Common pain-relievers linked to heart risk

By ACSH Staff — May 30, 2013

Nonsteroidal anti-inflammatory drugs (there’s a mouthful for you, but let’s call them NSAIDs or nsaids for short) are the most commonly used class of drugs in the world. They act as anti-inflammatory agents, but in the real world they are used as pain relievers for people with a variety of conditions, ranging from active inflammatory diseases such as rheumatoid arthritis, to simple joint pains, headaches and muscle aches. Some of the best-known are ibuprofen, naproxen/aleve, diclofenac/voltaren, and the coxibs type such as Celebrex.

In the current Lancet, a huge meta-analysis [2] comprising the authors evaluations of 280 trials comparing NSAIDs to placebo (over 124,000 subjects), and 474 trials comparing individual NSAIDs to others of the class (almost 230,000 subjects) undertook to discern the cardiovascular disease (CVD) risks associated with the various drugs. The study was led by Prof. Colin Baigent of the University of Oxford, UK.

The disconcerting news is that all of the studied drugs except naproxen were linked to significant increases in CVD events: heart attacks, strokes, sudden death (likely of cardiac origin), and heart failure. (Gastrointestinal events were also tabulated, including bleeding, perforation or obstruction). The increased risks ranged from about one-third to more than double; the worst offenders were Celebrex and diclofenac (aka Voltaren, which is the most common painkiller worldwide, but little used fortunately it seems here in the U.S.).

Although naproxen/aleve was not found to be associated with elevated CVD risk, it did double the risk of heart failure, paradoxically. All of the drugs were linked with significant increased risk of GI complications as well.

One factor to be emphasized is that this study focused on high-dose NSAID use, ignoring the probably more common dosages most people take for minor aches and pains. Also, aspirin was NOT amongst the drugs studied: it has a specific beneficial action to prevent CVD events in appropriate people.

An editorial in the same issue [3] by Dr. Marie Griffin of Vanderbilt U. Medical Center added this perspective: Identification of safe and effective strategies for chronic pain is sorely needed. Long-term use of high doses of NSAIDs should be reserved for those who receive considerable symptomatic benefit from the treatment, and understand the risks.