Fentanyl Delivers Relief in Advanced Osteoarthritis

BY BRUCE JANCIN
Denver Bureau

VIENNA — Transdermal fentanyl brought effective pain relief to patients with advanced knee or hip osteoarthritis in a large randomized, double-blind, placebo-controlled trial, Jozef Vojtassak, M.D., reported at the annual European congress of rheumatology.

Fentanyl patches have previously been shown to be effective for a variety of types of chronic nonmalignant pain, including that associated with osteoarthritis; however, until now the evidence has come largely from open-label studies, according to Dr. Vojtassak of Comenius University, Bratislava, Slovakia.

He reported on 416 patients awaiting knee or hip replacement surgery who were randomized to transdermal fentanyl (Durogesic) or placebo patches in a 6-week double-blind study followed by a week-long taper. All had previously shown an inadequate response to weak opioids. None had received strong opioids within 4 weeks of enrollment.

The starting dose of fentanyl was 25 mcg/hour. It could gradually be raised to 100 mcg/hour as required. Patches were changed every 72 hours. Allowable supplemental pain medication consisted of nonsteroidal anti-inflammatory agents, used by more than two-thirds of patients, and acetaminophen, used at dosages of up to 4 g/day by 27%.

Of note, 57% of participants withdrew from the study prematurely, with roughly equal numbers of dropouts in both study arms. Their reasons for quitting, however, were quite different. Fifteen patients in the fentanyl arm withdrew because of insufficient treatment efficacy, compared with 66 in the placebo group. On the other hand, 62 patients taking fentanyl quit due to adverse events—chiefly nausea and vomiting—compared with 20 patients in the placebo group, he said at the meeting, which was sponsored by the European League Against Rheumatism.

The primary study end point was change in mean pain visual analog scores recorded by patients in a daily pain diary. From a baseline self-rated score of 73 out of a possible 100, fentanyl-treated patients had a mean 23.4-point decrease, significantly better than the 17.9-point reduction with placebo. Morning and evening pain improved by 19%-20% in the fentanyl arm, compared with a 14% improvement with placebo.

Pain on walking was rated 25% better than at baseline in fentanyl-treated patients with knee osteoarthritis, and 15% better in placebo-treated patients. Similarly, fentanyl-treated patients with hip osteoarthritis rated their pain on walking as 20% improved over baseline, which was significantly better than the nearly 13% improvement among controls.

Measures of functional improvement by the Western Ontario and McMaster Universities Osteoarthritis Index trended in favor of the fentanyl group, a benefit that fell just short of statistical significance. The study was sponsored by Janssen Pharmaceutica. ■

Synvisc Injection Treatments Deemed Beneficial in Hip OA

BY BRUCE JANCIN
Denver Bureau

VIENNA — Ultrasound-guided intraarticular injection of hylan G-F 20 (Synvisc) in patients with hip osteoarthritis is safe, well tolerated, and results in reduced pain and improved function for up to 9 months post injection, Alberto Migliore, M.D., reported at the annual European Congress of Rheumatology.

Synvisc, a hyaluronan derivative, is injected in order to supplement synovial fluid that has lost its elastoviscosity due to osteoarthritis. It is used routinely in patients with symptomatic knee osteoarthritis, a setting in which multiple studies have shown the treatment provides pain relief with a low risk of adverse events.

Fewer data are available regarding Synvisc in hip osteoarthritis, in large part because hip injections are technically more difficult and require ultrasound guidance in order to achieve consistently good results, explained Dr. Migliore of San Pietro Hospital, Rome.

He reported on 223 patients with symptomatic hip osteoarthritis who received one or more intraarticular 2-mL Synvisc injections. Sixty-two had bilateral hip osteoarthritis. Patients were followed for up to 9 months.

They could receive a repeat injection every 3 months as needed. A total of 360 injections were administered. Nineteen patients left the study in order to undergo hip replacement surgery.

Significant improvement occurred in all three study end points: osteoarthritis pain as self-assessed on a visual analog scale, need for nonsteroidal anti-inflammatory drugs, and clinical improvement as measured using the Lequesne index. (See chart.)

No local infections or systemic adverse events occurred.

The injection technique involved the use of a sterile biopsy guide attached to a 3.5-MHz convex or 7-MHz linear ultrasound transducer. The joint was imaged using an anterior parasagittal approach.

