

EULAR Straddles the Data-Opinion Gap on Hip OA

BY CHRISTINE KILGORE
Contributing Writer

New recommendations from the European League Against Rheumatism on the management of hip osteoarthritis come from two camps—the best available research evidence, and expert opinion/current practice—and these camps are not always in agreement.

Discordances between expert opinion and the literature demonstrate the need for more clinical trial data specifically on hip osteoarthritis (OA) and make EULAR's 10 treatment recommendations truly an "open recommendation set" that should provide a frame of reference for physicians, said Maxime Dougados, M.D., who led the multidisciplinary task force that wrote the recommendations.

"We provide 10 take-home messages, but without providing any strict guidelines or a treatment algorithm," said Dr. Dougados, chief of rheumatology at the Hospital Cochin in Paris.

Total hip replacement is not supported by strong research evidence, for instance, but "nevertheless, all the experts consider it of clinical benefit," he said.

In their report, he and his colleagues note that "more clinical trial data specific to hip OA are required, especially because some interventions appear to show different efficacy according to the joint site" (*Ann. Rheum. Dis.* 2005;64:669-81).

Despite shortcomings in research, the recommendations are useful and "eminently reasonable," said Marc C. Hochberg, M.D., who helped develop the American College of Rheumatology's recommendations for managing osteoarthritis of the hip and knee. ACR's recommendations were published in 2000.

The recommendations, each of which includes an analysis of cost effectiveness, indicate that optimal management of hip OA should be individually tailored; that it requires a combination of nonpharmacologic and pharmacologic treatment modalities; and that nonpharmacologic treatment should include education, exercise, devices such as insoles, and weight reduction if necessary.

The experts were asked to assess separately the strength of each intervention based on research evidence and clinical expertise. Of the 21 interventions reviewed in the new recommendations, 15 were positively supported by evidence of various grades. However, only 15% of the hip OA studies were randomized controlled trials.

Here's a look at some of the recommendations:

► **Acetaminophen** is the oral analgesic of first choice for mild to moderate pain, and if successful, is the preferred long-term oral analgesic.

► **NSAIDs** should be added or substituted, at the lowest effective dose, in patients who respond inadequately to paracetamol. In patients with increased gastrointestinal risk, nonselective

NSAIDs plus a gastroprotective agent, or a selective cyclooxygenase-2 inhibitor, should be used.

► **Opioid analgesics**, with or without acetaminophen, are useful alternatives in patients in whom NSAIDs (including coxibs) are contraindicated, ineffective, and/or poorly tolerated.

► **Joint replacement** has to be considered in patients with radiographic evidence of hip OA who have refractory pain and disability.

► **Osteotomy** and joint preserving surgical procedures should be considered in young adults with symptomatic hip OA, especially in the presence of dysplasia or varus/valgus deformity.

► **Diacerhein and avocado soybean unsaponifiable (ASU)** were found to "have a symptomatic effect and low toxicity." However, their "effect sizes are small, suitable patients are not well defined, and structure-modifying effects are not well established," according to the recommendations. In any case, such guidance has limited applicability in the United States, given the lack of availability of these two compounds, noted Dr. Hochberg, head of rheumatology and clinical immunology at the University of Maryland.

Three interventions—acetaminophen, glucosamine, and exercise—had no direct, hip-specific evidence to support their use, and another three interventions—ASU, diacerhein, and intraarticular steroid injection—had either evidence showing no symptomatic benefit or inconclusive evidence. Still, based on clinical experience, these treatments were deemed effective and have been recommended for knee OA.

"There may be true treatment differences for OA according to the site affected," wrote the task force members, who had excluded from the literature review most of the studies that combined hip and knee OA.

Acetaminophen—one of the three interventions with no direct efficacy data—received a relatively high mean "strength of recommendation" rating (79%) based on clinical expertise, for instance.

Total hip replacement was similar: It received a low "strength of recommendation" rating based on research evidence (a C on an A-D scale), but a high rating (86%) based on clinical expertise.

Opioids, on the other hand, received a high rating (A on an A-D scale) based on research evidence but a low rating (44%) based on clinical expertise. NSAIDs were rated highly with respect both to research evidence of efficacy (A) and to clinical expertise (80%).

"It's clear now that NSAIDs might have a controversial toxicity," said Dr. Dougados in an interview. "But these drugs are very powerful and very efficient. I think prescriptions will continue but with more emphasis on decreasing dose and duration."

