

## Risks Associated with NSAIDs and Acetaminophen

Many of us have seen the leading news stories over the past several weeks with regard to the risk of injury from the use of Nonsteroidal Anti-inflammatory Drugs (NSAIDs) and Acetaminophen. The FDA is seriously considering the removal of narcotics such as Percocet (which contains acetaminophen) from the market, not because of the addiction considerations, but because of the acetaminophen overdoses (and resulting liver damage) when used with over the counter Acetaminophen containing products such as Tylenol. We all remember several years ago when Vioxx and Bextra (Rofecoxib) were identified as causing strokes and heart attacks in otherwise healthy patients. In a recent article in the American Journal of Clinical Chiropractic, Dr. Daniel Murphy reviewed this topic. I have summarized the points below.

Acetaminophen is found in more than 100 OTC preparations. Acetaminophen is used to reduce pain and fever. It has been available in the United States since 1960. Unlike NSAIDs, acetaminophen does not reduce inflammation or blood clotting or cause gastric complications. Nevertheless, acetaminophen overdose is one the most common causes of OTC drug poisoning in the United States and Britain. More than 30,000 cases per year of acetaminophen overdose are reported to the American Association of Poison Control Centers. It is a leading cause of liver failure in the Western world and the leading cause of drug-induced liver failure in the United States. 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. People who use acetaminophen on a regular basis double their risk of kidney cancer.

NSAIDs are common medications used to reduce pain and inflammation. They are available as both OTC medications and prescription drugs. Regular use of NSAIDs increases the risk of kidney disorders. NSAIDs damage tissue in the gastrointestinal tract, inhibit the function of platelets (blood cells that aid in coagulation and homeostasis), and alter kidney function. The mortality rate from NSAID-related gastrointestinal toxicity, including toxicity from prescription NSAIDs, is 0.2 percent per year. The widespread intake of NSAIDs results in approximately **107,000 hospitalizations annually** for gastrointestinal complications and **16,500 deaths** for arthritis patients. Celebrex, a prescription COX-2 inhibitor, is used by more than 3.7 million Americans.

A study published in 2009 by Vaithianathan titled **Idrogenic Effects of COX-2 Inhibitors in US Population Drug Safety** offered some enlightening and worrisome information. In a 4 year period from 1999-2004 these were some of the observations in the study.

- **There were 46,783 myocardial infarctions, 21,832 strokes, 100,842 excess GI hemorrhages.**
- **Traditional NSAIDs were associated with an excess of 87,327 GI hemorrhages.**
- **COX-2 inhibitors resulted in 26,603 deaths.**
- **Traditional NSAIDs resulted in 9,606 deaths.**
- **Rofecoxib (Vioxx) was identified as the 14<sup>th</sup> most commonly implicated drug in causing death from 1998-2005.**
- **In this same period, Celebrex was in 10<sup>th</sup> place for causing disability or other serious outcome.**

It's quite obvious why this is important for you, your family and your clients. From my perspective, it helps to demonstrate the relative risks associated with medication use by your clients as compared to the risks associated with chiropractic care. Over the past several years, we have seen some very well organized anti-chiropractic propaganda in the local media. An extremely well funded group has decided to scare our patients and your clients away from receiving chiropractic care in fear of suffering a stroke. In previous newsletters, I cited the literature demonstrating that the risk of a cerebrovascular event from a chiropractic manipulation to be as low as 1 in 6 million, comparable to the incidence of stroke in the general population. Compare that to the deaths and disability from NSAIDs and you find that one is far more likely to suffer serious injury or death from an over-the-counter pill than from having many thousands of chiropractic treatments. The next time a client questions the safety of the chiropractic treatment tell them that should be the least of their worries!