Treating Insomnia May Reduce Osteoarthritis Pain

BY SHERRY BOSCHERT
San Francisco Bureau

SAN FRANCISCO — Cognitive-behavioral therapy for comorbid insomnia in patients with osteoarthritis not only improved sleep but also reduced self-reported pain in a randomized, controlled pilot study of 51 patients.

The improvements in both sleep and pain levels persisted at 1-year follow-up. This is the first study to demonstrate such a duration of benefit from cognitive-behavioral therapy for insomnia in patients with comorbid chronic medical illness of any kind, reported Michael V. Vitiello, Ph.D, and his associates in a poster presentation at the annual meeting of the Gerontological Society of America.

This preliminary study suggests that improving sleep can be "analgesic" in patients with osteoarthritis, said Dr. Vitiello, professor of psychiatry and behavioral sciences at the University of Washington, Seattle. "Techniques to improve sleep should be considered for addition to treatment programs for pain management in osteoarthritis and possibly other pain states," he added.

More than half of older adults develop osteoarthritis, and a majority of these develop significant sleep disturbance. The pain initiates and exacerbates the sleep disturbance, and the disturbed sleep then seems to maintain and exacerbate pain by lowering pain thresholds and amplifying transmission of pain signals, he said.

The cognitive-behavioral intervention included stimulus control techniques, like teaching patients not to go to bed unless they're sleepy.

The study randomized 23 patients (18 women and 5 men) to cognitive-behavioral therapy for insomnia and 28 patients (27 women, 1 man) to a control group that received an intervention focused on attention control, stress management, and wellness. Neither group specifically addressed pain control. Each group met 2 hours per week for 8 weeks for the intervention.

Several measures of insomnia improved significantly in the treatment group but not in controls. Sleep latency (the time it takes to fall asleep) decreased from a mean of 40 minutes to 24 minutes, and nighttime wakefulness decreased from 62 to 25 minutes. Sleep efficiency (the proportion of time in bed spent asleep) improved from 71% to 84%.

Self-reported pain on the Short Form–36 pain scale improved from a score of 56 before cognitive-behavioral therapy to 66 afterward (higher scores indicate less pain), but did not change significantly in the control group. There was a nonsignificant trend toward reduced pain in the treatment group as assessed by the McGill Pain Questionnaire.

After posttreatment results were assessed, 10 patients in the control group crossed over to receive cognitive-behavioral therapy for insomnia. Results of 1-year follow-up in 19 patients from the original cognitive-behavioral therapy group plus the 10 crossovers were nearly identical to the results of the after-treatment assessments, showing duration of the improvements over time, Dr. Vitiello said.

Cognitive-behavioral therapy for insomnia is "not the kind of thing that a physician can do in an office visit, but it can be done by trained health care professionals in relatively quick fashion in group settings," he said. The cognitive-behavioral intervention consisted of a fairly standard series of behavioral manipulations such as sleep restriction (teaching patients to somewhat curtail their time in bed), stimulus control (telling them not to go to bed unless sleepy), sleep hygiene (teaching them how to nap appropriately), and other techniques.

"We always think of sleep disturbance as a symptom, as secondary," Dr. Vitiello said. "What we're learning, really, is that sleep is interactive with illness, and it is not simply a symptom." ■

Obesity Hinders Remission In RA, but Infliximab Helps

BY NANCY WALSH
New York Bureau

BOSTON — Overweight patients with early rheumatoid arthritis were less likely to achieve remission with conventional disease-modifying drugs than patients with a normal body mass index.

Overweight and obese patients fared better if they were treated with a regimen that also included infliximab, Dr. Marjatta Leirisalo-Repo said at the annual meeting of the American College of Rheumatology.

The study enrolled 100 patients with RA of less than 1 year's duration from 15 centers, and randomized them to methotrexate, sulfasalazine, hydroxychloroquine, and prednisone plus either infliximab or placebo for 6 months.

Patients' mean age was 46 years, median duration of symptoms was 4 months, mean number of swollen joints was 15, and mean number of tender joints was 20. All participants had morning stiffness lasting 45 minutes or more.

At baseline, the mean erythrocyte sedimentation rate (ESR) was 33 mm/h and the mean Health Assessment Questionnaire (HAQ) score was 1.

In all, 67% of patients were female and 68% were rheumatoid factor positive. None of the patients had previously been treated with a disease-modifying antirheumatic drug (DMARD).

