and liver failure
- Slower bone repair in fractures- potential worsening of osteoporosis
- Increased rate of joint destruction and joint deterioration

It is interesting to note that the very drugs that you are taking to ease your joint pain actually accelerate the rate that the joint deteriorates causing further pain. I never saw that information in the commercial!

NSAIDS interrupt the body's elaborate method of repairing and rebuilding the cartilage that lines and lubricates the joints. When this cartilage erodes joint pain can become severe and joint wear and tear accelerate.

The joint is an elaborate balancing act. A joint contains a capsule, which encloses the joint, and ligaments, which connect bones to bones. Joints also have tendons, which connect muscles to bones. Joints contain cartilage, which is a slippery substance that covers the ends of the bones and acts as a lubricant as the bones move over each other. Inside the joint capsule is a fluid called synovial fluid. The cartilage and fluid are always being replaced and restored.

The cartilage contains special substance called proteoglycans. Proteoglycans are manufactured continuously to replace area of the cartilage that is worn away during daily activity. There are also compounds like hyaluronic acid in the joint fluid that act as a shock absorber in the joint.

When the joint is working well then there is a balance between the rate of damage and the rate of repair. All joints wear down but the body's ability to repair the joint is the critical factor in determining how the joint will fare in the long run.

Poor joint mechanics and alignment often throws this balance off and joint destruction outpaces joint repair. The result is a degenerative joint condition called osteoarthritis, which is really a fancy word for wear and tear.

There is another factor to consider. Far too many people are resorting to using NSAIDS for management of their chronic joint pain. These drugs interfere with the production of proteoglycans and hyaluronic acid, which are the body's natural defense against joint destruction.

NSAIDS do relieve pain associated with osteoarthritis and degeneration, but NSAIDS actually cause the joint to degenerate and wear down faster by interfering with the production of the lubricating substances in the cartilage and synovial fluid.

There is hope!! Several years ago a study came out naming a peculiar substance that was as effective as NSAIDS in relieving joint pain. This compound didn't speed joint destruction. This substance actually relieved the joint pain by improving the rate of repair! No drug can do that. Vioxx, Celebrex and other expensive medications don't slow joint degeneration. In fact all NSAIDS increase joint wear and tear and don't slow the progression of arthritis, but this substance does.

The substance is a natural compound and caused no side effects in the participants taking it. I bet you didn't see this on the front page of your newspaper. Years ago people had never heard of it and most people couldn't even pronounce it. The compound is known as glucosamine sulfate. Glucosamine helps the body manufacture hyaluronic acid and proteoglycans, which protect the joint and rebuild cartilage.

Recent research has shown that glucosamine kicks NSAIDS in the pants on every study. No toxicity, better joint repair, and better joint mobility and function are the benefits of glucosamine supplementation.

Pharmaceutical companies are not happy about this situation because glucosamine is a natural substance so it can't be patented.

There are a few problems with glucosamine supplementation. The first is time; glucosamine doesn't work right away, taking an average of 3 months before measurable results can be noticed. The next issue is dosage; all studies used 1500mg per day. Many people who have not had success with glucosamine have not taken the prescribed dosage and have not taken it long enough to get the benefits.

I prescribe glucosamine to my patients, and I something a little different. I give instructions on loading dose, which is a heavy dose for two weeks of 3000-4000 mg per day then tapering off to 1500 mg. This results in faster relief and more rapid return of normal joint motion.

Some newer research shows that N-acetyl glucosamine, Niacinimide, and S-adenosylmethione (SAM-e) also show promise in enhancing joint repair and reducing joint inflammation. There are many natural products that reduce inflammation but only glucosamine is proven to slow joint degeneration.

For quick relief of inflammatory conditions I rely on herbs with potent anti-inflammatory effects such as:

- Tumeric
- Ginger
- Cats Claw
- Boswelia

Increasing ones intake of Omega 3 fats with fish oils decreases inflammation throughout the body. Gamma Linoleic acid, which is found in evening primrose oil and borage oil, also has potent anti-inflammatory effects. Taking digestive enzymes containing Bromelin helps in breaking down inflammatory proteins.

There is substantial evidence that diet creates systemic inflammatory conditions contributing to a number of disease processes. Anti-oxidant nutrients work to protect the body from damage by free radicals. Good anti-oxidant protection also has a protective effect in the joint from inflammatory compounds. A good healthy diet is critical to the body's ability to repair and rebuild itself. Many chronic conditions do in fact have nutritional components, so this should not be overlooked when assessing joint pain.

My prescription for joint pain is a three-step process:

1. Troublesome joints should be evaluated by someone who understands **joint mechanics** in order to determine if they are working properly.
2. Stop taking NSAIDS and start taking glucosamine 1500mg daily.
3. Address your nutritional needs. Take a good multivitamin; multimineral. Make sure you are getting adequate calcium, magnesium, and other minerals necessary for good bone health. Anti-oxidants also have anti-inflammatory effects. Supplement with fish oil and gamma linolenic acid to reduce inflammation in all body tissues.

Hopefully with this information you can conquer joint pain and resume the normal activities you enjoy.

Yours in health,

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