

# The GeriJournal



Volume 5, Number 2

February 2010

*A publication of GeriatRx Pharmacy*

## **Tylenol Trouble**

We've always known that high doses of acetaminophen could be dangerous, potentially causing acute liver failure. The latest question is, "*How high is too high?*"

Until recently, we felt safe giving up to 4,000 mg per day with individual doses as high as 1,000 mg. Last summer, an FDA advisory panel of experts voted to reduce the maximum daily dose, due to reports of severe liver damage. Unfortunately, no new daily maximum dosage has been recommended. The panel did recommend that the maximum single dose of acetaminophen be limited to 650 mg.

While neither of these dosage positions has become policy in the U.S. as yet, caution should be exercised when using high doses of acetaminophen. Extremely frail residents or those with any degree of hepatic impairment should receive reduced doses. If hepatic disease is significant or alcohol is being consumed, acetaminophen usage should be reconsidered.

## **Gout News**

Allopurinol continues to be our principle weapon against gout. It reduces the production of uric acid, preventing it from accumulating and crystallizing in the joints.

Allopurinol is effective, but has an extensive adverse effect profile, including potentially serious liver and skin reactions. It is also eliminated by the kidneys, so the dose must be reduced when renal function is impaired.

Last year, Uloric® (febuxostat) was released south of the border. Uloric® is eliminated by the liver and has very few drug interactions. It may be a good alternative for individuals who do not tolerate allopurinol or whose kidney function makes dosing difficult. There is no information about a release date in Canada at this time.

Treatment of acute gout has also changed somewhat in recent years. Indocid, which had been a mainstay in the treatment of gouty attacks, is strongly discouraged in the elderly. The GI, vascular and renal toxicities are far too significant for it to be used in our patient population. Colchicine is not much better with its extensive side effect and drug interaction profile. Anti-inflammatory drugs, such as naproxen or ibuprofen may

be used, but are risky in those with renal impairment or a history of GI ulcers. Prednisone is often a safer alternative in the elderly.

## **Tamoxifen and Paxil**

Tamoxifen helps to prevent breast cancer relapse by blocking estrogen receptors on tumor cells. Tamoxifen is a "pro-drug". It must be converted by cytochrome 2D6 in the liver to be effective. The activity of this enzyme is inhibited by the antidepressant Paxil® (paroxetine).

Drug Benefit records show the number of Ontario women undergoing breast cancer treatment with tamoxifen. Paxil® use was associated with an increased mortality rate. It is believed that one extra death occurred for every twenty women who took Paxil® for a typical period with tamoxifen. Other SSRI antidepressants were not implicated, although Prozac® is also known to inhibit 2D6.

The conversion of codeine to morphine also involves cytochrome 2D6. Paxil® has been linked to poor analgesic response in patients on this combination. Paxil® use has diminished in recent years, as drugs with less interactive potential, such as Celexa®, have become available. We should be cautious when considering Paxil® for LTC residents.

Prepared by Randy Goodman  
Certified Geriatric Pharmacist

