Small Joint Swelling, Labs May Point to Early RA

BY SHERRY BOSCHERT
San Francisco Bureau

SAN FRANCISCO — An observational study of 395 patients with suspected early arthritis identified two factors that predicted a diagnosis of rheumatoid arthritis within a year's time.

Patients with swelling in a small joint of the hands and/or feet were six times more likely to be diagnosed with rheumatoid arthritis within a year than were patients whose swollen joints did not include those sites. A diagnosis of rheumatoid arthritis within a year was 39 times more likely in patients whose laboratory tests at baseline showed the presence of anti–cyclic citrullinated peptide (anti-CCP) antibodies, compared with anti-CCP-negative patients, Dr. Maria D. Mjaavatten reported at the annual meeting of the American College of Rheumatology.

The same factors also were predictive (though to a lesser degree) of persistent arthritis and of subsequent use of disease-modifying antirheumatic drugs within a year, added Dr. Mjaavatten of the department of rheumatology at Diakonhjemmet Hospital, Oslo.

Patients with small-joint arthritis were twice as likely to develop persistent arthritis and four times as likely to start a DMARD within a year compared with patients without small-joint involvement. Patients with anti-CCP positivity were five times more likely to develop persistent arthritis and nine times more likely to start a DMARD compared with anti-CCP-negative patients.

The results will help inform an ongoing effort by a joint European-American task force to define new diagnostic criteria for early rheumatoid arthritis, Dr. Mjaavatten said. Classification criteria from the American College of Rheumatology (ACR) were developed in 1997 for established disease and are not as useful in early arthritis.

The study enrolled adult patients with at least a 16-week history of one or more clinically swollen joints diagnosed as arthritis by rheumatologists at one of five Norwegian centers, and followed patients for at least a year. Although physicians were aware of the ACR diagnostic criteria for rheumatoid arthritis, diagnoses were not limited to patients who met those criteria.

The cohort represented approximately 70% of all patients enrolled. The other 30% were lost to follow-up before completing at least two follow-up assessments and were presumed to have nonpersistent arthritis. The study defined persistent arthritis as the presence of joint swelling on at least two out of three follow-up assessments during the first year.

The cohort was younger (mean age, 46 years) and included fewer women (57%) than might be expected in a "typical" rheumatoid arthritis cohort, she noted. The mean arthritis duration at baseline was very short (30 days), with a duration of 10 days or less in a quarter of the patients.

During the year of follow-up, 18% of patients were diagnosed with rheumatoid arthritis and 26% had persistent arthritis. At presentation, 38% of patients had single-joint arthritis, 33% had two to four swollen joints, and 29% had polyarthritis.

Dr. Mjaavatten reported no conflicts of interest in this study. ■

Low-Dose Colchicine Relieves Gout With Fewer Side Effects

BY SHERRY BOSCHERT
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SAN FRANCISCO — Low-dose colchicine appeared to be as effective as a more conventional dose in treating acute gout flares, but produced far fewer side effects in a randomized, double-blind, placebo-controlled trial in 185 patients.

The results support European League Against Rheumatism 2006 consensus guidelines recommending low doses (0.5 mg t.i.d.) when using colchicine to treat gout flare, a recommendation that was made without the backing of clinical trial data, Dr. Robert A. Terkeltaub said at the annual meeting of the American College of Rheumatology.

The study prerandomized 575 patients to receive high-dose colchicine, low-dose colchicine, or placebo capsules if they called a 24-hour service within 12 hours of the onset of a gout flare. Of the 184 patients who called and received treatment, 52 received high-dose colchicine (1.2 mg, then 0.6 mg hourly for 6 hours, for a total of 4.8 mg); 74 received low-dose colchicine (1.2 mg, then 0.6 mg in 1 hour, for a total of 4.8 mg), and 58 were given placebo (two capsules, then one capsule hourly for 6 hours). One more patient in the placebo group who had no outcomes recorded was excluded from the intent-to-treat analysis of efficacy but included in the safety analysis.

In the only previous placebo-controlled study of colchicine for gout flare, patients on colchicine received a mean total dose of 6.7 mg (higher than the high dose in the current study) and all patients developed diarrhea by the time of clinical response.

