Heat/Ice Lack Support

Osteoarthritis *from page 1*

The first of the 25 OARSI recommendations states that optimal management requires a combination of nonpharmacologic and pharmacologic modalities. The remaining recommendations support the use of 11 nonpharmacologic, 8 pharmacologic, and 5 surgical modalities. Each recommendation is rated according to the level of evidence and the strength of the recommendation, expressed as a percentage.

"The guidelines were simplified as much possible to allow people to know which particular therapy would be most useful for an individual patient. I think they are useful in that sense. It's hard to know whether or not they will be used. Guidelines are not very popular in any field," Dr. Altman said in an interview.

The strongest nonpharmacologic recommendation (strength of recommendation, 97%) is patient education about lifestyle modifications to reduce the load on affected joints, along with an emphasis on self-help and patient-driven treatments.

Other nonpharmacologic recommendations include referral to a physical therapist for evaluation and exercise instruction (strength of recommendation, 89%), instruction in optimal use of walking aids (90%), and regular follow-up via telephone (66%). Also recommended for relief of symptoms are some thermal modalities (64%), transcutaneous electrical nerve stimulation (58%), and acupuncture (59%).

The strongest pharmacologic recommendation is for use of the lowest effective dose of an NSAID for symptomatic hip or knee osteoarthritis, but not as a long-term option (93%). Acetaminophen also is recommended as an initial oral analgesic for mild to moderate pain (92%). Intra-articular hyaluronate injections are recommended (64%), but have a wide range of confidence levels (43%-85%) "because there have been very discordant findings," said Dr. Nuki, professor emeritus of rheumatology at the Osteoarticular Research Group, The Queen's Medical Research Institute, University of Edinburgh, Scotland.

The guidelines also state that glucosamine and/or chondroitin sulfate may alleviate some symptoms of knee osteoarthritis, but should be discontinued if no benefit is observed after 6 months (63%).

Among the surgical recommendations is consideration of joint replacement surgery for patients who have not obtained adequate pain relief and functional improvement from a combination of nonpharmacologic and pharmacologic modalities (96%).

In contrast, the evidence did not support the efficacy of ultrasound, massage, or heat/ice therapy. A complete description of how the guidelines were developed appeared in the September 2007 issue of Osteoarthritis and Cartilage (2007;15:981-1000). The full guidelines are scheduled for publication in the February 2008 issue.

The OARSI guidelines are evidence driven, said Weiya Zhang, Ph.D., head of the guideline committee. In contrast, the European League Against Rheumatism (EULAR) guidelines are more clinically driven, as those researchers began with expert consensus to develop key propositions and then searched for evidence to support their recommendations, Dr. Nuki said.

In addition, he noted that EULAR guidelines have a primarily European focus, whereas the OARSI recommendations "aim to be more international in scope."

The OARSI guideline writing committee was made up of 11 rheumatologists, 2 primary care physicians, 1 orthopedist, and 2 experts on evidence-based medicine from six countries.

'The guidelines were simplified as much possible to allow people to know which particular therapy would be most useful for an individual patient. [But] it's hard to know whether or not they will be used.'

OARSI members provided feedback on the strength of draft recommendations, which were then accepted, dropped, or reworded based on the degree of consensus.

All industry-disclosure statements made by committee members were scrutinized. The authors also considered any industry support for the studies they reviewed.

"One of the Cochrane reviews, for example, was industry-sponsored," Dr. Nuki acknowledged.

Modalities were compared, when possible, on the basis of effect size, number needed to treat, relative risk or odds ratio, and cost per quality-adjusted life-year gained, said Dr. Zhang, who is on the musculoskeletal epidemiology faculty at the University of Nottingham (England).

The American College of Rheumatology (ACR) has decided to issue its own guidelines on osteoarthritis of the hip, knee, and hand, said Dr. Altman, who also is working on the ACR guidelines.

"There were will be some overlap between the ACR and OARSI guidelines—we are doing a complete literature review," he said. The OARSI recommendations will be regularly revised as research findings become available.

In addition, "there is a need for researchers to assess the value of combining modalities," Dr. Nuki said at the meeting, which was sponsored by OARSI. "There is also an overwhelming need for new modalities and therapies." ■

Meniscal Damage Shown to Lead To Radiographic Knee Arthritis

BY DIANA MAHONEY

New England Bureau

BOSTON — Preventing meniscal damage should be a top therapeutic priority in the fight against knee osteoarthritis, Dr. Martin Englund said at the annual meeting of the American College of Rheumatology.

Dr. Englund of Boston University and his colleagues in the Multicenter Osteoarthritis (MOST) study demonstrated for the first time that meniscal damage without surgical resection is a potent risk factor for the development of tibiofemoral radiographic knee osteoarthritis (OA).

No studies have demonstrated that meniscal damage without surgical resection is associated with the development of incident radiographic knee OA (ROA), he said.

The researchers conducted a nested case-control investigation comprising patients enrolled in the MOST study, which is a prospective observational study of 3,026 individuals older than age 50 who have or are at high risk of developing knee OA, excluding those who have had previous knee surgery. As per the MOST protocol, study participants underwent standardized, weight-bearing fixed-flexion x-rays at baseline and at 30 months, and these x-rays were read paired by a musculoskeletal radiologist and rheumatologist who were blinded to clinical and MRI data, Dr. Englund said.

For the current study, 52 knees that had no tibiofemoral ROA at baseline but had evidence of grade 2 or higher ROA on the Kellgren-Lawrence scale during the 30-month follow-up were case knees, and 130 knees drawn from the same source population but with no tibiofemoral ROA at follow-up served as controls.

To assess the baseline meniscal status of the knees included in the analysis, two musculoskeletal radiologists who were blinded to the case-control status of the knees reviewed coronal and sagittal fast spin echo MRI images and evaluated each for meniscal damage using a collapsed scale, whereby knees with no meniscal damage were graded as 0, those with a minor tear were considered grade 1, and those with a nondisplaced tear, displaced tear, maceration, or destruction were considered grade 2.

"Meniscal damage at baseline was significantly more common in cases than in controls," Dr. Englund reported. Specifically, meniscal damage was evident in 52% of the case knees, compared with 18% of the control knees. When knees with meniscal damage were compared with knees that had a normal meniscus at baseline, the adjusted odds ratio for ROA at 30 months was 4.3 for knees with a meniscal score of 1 and 7.8 for those with a meniscal score of 2.

The findings highlight the need for better treatments and prevention of meniscal damage. Dr. Englund disclosed no financial conflicts related to his presentation. ■

Addressing Insomnia May Help Reduce OA-Related 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, reported Michael V. Vitiello, Ph.D.

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, Dr. Vitiello and his associates reported 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.

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 the control group. Sleep latency (the time it takes to fall asleep) decreased from a mean of 40 minutes before therapy 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 (with a higher score indicating less pain), but did not change significantly in the control group. There was a nonsignificant trend toward reduced pain in the treatment group as measured 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. ■