Ask the Expert

Treating RA Diagnosed After Age 60

When it comes to rheumatoid arthritis, patients' age at diagnosis seems to dictate how aggressively the disease is treated, according to a recent study comparing clinical and therapeutic differences between young- and elderly-onset rheumatoid arthritis. Using data from the Consortium of Rheumatology Researchers of North America (CORRONA), investigators from the University of California at San Diego (UCSD) assessed the disease activity and treatment of more than 2,000 patients diagnosed with rheumatoid arthritis (RA) after age 60 years and of the same number of patients, matched for disease duration, whose RA was diagnosed when they were between ages 40 and 60 years. Significantly fewer patients in the older group received multiple disease-modifying antirheumatic drugs (DMARDs) or biologic agents, despite comparable disease severity, activity, and duration, according to the investigators (Ann. Rheum. Dis. 2006;65:1226-9).

BY ARTHUR F. KAVANAUGH, M.D.

There is little to no scientific evidence validating the appropriateness of this discrepancy, according to Dr. Arthur F. Kavanaugh, one of the study authors. Instead, much of the hesitation to treat older patients as aggressively as younger ones likely comes from rheumatologists' training in internal medicine and "years of being told and shown that certain medications are indeed more toxic among older persons," he said.

In this month's column, Dr. Kavanaugh, director of the Center of Innovative Therapy at UCSD, discusses management issues associated with treating rheumatoid arthritis in elderly patients.

Rheumatology News: In your opinion, are the discrepancies in treatment of older- vs. younger-onset rheumatoid arthritis patients a function of age alone or do other factors such as disease severity, comorbid conditions, and potential side effect vulnerability come into play?

Dr. Kavanaugh: I think all of the above. Certainly we consider comorbidities, which are more common in older people and may complicate the use of certain medications. For example, it can be difficult to use NSAIDs, particularly at anti-inflammatory doses, in older persons, due to a number of important toxicities that occur with advancing age, such as NSAID gastropathy, impaired renal function, and worsening of congestive heart failure. Some doctors might use prednisone in an older person whereas they would use NSAIDs in a younger patient with a very similar case. However, I think much of the hesitation is ingrained in rheumatologists from their training in internal medicine, where this point is hammered home.

RN: Is there evidence to suggest that patients who are older at the onset of RA should (or should not) be treated as aggressively as their younger counterparts?

Dr. Kavanaugh: There is a paucity of high-quality data addressing this, and that would be great information to have. Other than subset analyses, I cannot think of any study specifically of biologic therapies in older RA patients, for example. The findings from the CORRONA registry data certainly support the study and possible use of more aggressive therapies in older persons as well as younger patients.

RN: What factors might preclude the use of aggressive therapies in patients who were older at the onset of RA?

Dr. Kavanaugh: Factors that affect potential toxicities would probably be most important. These will vary from agent to agent. Severe congestive heart failure, which is more common in older persons, would be a reason potentially not to use a tumor necrosis factor inhibitor. Similarly, a history of cancer or serious infections would affect the decision to use any immunomodulatory medication.

RN: Before prescribing some of the more aggressive therapies to an older patient, what information should a rheumatologist have in hand?

Dr. Kavanaugh: In addition to a thorough history and physical, it's important to get focused laboratory tests to look for the presence of comorbid diseases. ■

Dr. Kavanaugh *is professor of clinical medicine and director of the Center of Innovative Therapy at the University of California at San Diego.*

Risks of NSAIDs Greater Than Benefits in Hip Replacement

BY JONATHAN GARDNER
London Bureau

A 2-week course of ibuprofen after total hip replacement or revision surgery can reduce ectopic bone growth, but does not reduce pain or improve mobility significantly several months after surgery and can lead to serious postoperative bleeding, a randomized study has found.

Routine prophylaxis with nonsteroidal anti-inflammatory drugs after hip surgery is believed to reduce the occurrence of ectopic bone growth, which occurs in one-third of all hip-replacement patients. Physicians believe ectopic bone growth is a determinant in the risk of long-term pain or disability. The researchers in this study examined whether postsurgical ibuprofen led to reduced pain and improved mobility 6-12 months after surgery.