The DMARD regimens were individually tailored, with maximum dosages of methotrexate of 25 mg/week and maximum dosages of sulfasalazine of 2 g/day. Hydroxychloroquine was given in dosages of 35 mg/kg per week and prednisone in 7.5 mg/day. Patients randomized to also receive infliximab received it in dosages of 3 mg/kg at weeks 4, 6, 10, 18, and 26.

Remission was defined as early-morning stiffness lasting less than 15 minutes; no fatigue, joint pain, or swollen or tender joints; and an ESR less than 30 mm/hour.

At 6 months, 53% of patients had achieved remission, said Dr. Leirisalo-Repo, professor of rheumatology at Helsinki University Central Hospital and the University of Helsinki.

The percentages of patients in remission at 6 months in the infliximab and placebo groups were 58% and 47%, respectively. At 12 months, the corresponding percentages were 58% and 52%.

At 6 months, 63% of placebo patients whose body mass index (BMI) was less than 25 kg/m^2 had achieved remission, compared with 35% of those who were overweight (BMI 25-29.9). Among the obesese (BMI 30 or greater), 25% were in remission.

"No such association was seen in the infliximab-treated patients," Dr. Leirisalo-Repo said. Remission rates in the normal, overweight, and obese groups receiving the biologic agent at 6 months were 55%, 68%, and 46%, respectively.

At 12 months, the remission rates for normal, overweight, and obese patients in the placebo group were 58%, 35%, and 25%, whereas those in the infliximab group were 45%, 74%, and 55%.

It appears obesity is associated with a lack of response to conventional DMARDs, even when these drugs are given in combination, but infliximab was able to overcome this DMARD resistance, Dr. Leirisalo-Repo said. "Fat is proinflammatory, and obesity is characterized by systemic inflammation," she said in a press conference.

Dr. Leirisalo-Repo disclosed that she has received research grants from Schering-Plough Oy in Finland. ■

Gold Therapy in Pregnancy Safe For Severe Rheumatoid Arthritis

BY DENISE NAPOLI
Assistant Editor

Gold therapy seems to be a safe treatment option for severe rheumatoid arthritis in both pregnant women and women who are trying to conceive who must discontinue or forgo other teratogenic therapies, according to findings from a small chart review.

The study looked at 14 women with severe rheumatoid arthritis (RA) who became pregnant while taking gold between January 1992 and January 2006. One woman had stopped taking gold therapy 4 weeks prior to conception; four women stayed on gold throughout the pregnancy.

The 14 women reported 20 pregnancies, according to Dr. Mohammed Almarzouqi, a rheumatologist at the University of British Columbia, Vancouver, and his fellow researchers.

Rheumatoid arthritis was considered controlled if there were fewer than four swollen or tender joints in an assessment by a clinic rheumatologist, and if no new prescription of prednisone or nonsteroidal anti-inflammatory drugs was required.

The mean age at pregnancy was 35 years (range 24-41) and the mean disease duration was 8.5 years. Rheumatoid factor was positive in 9 of 14 women.

The amount of time taking gold prior to conception was less than 1 year in seven pregnancies, 1-2 years in four pregnancies, 25-34 months in two pregnancies, and 2-8 years in seven pregnancies. Six of the patients had 11 pregnancies prior to gold therapy.

Ten patients had never taken methotrexate (MTX) prior to conception, while the other four women had discontinued MTX 8-16 months before conception. Thirteen pregnancies had a mean dose of gold while planning pregnancy and prior to conception of 25-50 mg/week. At the high end of the dosage spectrum, two pregnancies followed a dose of 50 mg/every 2 weeks, and in one pregnancy it was 60 mg/week.

At the low end, two pregnancies had a mean dose of 5-10 mg/week, and two other pregnancies had a mean dose of 10 mg every 2 weeks (J. Rheumatol. 2007; 34:1827-31).

"In our small series of women taking gold for RA while planning pregnancy, 5 of 20 pregnancies ended in spontaneous abortion," wrote the investigators.

However, they pointed out that the mean age of women in their study was 35 years, and that the rate of fetal loss in women over 40 and women near that age is higher than for younger women.

Additionally, two of the reported spontaneous abortions occurred in a woman with a "known chromosomal defect." Two of the women who lost a fetus also reported birth of one healthy baby while taking gold.

The remaining children, including one set of twins, were healthy at birth.

Rheumatoid arthritis flared during just 3 of the 15 full-term pregnancies, and it was controlled in the rest.

Although this study was small, the authors concluded that, in light of the fact that there are so few available disease-modifying antirheumatic drugs that are recommended for pregnant women or women attempting pregnancy, gold is a safe and efficacious rheumatoid arthritis treatment during pregnancy.

The investigators disclosed no conflicts of interest related to this study. ■