We [need to] answer the question of when exactly to recommend and perform THR. ■

Quantitative MRI Assessment Method Looks at Whole OA Joint

BY KERRI WACHTER
Senior Writer

DESTIN, FLA. — While MRI applications for evaluating osteoarthritis are currently limited, methods are being developed that will eventually enable quantitative assessment of the disease, according to Charles Peterfy, M.D., who spoke at a rheumatology meeting sponsored by Virginia Commonwealth University.

Current applications of MRI including its use to noninvasively guide cartilage repair. The high-resolution delineation of cartilage defects and abnormalities that MRI provides can help guide patient selection and preoperative planning. Postoperatively, MRI can be used to monitor the integrity and durability of the repair, said Dr. Peterfy, a radiologist specializing in musculoskeletal imaging and the chief medical officer of Synarc Inc., a radiology services company.

In addition, newer applications of MRI "allow us, for the first time, to visualize all of the components of the joint simultaneously," he said. MRI can be used to visualize menisci, ligaments, synovitis, bone abnormalities, and periarticular abnormalities.

The result is that instead of assessing in an isolated fashion any one aspect of the disease's effect, physicians can analyze the whole joint. This approach is facilitated by the development of a semiquantitative scoring system for evaluating osteoarthritis using MRI. Dr. Peterfy was one of the authors of the Whole-Organ Magnetic Resonance Imaging Score (WORMS) method for assessing the structural integrity of the knee.

The WORMS method can be used to evaluate independent articular features in-

cluding: cartilage signal and morphology, subarticular bone marrow abnormality, subarticular cysts, subarticular bone attrition, marginal osteophytes, medial and lateral meniscal integrity, anterior and posterior cruciate ligament integrity, medial and lateral collateral ligament integrity, synovitis, loose bodies, and periarticular cysts/bursae.

One the most promising areas of MRI research centers around bone marrow edema-like abnormalities. These edema-like signals may represent pulsion of joint fluid through breaks in the articular surface, localized inflammation, or changes associated with trauma due to biomechanical incompetence of the articular surface.

Whatever their etiology, bone marrow edema abnormalities behave like microtrauma, said Dr. Peterfy, who is also on the advisory board for MagneVu, the maker of portable MRI units.

Using a WORMS-like evaluation method, bone marrow edema abnormalities have been shown to correlate with pain and collagen II breakdown and even to predict joint space narrowing on x-ray, and cartilage narrowing. In addition, these findings have been shown to progress very rapidly—even in as few as 3 months.

In a study of 378 patients treated at several clinical centers worldwide, 82% had bone marrow abnormalities on MRI at baseline (as scored on the bone marrow subscale of WORMS), said Dr. Peterfy. The patients were followed for 3 months, at which time, 34% of those with baseline abnormalities had progression of these abnormalities. This change correlated well with urine concentrations of collagen type II degradation product (CTXII), which results from cartilage breakdown (*Arthritis Rheum.* 2005 [in press]). ■

ACR's Tender Point Criteria for Fibromyalgia Flawed, Expert Says

DESTIN, FLA. — The tender point criteria commonly used to diagnose fibromyalgia are not useful and in fact may even explain why the disease appears to disproportionately affect women, said Daniel Clauw, M.D., speaking at a rheumatology meeting sponsored by Virginia Commonwealth University.

According to the American College of Rheumatology's 1990 classification criteria, patients must have both widespread pain and tenderness in 11 of 18 tender points in order to be diagnosed with fibromyalgia.

Yet "tender points merely represent areas of the body where everyone is more tender," explained Dr. Clauw, the executive director of the Chronic Pain and Fatigue Research Center at the University of Michigan in Ann Arbor. Fibromyalgia patients and healthy individuals were found to have different thresholds of pain in those tender points. These two groups also had different thresholds of pain in areas not thought to be tender—the fore-

head and fingernails, for example—as at the recognized tender points. In addition, the cutoff of 11 out of 18 tender points is arbitrary. "We know that tenderness varies a great deal from day to day and week to week, especially in women," he said.

In clinical practice, many physicians are realizing the arbitrary nature of the diagnostic criteria. The diminished role of tender points represents a shift in the way that they view the disorder. In the past, the disorder was considered a discrete illness with pain and focal areas of tenderness. In more recent years, fibromyalgia has been appreciated as part of a larger continuum, with many somatic symptoms and diffuse tenderness all over the body—not just at tender points.

Tender points are "not even a good way to measure tenderness," as study findings suggest that the number of tender points correlates better with a patient's general stress than with pain, Dr. Clauw pointed out.

—Kerri Wachter