Marlene Fransen of the University of Sydney, Australia, and her associates compared outcomes for 898 patients (mean age 66) in Australia and New Zealand undergoing the surgery at 20 hospitals between February 2002 and May 2004. Half were randomized to receive ibuprofen (two doses of 200 mg taken three times daily), the other half to placebo. Treatment began within 24 hours of surgery and lasted for 14 days (BMJ 2006;333:519-23).

Of the patients who received follow-up examinations 6-12 months after surgery, the 391 patients in the ibuprofen group had significantly reduced risk of developing ectopic bone of any grade (risk ratio 0.7) and severe ectopic bone (0.4), compared with the 407 patients in the placebo group.

Compared with patients on placebo, those on ibuprofen showed no statistically significant improvements in pain and physical function, such as physical activity, ability to get out of the house, walking speed, time taken to stand up from sitting in a chair, and use of analgesics.

The risks of bleeding were higher with ibuprofen. During the hospital admission, patients in the ibuprofen group were twice as likely (risk ratio 2.1) to experience a bleeding complication.

"Our results provide no evidence of clinical benefit 6 to 12 months postoperatively and raise concerns about the safety of ibuprofen for the prevention of ectopic bone formation after hip arthroplasty," the authors wrote.

In an accompanying editorial, Fraser Birrell, consultant and senior lecturer in rheumatology, Northumbria Healthcare National Health Service Trust and School of Clinical Medical Sciences, University of Newcastle upon Tyne (England), and Stefan Lohmander, senior lecturer Department of Orthopaedics, University Hospital in Lund, Sweden, wrote that while it has been shown that use of ibuprofen and other NSAIDs reduce ectopic bone growth, the study demonstrates the risk of this practice (BMJ 2006;333:506-7). ■

Intra-Articular Hyaluronic Acid Quells Ankle OA Pain

BY MARY ANN MOON
Contributing Writer

Intra-articular injections of hyaluronic acid relieved pain and produced functional improvements lasting at least 6 months in a pilot study of 75 patients with ankle osteoarthritis, reported Dr. Shu-Fen Sun of Veterans General Hospital, Kaohsiung, Taiwan, and associates.

Researchers have reported success with hyaluronic acid injections in osteoarthritic knees, so Dr. Sun and colleagues assessed the efficacy and safety of these injections in an open-label prospective clinical trial involving 41 men and 34 women with mild to moderate unilateral ankle osteoarthritis (OA). "To date there is only limited published literature on its use in the ankle," and it is approved for clinical use only in the knee, they noted.

OA reduces the concentration of hyaluronic acid in the synovial fluid of affected joints. Intra-articular injections are thought to restore viscosity and elasticity in that fluid, as well as to normalize endogenous synthesis of hyaluronic acid and inhibit its degradation, the investigators said (Osteoarthritis Cartilage 2006;14:867-74).

Study subjects received five weekly intra-articular injections. Beneficial effects were noted within 1 week of completing the series of injections and persisted through a 6-month follow-up. On the Ankle Osteoarthritis Scale, a patient-rated measure that addresses pain and function in the affected joint, scores decreased significantly beginning at 1 week after treatment and continuing through 1-month, 3-month, and 6-month follow-up visits.

Similarly, on the physician-rated 100-point measure of the American Orthopaedic Foot and Ankle Society, which assesses pain, function, and alignment, mean scores improved from 64 at baseline to 75 at 1 week and 78 at all subsequent follow-ups.

The treatment decreased the patients' use of rescue analgesics. Acetaminophen use dropped from an average of 14 tablets per week at baseline to 3 tablets per week at 1-month, 3-month, and 6-month follow-up visits.

Ankle sagittal range of motion did not change significantly with treatment.

Given that surgical treatment of ankle OA "is often quite painful," intra-articular hyaluronic acid injections may offer a new option to patients who have not responded to traditional pain therapies, Dr. Sun and associates said.

These findings support the idea that the treatment's mechanism of action exceeds simple replacement of viscous joint fluid. "Temporary restoration of the rheologic homeostasis may trigger normal native hyaluronic acid metabolism. Hyaluronic acid also fulfills an anti-inflammatory role by reducing white cell aggregation and activation. With this postulated disease-modifying behavior, its clinical effects may persist beyond its physical duration within the joint," the researchers noted. ■