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Duloxetine for Knee OA

The Framingham Osteoarthritis Study estimates that 44% of octogenarians suffer from OA of the knee. Since non-steroidal anti-inflammatory drugs cause too many GI and CV problems in the elderly, other options must be found. High dose acetaminophen is usually our first choice, but its effectiveness for OA of the knee is often unsatisfactory.

Corticosteroid (usually Depo-Medrol® or Kenalog®) injections are another option. They suppress inflammation and usually bring relief within days. Their effect wears off in just weeks, however, and frequent injections can cause infection or joint damage. Other injection products contain hyaluronic acid (e.g. Synvisc®), which resembles the natural lubricant in synovial fluid. These products work well, but only last six months or so, and are expensive, costing roughly \$500 per shot.

The *SNRI* subclass of antidepressants, is known to have analgesic activity. Several studies have evaluated Cymbalta® (duloxetine) for

treating OA of the knee. In the three core studies, duloxetine usually showed substantial (greater than 50% improvement) or moderate (30% improvement) in function or pain. The onset of activity was measurable after one week, and was impressive at the four-week mark. The main adverse effects were nausea (starting with 30mg minimizes this), constipation, diarrhea, dry mouth, fatigue, dizziness and drowsiness. Duloxetine is worth considering for knee OA.

Quinolone Woes

For many years, quinolones (Cipro®, Levaquin® and Avelox®) have been our “go to” antibiotics for UTIs and respiratory infections. Concerns about resistance and a collection of adverse event warnings have done little to deter prescribers from using them, but the latest advisory may change that.

The FDA has issued a warning that fluoroquinolones can increase the risk of aortic aneurysm. Aneurysms can burst or lead to dissection, a split in the wall of a major blood vessel. These are medical emergencies often having fatal outcomes. The warning further identifies “at risk” populations, including the elderly, those with peripheral atherosclerotic vascular disease and hypertension (common problems in our seniors). Quinolones appear to activate

enzymes that damage connective tissue found between layers of arterial walls. This same activity is implicated in other quinolone warnings linking them to tendon rupture, muscle and joint damage. Other alerts in recent years include mental health side effects (agitation, anxiety, delirium and memory impairment), hypoglycemic episodes, QT prolongation and peripheral neuropathy. Quinolones should be reserved for serious infections where no other reasonable treatment option is available.

Fountain of Youth?

We all learned about Ponce de Leon back in middle school (Jr. High in my day). He was searching for the fountain of youth, but came up short because he was weak in molecular chemistry. There have been a few scientific advances since then, and the on-line version of the *Lancet* suggests aging reversal may be just around the corner.

Damaged, poorly functional “senescent” cells accumulate with neurological disease, frailty and aging. Eliminating these cells in animals extends life and function. A cancer drug, dasatinib, plus quercetin, a plant pigment, completely cleared senescent cells in 14 pensioners in just 24 hours. Movement and test scoring improved. Maybe Ponce was onto something. Time will tell.

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