Chondroitin Reduced Joint Space Narrowing in OA

The dietary supplement also reduced pain scores and lessened the use of NSAIDs.

BY NANCY WALSH
New York Bureau

WASHINGTON — The dietary supplement chondroitin sulfate significantly reduced the progression of joint space narrowing among patients with knee osteoarthritis in a multicenter, prospective, double-blind study presented in a late-breaking abstract session at the annual meeting of the American College of Rheumatology.

This radiologic finding represents a structure-modifying effect in the clinical progression of the disease, according to Dr. Jean-Yves Reginster, who has an unspecified interest in the Institut Biochimique SA (Pambio-Noranco, Switzerland), the manufacturer of Chondrosulf, the chondroitin formulation used in the study.

The 2-year Study on Osteoarthritis Progression Prevention (STOPP) included 622 patients with mild to moderate osteoarthritis from 40 centers in Europe and the United States, randomizing them to receive oral chondroitin sulfate, 800 mg/day or placebo.

Rescue acetaminophen and nonsteroidal anti-inflammatory drugs were permitted.

All had tibiofemoral knee osteoarthritis evaluated for pain on a visual analog scale and radiologically on digital x-rays utilizing a high-performance Lyon schuss slightly modified semiflexed view. The minimal level of pain for inclusion was 33 mm for the past 3 months, and the minimum joint space was greater than 1 mm at the narrowest point.

'The final difference was 55% prevention in joint space narrowing, which was statistically significant at the end of the second year' in the study of 622 patients.

Patients ranged in age from 45 to 80 years, and with a mean body mass index of 29 kg/m^2, and were less overweight than patients in some similar trials such as the National Institutes of Health's Glucosamine/chondroitin Arthritis Intervention Trial (GAIT).

If both knees were affected, the more severely affected knee was chosen as the index joint.

There were 206 completers in both groups. In an intention-to-treat analysis of the primary outcome measure—joint space narrowing at the medial compartment of the knee over 24 months—a significantly greater mean joint space narrowing of 0.24 mm was seen among patients receiving placebo, compared with 0.10 mm among those receiving chondroitin, reported Dr. Reginster of the University of Liège (Belgium).

The change in joint space was linear among patients receiving placebo, around 0.1 mm/year, which was prevented completely in patients receiving chondroitin sulfate, he said.

"The final difference was 55% prevention in joint space narrowing, which was statistically significant at the end of the second year," he added.

Significant differences also were seen in pain scores on VAS and on the Western Ontario and McMaster Universities osteoarthritis index scores (WOMAC). The chondroitin group also used 20% fewer NSAIDs, compared with the placebo group, he said. ■

Adalimumab Linked to Sizeable Rates of RA Remission

BY NANCY WALSH
New York Bureau

WASHINGTON — Clinical remission—a therapeutic goal increasingly achievable in the era of biologic therapies—was reached by a substantial percentage of patients with long-standing active rheumatoid arthritis treated with adalimumab, Dr. Gerd M. Burmester reported at the annual meeting of the American College of Rheumatology.

Nearly one-third of patients who participated in the Research in Active RA (ReAct) trial, which took place at 448 sites in Europe and Australia, achieved clinical remission as assessed on several different criteria.

Of 1,251 patients receiving 52 weeks of adalimumab, 13% achieved a major clinical response.

DR. BURMESTER

ReAct included 6,610 patients, 81% of whom were female, whose mean age was 54 years and whose mean disease duration was 11 years.

Among this cohort 73% were rheumatoid factor positive, 74% were receiving disease-modifying antirheumatic drugs, and 71% were receiving corticosteroids, according to Dr. Burmester.

The patients mean disease activity score (DAS) 28 at baseline was 6, and their mean Health Assessment Questionnaire Disability Index (HAQ DI) score at baseline was 1.64.

During the initial 12-week open-label phase of the trial, patients received subcutaneous adalimumab (Humira), 40 mg every other week, in addition to their current disease-modifying drugs.

