Dynamic Chiropractic

Recent Report Highlights Growing Dangers of Anti-Inflammatory Medications

James P. Meschino, DC, MS

In the Sept. 27, 2011 posting of the *Biomedical Central Journal: Family Practice*, R.J. Adams and colleagues commented on concerns raised by the common prescribing of nonsteroidal anti-inflammatory medications, particularly with respect to their important and sometimes fatal adverse side effects. They state, "Non-steroidal anti-inflammation drugs (NSAIDs) are one of the most common causes of reported serious adverse reactions to drugs, with those involving the upper gastrointestinal tract (GIT), the cardiovascular system and the kidneys being the most common. Much of the focus on NSAID adverse effects has been on GIT consequences, with good reason. A U.S. study found the rate of deaths from NSAID-related GIT adverse effects is higher than that found from cervical cancer, asthma or malignant melanoma."[1] They also point out that frequent use of NSAIDs increases risk for high blood pressure, chronic heart failure, as well as serious cardiovascular events (with certain NSAIDs).

Studies show that the risk of suffering these adverse side effects is increasing among the elderly and those with co-morbidities. The researchers cite recent evidence suggesting that the burden of illness resulting from NSAID-related chronic heart failure may exceed that resulting from GIT damage.[1]

Adams, et al., also cite evidence from a recent Danish population study, which suggests increased cardiovascular mortality among people without a prior history of heart disease, but who frequently use NSAIDs. This seems to be particularly true for diclofenac and ibuprofen. However, the baseline cardiovascular risk of people in this study was not reported. The researchers also note that NSAIDs promote the rapid deterioration of renal function. As such, national medical guidelines recommend avoidance of nephrotoxic drugs, including NSAIDs, in people with chronic kidney disease.[1]

Acetaminophen

It's not only NSAID medications, such as drugs containing aspirin, ibuprofen, indomethacin, diclofenac, COX-2 inhibitors, that raise concerns regarding frequent and significant side effects, but also for acetaminophen-containing medications. The National Kidney & Urologic Diseases Information Clearinghouse (a service of the National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health) posted the following precautionary notes about acetaminophen on its Web site:

"Kidney Disease From Acetaminophen and NSAIDs - A form of kidney damage, called analgesic nephropathy, can result from taking painkillers every day for several years. Analgesic nephropathy is a chronic kidney disease that over years gradually leads to irreversible kidney failure and the permanent need for dialysis or a kidney transplant to restore kidney function. Researchers estimate that four out of 100,000 people will develop analgesic nephropathy. It is most common in women over 30.[2]

A review article in *Life Extension* provides scientific references outlining the dangers of acetaminophen use over long periods. The authors state, "Acetaminophen is a leading cause of liver failure in the Western world and the leading cause of drug-induced liver failure in the United States (Bartlett D, 2004). People who have liver disorders or who consume large amounts of alcohol are advised to avoid acetaminophen, which can damage both the kidneys and the liver, even at therapeutic doses (Bromer MQ, et al., 2003). People who use acetaminophen on a regular basis double their risk of kidney cancer (Kaye JA, et al., 2001; Gago-Dominguez M, et al., 1999; Derby LE, et al., 1996). Most cases of acetaminophen poisoning occur because people take smaller doses over a long period of time. In this setting, doses of 4000 mg daily can be toxic."[3]

Drugs for Autoimmune Patients

Many people with autoimmune diseases also have inflammation of joints and other tissues. Some novel medications have been developed to inhibit the overstimulation of tumor necrosis factor (TNF) on target tissues in these cases, as well as anti-metabolite medications, such methotrexate and purine inhibitors, which decrease proliferation of the immune cells involved in the inflammatory and hyperproliferative signalling cascade.

The potential side effects of TNF-inhibitors such as infliximab (Remicade), adalimumab (Humira), certolizumab pegol (Cimzia), or etanercept (Enbrel), include lymphoma, infections, congestive heart failure, demyelinating disease, a lupus-like syndrome, induction of auto-antibodies, injection-site reactions, systemic side effects and opportunistic infections.[4] The most common side effects of methotrexate include acne, chills and fever, dizziness, flushing, general body discomfort, hair loss, headache, infertility, irregular periods, itching, loss of appetite, lowered resistance to infection, miscarriage, nausea, sensitivity to sunlight, sore throat, speech impairment, stomach pain, swelling of the breast, unusual tiredness, vaginal discharge, and vomiting.[5]

Common side effects of purine-synthesis inhibitors include increased risk of infection, nausea, fatigue, hair loss, and rash. Azothioprine has been listed as a human carcinogen by the U.S. Department of Health and Human Services in its 11th *Report on Carcinogens*.[6]

Corticosteroids (e.g., Prednisone)

Long-term use of corticosteroid drugs, such as prednisone and dethamexasome, are known to cause weight gain – with redistribution of body fat to the upper back and neck (Buffalo hump), glucose intolerance, hypertension, increased susceptibility to infections and cancer from immune suppression, osteoporosis from demineralization, easy bruising, mood swings, insomnia, depression upon withdrawal, avascular necrosis of bone, abdominal striae, cataracts and acne.[7]

Realistic Options

It's not realistic to eliminate all anti-inflammatory drugs from the market due to the risk of serious adverse side effects. In some cases, these drugs are life-saving (e.g., acute flare-ups of lupus and other autoimmune diseases), or have been shown to improve the management of various inflammatory conditions and improve quality of life for certain patients when no other forms of therapy or treatment have been useful. However, there are a number of dietary and supplementation practices that should also be implemented in these cases. (I have described these practices in detail in "Nutrition and

Supplementation Management in Autoimmune Diseases," "The Clinical Use of Natural Anti-inflammatory Herbs and Supplements" and "The Research Status of Glucosamine Sulfate.")

The problem is that most medical doctors fail to teach patients who suffer from joint inflammatory diseases how important it is for them to follow an anti-inflammatory diet and to use natural supplements that have proven anti-inflammatory and analgesic effects to help manage their condition (as well as the use of glucosamine sulfate to support joint cartilage in osteoarthritis and cartilage injury management). These dietary practices and ingestion of anti-inflammatory and cartilage-supporting supplements can be taken concurrently with anti-inflammatory, analgesic and autoimmune medications. Their inclusion in the comprehensive management of these conditions can reduce the patient's need and dependency on synthetic medications, and thus reduce the risk of significant side effects over the patient's lifetime.

The responsibility to educate patients on this subject often falls to doctors of chiropractic and other evidence-based holistic practitioners. Chiropractors are aware that many patients with inflammatory joint conditions respond well to chiropractic care, in addition to exercise and various ancillary modalities. Educating patients on the value of an anti-inflammatory diet and anti-inflammatory supplements as part of the scope of management of these cases can further help to reduce the patient's dependency on NSAIDs and other anti-inflammatory, analgesic and autoimmune medications. These measures are an important step in reducing the patient's risk of serious drug-related adverse side effects and organ damage over their lifetime.

References

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