Flavonoid Mixture and Osteoarthritis of the Knee

A proprietary mixture of flavonoids (baicalin and catechin) known as flavocoxid (Limbrel) was tested against naproxen, a conventional non-steroidal anti-inflammatory drug for the management of moderate osteoarthritis (OA) of the knees. A 4-week, multicenter, double-blind, controlled pilot study was conducted in patients who had grade 2 to 3 OA of a knee. Subjects were randomly assigned to either flavocoxid 500 mg twice daily or naproxen 500 mg twice daily. One hundred three individuals were randomized to the trial. Two failed to complete the study, both in the naproxen arm, and one presumably due to side effects of upper gastrointestinal discomfort.

Both the flavocoxid and naproxen groups showed significant and similar reduction in the signs and symptoms of knee OA (p < 0.001) of approximately 85% from baseline for all four measurements. There were no statistically significant differences in the two groups with respect to any of the measurable outcomes.

Comment: Flavocoxid is considered a prescription medical food, a category considered distinct from drugs and supplements. It is a concentrated > 90% pure standardized blend of baicalin, a flavonoid extracted from Scutellaria baicalensis, and a catechin from Acacia catechu. It has been previously determined that mixtures of baicalin and catechin possessed significant COX-1, COX-2, and 5-LOX inhibitory activity. Practitioners are familiar with other plants and plant extracts possessing significant anti-inflammatory activity, so this should be no surprise. However, this is the first formal clinical trial investigating flavocoxid. A 30-day therapeutic trial of an herbal product demonstrating similar results to a common pharmaceutical analgesic, and on average 85% improvement in signs and symptoms of knee OA, is a great sign for practitioners and patients.


Seaweed Supplement for Knee Osteoarthritis

This small, double-blind, placebo-controlled pilot study investigated a supplement from seaweed (Aquamin) on symptoms of moderate to severe OA of the knees in 22 subjects. Measurements assessed included walking distance, range of motion, pain, and joint mobility of the knee in those individuals who were withdrawing from NSAIDs. Eight subjects were given 2400 mg/day of Aquamin and 14 given placebo for up to 12 weeks.

Fourteen individuals completed the study, and analysis showed that there were no significant differences in pain and joint mobility scores, but did show small but statistically significant improvements in passive and active extension, and improved walking distance in the Aquamin group, but not the placebo group. There was a 50% reduction in NSAID use in the Aquamin group, although it should be noted that the Aquamin did not eliminate the NSAID use altogether.

Comment: Aquamin is a calcium- and magnesium-rich seaweed derived from the red algae Lithothamnion coralliodes. It also contains some trace minerals, including manganese, selenium, zinc, phosphorus, potassium, sulfur, iron, boron, sodium, cobalt, and copper. Many minerals have been shown to have some anti-inflammatory effects, including magnesium, boron, and manganese, all of which are found in Aquamin, although in quite small amounts. Whether it due to is the calcium, one or more of the other minerals, or a phytonutrient ingredient in the product, this study suggests that Aquamin is a potential treatment for moderate to severe OA of the knee, especially able to reduce the use of NSAIDS, and improve walking distance and range of motion.


Folic Acid Update

It has been known for a considerable time that folic acid given to women planning for and during pregnancy can lower the risk for neural tube defects. Incorporating the research done up to that time, the US Preventive Services Task Force (USPSTF) first published its recommendations in 1996. These were recently updated, and the USPSTF
Copyright of Townsend Letter is the property of Townsend Letter Group and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.