

# Image-Guided Steroid Injections Urged in Hip OA

BY BRUCE JANCIN  
Denver Bureau

AMSTERDAM — Radiologically guided corticosteroid injections brought marked symptomatic improvement to patients with advanced hip osteoarthritis in a double-blind, placebo-controlled randomized trial, Dr. Walter P. Maksymowych reported at the annual European Congress of Rheumatology.

Many physicians perform these injections without imaging-guided assistance—and as a result, they often miss the mark, according to Dr. Maksymowych, professor of medicine at the University of Alberta, Edmonton. That's the likely explanation for the negative results of some previous studies of intraarticular steroid injections for hip osteoarthritis, he added.

Dr. Maksymowych and his colleague Dr. Robert Lambert, professor of radiology also at Alberta, reported on 52 patients who were randomized to fluoroscopically guided injections of 40 mg of triamcinolone hexacetonide or 2 mL of normal saline. All patients had hip osteoarthritis (OA) with marked structural joint damage on X-ray. All were experiencing high levels of pain and other symptoms that were no longer adequately relieved by NSAIDs and pain medications. Many were on the waiting list for hip replacement surgery.

The primary study end point was change in the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) pain scores 2 months post treatment. Scores in the active-treatment group were

reduced from a mean of 310 mm at baseline to 157 mm. The placebo group's scores remained unchanged. Results of all secondary end points were also significantly better in patients who received steroid injections (see chart).

Misconceptions regarding intraarticular steroid injections for OA abound among physicians and patients. Many physicians, overconfident in their manual skills, dismiss the need for imaging guidance of the needle—a big mistake, Dr. Maksymowych noted.

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DR. MAKSYMOWYCH

And many patients worry that repeated steroid injections into the hip may be harmful. However, Dr. Maksymowych stressed that there is no evidence that the injections induce structural joint damage or are otherwise harmful to patients.

"On the other hand, there's no evidence at this point in time that repeated corticosteroid injections prevent progression of joint damage," the rheumatologist added at the congress sponsored by the European League Against Rheumatism.

Both EULAR and the American College of Rheumatology endorse the use of corticosteroid injections as a key recommendation in the management of OA. But the guidelines also characterize the supporting evidence as weak, which was certainly the case up until this new randomized trial, he said. Some physicians have declined to offer steroid injections, despite the recommendations, because the practice was not backed by a solid evidence base. The procedure is likely to win converts because of these convincingly positive new data, Dr. Maksymowych predicted. ■



A contrast agent is injected into the hip joint under fluoroscopic guidance, to facilitate subsequent needle placement into the joint for a steroid injection.

## Intraarticular Steroids Bring Big Improvement

	Steroid group	Placebo group
<b>Patients with more than 50% improvement in WOMAC pain scores</b>		
at 1 month	71%	14%
at 2 months	61%	14%
<b>Mean WOMAC stiffness scores (mm)</b>		
at baseline	137	124
at 2 months	76	135
<b>Mean WOMAC physical function scores (mm)</b>		
at baseline	901	914
at 2 months	502	897

Note: Based on a study of 52 patients.  
Source: Dr. Maksymowych

# Celecoxib Deemed Safer Than NSAIDs in Osteoarthritis Patients

BY DOUG BRUNK  
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Celecoxib is just as effective as naproxen and diclofenac for treating osteoarthritis, and it causes significantly fewer serious upper GI events than the other agents, according to data from a large international study.

The finding "shows conclusively that celecoxib does reduce the risk of upper GI complications, compared to conventional NSAIDs," the study's lead author, Dr. Gurkirpal Singh, said in an interview. "Until now managed care has been saying there is no evidence in a randomized, clinical trial that celecoxib is better than NSAIDs in reducing GI bleeding. But here it is—these are level 1 data that conclusively prove that."

However, Dr. Brennan M.R. Spiegel noted that although the difference favoring celecoxib reached significance, the actual

difference was only 1 patient per 100 patient-years. This tiny difference "is not enough to warrant spending as much as we do on Cox-2 inhibitors," said Dr. Spiegel of the digestive diseases division at the University of California, Los Angeles. He added that the study is "notable because it's very large, [but] I believed it before that GI events are less common with coxibs than with NSAIDs."

In a trial called the Successive Celecoxib Efficacy and Safety Study-1 (SUCCESS-1), Dr. Singh and his associates randomized 13,194 osteoarthritis (OA) patients from 39 countries to double-blinded treatment with celecoxib 100 mg b.i.d., celecoxib 200 mg b.i.d., or nonselective NSAID therapy for 12 weeks. The NSAID therapy consisted of diclofenac 50 mg b.i.d. or naproxen 500 mg b.i.d. (*Am. J. Med.* 2006; 119:255-66).

Patients with a history of two or more episodes of active peptic ulceration were excluded from the study, as were those with GI bleeding or recurrent gastric or duodenal ulcers and those with



**'Celecoxib does reduce the risk of upper GI complications, compared to conventional NSAIDs.'**

DR. SINGH

an esophageal, gastric, or duodenal ulcer within a month prior to randomization. Patients with active GI disease or any condition that required NSAID therapy were also excluded.

Participants' mean age was 62 years, 76% were women, and 80% were white, reported Dr. Singh of the division of gastroenterology

and hepatology at Stanford (Calif.) University. The mean duration of OA was 8 years.

Instruments used to measure efficacy included the Patient's Assessment of Arthritis Pain-Visual Analog Scale, Patients' Global Assessment of Arthritis, and the Western Ontario and McMaster Universities (WOMAC) osteoarthritis index. Serious GI events were evaluated by two independent committees that were blinded to patient randomization.

The researchers reported that the primary efficacy measures showed that both doses of celecoxib were equally as effective as the NSAIDs in treating OA.

There were 37 confirmed upper GI events: 19 in the patients who took the NSAIDs and 18 in the patients who took celecoxib. That translated into a rate of 2.1 per 100 patient-years for patients who

took the NSAIDs vs. a rate of 1.0 per 100 patient-years for those who took celecoxib. The difference was statistically significant.

A key limitation of the study, Dr. Singh said, is that it was not powered to detect differences in cardiovascular adverse events.

Dr. Spiegel said that the current standard of care for older patients with OA has "overtaken" the overall impact of the SUCCESS-1 study findings. "The reality is that people are moving to adding a proton pump inhibitor to an NSAID when [osteoarthritis] patients exceed the age of 65 or if they're put on aspirin," he said.

Dr. Singh disclosed that he received research support from Searle Pharmaceuticals, Pharmacia, Pfizer, Merck & Co., Boehringer Ingelheim, TAP Pharmaceuticals, Wyeth, Altana Pharma, GlaxoSmithKline, Novartis Pharmaceuticals Corp., and Centocor Inc. ■