In the current study, 33% of patients in the high-dose group and 38% in the low-dose group recorded at least a 50% reduction in pain scores on a seven-point Likert scale within 24 hours of taking the first dose without taking a rescue medication. These rates were significantly higher than the 16% of patients on placebo who achieved this primary outcome. The efficacy between colchicine groups did not differ significantly, said Dr. Terkeltaub, chief of rheumatology in the Veterans Affairs San Diego Healthcare System and professor of medicine at the University of California, San Diego.

The study was funded by Mutual Pharmaceutical Co (a subsidiary of URL Pharma Inc.), which manufacture a colchicine tablet. Based on these results, they are seeking Food and Drug Administration approval of the medication to treat the pain of gout flares.

Dr. Terkeltaub has been a consultant for AR Scientific, the branded arm of URL Pharma, and for other pharmaceutical companies. One of his coinvestigators is an employee and stockholder in AR Scientific, and other associates have been consultants to that company and to others.

High-dose colchicine produced GI side effects at a significantly higher rate (94%), compared with placebo (28%)—especially diarrhea (77% vs. 14%, respectively). In the low-dose colchicine group, 45% had GI side effects and 23% developed diarrhea. These rates were not significantly different, compared with placebo.

In addition, rates of all adverse events, vomiting, severe adverse events, or severe diarrhea were significantly higher in the high-dose group, compared with the placebo group, but did not differ significantly between patients on low-dose colchicine or placebo.

Patients resorted to rescue medications within 24 hours of the first dose at statistically similar rates in the high-dose group (35%) and placebo group (48%), but the rate of rescue in the low-dose group (28%) was significantly lower than in the placebo group. ■

Scoring System Predicts Ability Of Orthotics to Ease Knee Pain

BY CATHERINE HACKETT
Senior Editor

The success of orthotic devices for patellofemoral pain can be predicted by a patient's age, height, midfoot morphometry, and pain severity, according to a small, single-center Australian study.

The use of these predictor variables can help practitioners make better informed treatment decisions, wrote Bill Vicenzino, Ph.D., in an article published online (Br. J. Sports Med. 2008 [doi:10.1136/bjsm.2008.052613]).

The researchers performed a post hoc analysis of a randomized, single-blind clinical trial in 42 patients aged 18-40 years with patellofemoral pain (PFP) of nontraumatic origin who were given one of several treatments, including flat inserts, physical therapy, and foot orthoses. The latter consisted of four pairs of prefabricated ethylene-vinyl acetate foot orthoses with a 6-degree varus wedge and built-in arch support.

Patients given foot orthoses were followed for 12 weeks. During the first 6 weeks, patients attended six 30-minute physical therapy sessions in which they rated the comfort of the orthoses on a visual analog scale, with 0 mm indicating they were too uncomfortable to wear and 100 mm indicating no discomfort.

The severity of the worst and usual patellofemoral pain experienced during the previous week also was measured on a visual analog scale, with 0 mm representing no pain and 100 mm as the worst pain imaginable.

The orthoses were then modified, and patients were encouraged to wear them throughout the study, wrote Dr. Vicenzino, head of the division of physiotherapy at the School of Health and Rehabilitation Sciences, University of Queensland, Brisbane (Australia), and colleagues.

The outcome measure was the perceived effect of the orthoses as measured on a 5-point Likert scale, with options ranging from marked improvement to marked worsening. Only those who scored "marked improvement" were considered to have a successful outcome.

For the analysis of predictor variables, morphometric foot measurements and demographic data were recorded for the 42 participants at baseline and at the first intervention appointment. Morphometric characteristics included weight-bearing (taken when equal weight is on each foot) and non–weight-bearing measures of the midfoot; weight-bearing arch height; and midfoot width difference (the change in midfoot width from a non–weight-bearing to a weight-bearing position). Demographic data included age, sex, height, weight, and body mass index.

At 12 weeks, 17 (40%) of the patients had successful outcomes, on the basis of the Likert scale. Analysis showed that four of the predictor variables—age over 25 years, height less than 165 cm, worst pain less than 53 mm, and midfoot width difference greater than 11 mm—were significantly associated with a successful outcome. Compared with the pretest probability of success in all 42 patients of 40%, patients who had three of the four predictors had a post-test probability of success of 85%. For patients with two of the identified predictors, that probability was 61%, and for patients with one variable, it was 53%. No patients had all four predictors.

The study was funded primarily by the National Health and Medical Research Council of Australia. ■