Now that the safety and efficacy of intraarticular Synvisc injections have been demonstrated in hip osteoarthritis, Dr. Migliore's next goals are to establish the optimal dosing regimen and determine whether the therapy exerts a disease-modifying effect. ■

Outcomes Following Ultrasound-Guided Synvisc Hip Injection

	Baseline	3 months	6 months	9 months
Osteoarthritis pain (10-point visual analog scale)	6.2	4.0	4.4	4.8
Mean NSAID use (days per month)	9.5	4.4	4.9	6.7
Lequesne index	10.1	6.4	7.0	7.8

Source: Dr. Migliore

Hand Osteoarthritis Predicts Later Hip, Knee Disease Development

BY CHRISTINE KILGORE
Contributing Writer

Patients with hand osteoarthritis are significantly more likely to develop disease of the hip or knee later in life, a prospective, population-based study has shown.

The new findings are consistent with reports that osteoarthritis (OA) is a generalized disease in many patients, and suggest that by "identifying subjects who have a tendency for developing OA and by modifying their risk factors, it may be possible to avoid or prevent OA-related pain and disability in the weight-bearing joints," the investigators said.

They followed 1,235 patients who had baseline radiographs of the hand, hips, and knees that showed no prevalent OA of the hip or knee (a Kellgren/Lawrence score of 0-1) and either hand OA (a Kellgren/Lawrence score of 2-4 in two of three joint groups of either hand) or no hand OA. At a mean of 6.6 years later, they obtained hip and knee radiographs again.

Independent of other known risk factors, patients with hand OA at baseline were 3 times more likely to have future hip OA and 1.6 times more likely to have future knee OA, than patients without hand OA, reported S. Dahaghin, M.D., and colleagues at the Erasmus Medical Center at the University Medical Center Rotterdam, the Netherlands (Arthritis Rheum. 2005:52;3520-7).

When they restricted their analysis to patients without any possibility of hip or knee OA at baseline (Kellgren/Lawrence score of 0, versus 0-1), they found the risk of future knee OA was the same (odds ratio 1.6) and that the risk of future hip OA was even higher (odds ratio 6.5).

Family history of OA increased the risk of future hip OA even further in patients who had hand OA at baseline. The risk of future knee OA in these patients was further increased not by family history, but when they were overweight.

Additionally, the investigators found that high baseline levels of the OA biomarker CTX-II (type II collagen C-telopeptide degradation product) increased the risk of hip and knee OA, independent of the baseline presence of hand OA or "doubtful" hip or knee OA.

Patients in the study had a mean age of 66 years. They were a randomly selected subset of participants in the Rotterdam Study, a prospective, population-based cohort study of chronic diseases in the elderly. ■

Osteoporosis Follow-Up Found Lacking in Low-Trauma Fractures

QUEBEC CITY — Women who have had a low-trauma fracture are not getting the follow-up they need for osteoporosis, Sonia Singh, M.D., reported in a poster at the annual meeting of the North American Primary Care Research Group.

History of a previous low-trauma fracture is associated with a 40% increased risk of hip fracture, Dr. Singh reported.

A retrospective chart review identified 100 women aged 40 years or older who presented with a low-trauma fracture to a community hospital emergency department.

A questionnaire was sent to the women 6-9 months after the fracture to determine if they had been given a diagnosis of osteoporosis or had received any treatment, even just calcium supplementation.

Preliminary results from 42 women showed that 22 (52%) had no follow-up, 12 (29%) had received an ultrasound or bone mineral density scan, and 8 (19%) had follow-up without testing.

Of the 20 patients with follow-up, 7 (35%) had been prescribed medications.

Interviews with the women revealed that only 7 (17%) thought they were at an increased risk for another fracture.

Surprisingly, having had two or three previous fractures did little to change that perception or to improve medication rates, said Dr. Singh, clinical research associate, Peace Arch Hospital, White Rock, B.C., Canada.

A previous study found similar follow-up and treatment rates, with fewer than 20% of 108 men and women who presented with fragility-type fractures at three Ontario hospitals receiving follow-up 1 year later (CMAJ 2000;163:819-22).

"Despite the fact there has been a heightened profile for osteoporosis, that in itself has not improved the management," she said. "Our follow-up and treatment [findings] were a little better than the previous studies, but it's still not acceptable."

—Patrice Wendling