The 6,235 patients who remained in the study at week 12 then could enter an extension phase.

At week 28, 4,119 remained in the study, as did 3,021 at week 36 and 1,251 at week 52.

Clinical remission assessed on the DAS 28 was achieved by 20% of patients at week 12, according to Dr. Burmester of Charité Hospital, Berlin, Germany.

Of the 1,251 patients who received 52 weeks of adalimumab therapy, 164 (13%) achieved a major clinical response, which is an ACR70 response for 6 continuous months or more, Dr. Burmester wrote in a poster session.

The study also found that greater percentages of patients with baseline low DAS 28 and HAQ DI scores achieved and maintained clinical remission than did patients who were more severely disabled at study entry.

Dr. Burmester disclosed that he has received research grants and consulting fees and is on the speakers' bureau for multiple pharmaceutical companies, including Abbott, the manufacturer of adalimumab.

Analysis of data from ReAct has also demonstrated that adalimumab can be beneficial in patients who have previously received one or two other tumor necrosis factor (TNF)–α blocking agents, according to Dr. Stefano Bombardieri of the University of Pisa (Italy).

Among the patients enrolled in ReAct, 188 had previously received etanercept, 591 had received infliximab, and 120 had been treated with both drugs but had discontinued because of intolerance or loss of response.

At week 12, 60% of patients who had received previous anti–TNF-α treatment achieved an ACR20 response, as did 70% of patients who had not received any prior anti–TNF-α therapy.

Treatment with adalimumab also led to clinically important improvements in physical function as measured on mean changes from baseline in HAQ scores, even among difficult-to-treat patients who had received two previous anti–TNF-α drugs, Dr. Bombardieri wrote in another poster presentation.

Among patients who had not previously received any of the drugs, the mean change in HAQ DI from baseline was –0.58, while those who had received both of the other drugs had a mean change of –0.31.

Serious adverse events were reported in 13% and 18% of patients without and with a history of anti–TNF-α treatment, respectively, Dr. Bombardieri reported in his poster.

The malignancy rate was 0.6% in patients without and 0.8% in patients with such a history.

Dr. Bombardieri disclosed that he has received consulting fees from Abbott.

Analysis of data from another trial, the Humira Efficacy Response Optimization (HERO) study, found that clinical improvements in patients began as early as 1 day after the initiation of therapy with adalimumab.

In HERO, 1,938 patients with active RA were randomized to receive a blinded dose of subcutaneous adalimumab (40 mg) or placebo.

At 2 weeks, all patients began open-label treatment with the active drug.

During the 2-week blinded phase of this trial, patients recorded their pain, functional disability, fatigue, stiffness, and global assessment of disease activity using electronic diaries.

As early as day 1, the e-diary assessments of symptom severity in the adalimumab group showed improvements of 5.7 points on the 100-point visual analog scale, compared with a 0.9-point improvement in the placebo group, a difference that was statistically significant, Dr. Frederick Wolfe wrote in a separate poster session.

Nearly half of the total patient improvements seen with adalimumab therapy occurred during the first 14 days of treatment, and once the placebo patients were switched to active treatment they showed similar improvements, according to Dr. Wolfe of the National Data Bank for Rheumatic Diseases, Wichita, Kan.

Dr. Wolfe disclosed that the National Data Bank for Rheumatic Diseases has received research support from several companies, including Abbott. ■

RA Patients Treated With Adalimumab Who Achieved Clinical Remission

Remission Criteria	Remission At Any Time	Remission for 6 Continuous Weeks
DAS 28 <2.6	38%	21%
Simplified Disease Activity Index ≤3.3	24%	12%
Clinical Disease Activity Index ≤2.8	27%	14%
Tender joint + swollen joint count = 0	30%	16%
Tender joint + swollen joint count = 0 and normal ESR	25%	12%

Notes: Based on data from 6,610 patients; ESR = erythrocyte sedimentation rate.
Source: Dr. Burmester

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