

# Try Nondrug Options To Relieve OA Pain

BY DAMIAN McNAMARA  
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BIRMINGHAM, ENGLAND — Structural modification for treatment of osteoarthritis maybe worthwhile because it offers more than just symptom relief, according to a presentation at the annual meeting of the British Society for Rheumatology.

A multitude of nonpharmacologic options for osteoarthritis which include mechanical, behavioral, and nutritional therapies, can be pursued prior to drug treatment, Dr. Paul Dieppe said.

For example, findings from small studies support the theory that mechanically shifting the load off an affected lower-extremity joint modifies structure and alleviates symptoms of osteoarthritis.

Osteotomy, shoe wedging, and knee braces, as well as weight loss in the obese, are other options. "If we kept thin, ate sensibly, maintained good muscle strength, avoided injuring our joints, and wore sensible shoes ... there might not be as much osteoarthritis," said Dr. Dieppe, professor of rheumatology and dean of the faculty of medicine, University of Bristol (England).

Dr. Dieppe says he is unhappy when people borrow the term "disease-modifying treatment" from the rheumatoid arthritis field and apply it to osteoarthritis. "We go on pretending that osteoarthritis is related to rheumatoid arthritis, and just a bit different. What might disease-modifying treatment mean in osteoarthritis? We are talking about structure modification."

Structural changes can be achieved with Ilizarov frames—more commonly used by orthopedists to correct limb length discrepancies. The frames pull and increase the space between joints. "Most of the data [so far have come] from the ankle joint," Dr. Dieppe said. "The trials are small in numbers, but suggest very positive outcomes with recovery of the joint space in many cases, as well as symptom relief."

Success with these frames provides proof of the concept that if the joint is unloaded, there is structure and symptom modification. "It looks gruesome, but clearly, it can work."

Investigators should assess crepe shoes, shoe wedging, and other less invasive interventions, he added.

Osteoarthritis of the knee begins when a kinematic change occurs and shifts the load of the joint to a region unaccustomed to the new loading, according to a review article (Curr. Opin. Rheumatol. 2006;18:514-8). The authors state that the progression of osteoarthritis thereby is associated with the degree of this increased load during ambulation.

In terms of nutritional modification, trials are underway to assess any roles for vitamin C or vitamin D to slow the pathogenesis or progression of osteoarthritis, Dr. Dieppe said. Altering the course of osteoarthritis with certain dietary supplements does not work, he said. "That chondroitin or glucosamine causes structural changes is a silly idea. The relationship between symptom change and structural change requires further study." ■

# Surgery Eases Joint Discomfort in Juvenile Idiopathic Arthritis Patients

BY DAMIAN McNAMARA  
Miami Bureau

BIRMINGHAM, ENGLAND — Surgery can be an effective pain-relieving strategy for children with hip or knee joints severely disabled by juvenile idiopathic arthritis.

Total hip replacement is a good pain-relieving operation, and sometimes is indicated even in young patients, Dr. Johan Witt said at the annual meeting of the British Society for Rheumatology.

"Younger patients are better off getting a hip replacement while they still have bone to put this into," said Dr. Witt, a consultant orthopedic surgeon at the University College of London Hospitals.

Joint replacements have the potential to last a long time, but close monitoring of the patients is warranted. Synovectomy is an option that can help some patients with juvenile idiopathic arthritis (JIA), but it is used less and less frequently. "I've probably done one in the past year," he said. "This requires intensive rehab to get anything out of it."

Another option for a subgroup of patients is hip resurfacing. "There has been a push from patients over time, including a group of JIA patients," he said. This procedure is indicated only for slightly older patients in whom the disease has largely resolved. "Some patients have an unrealistic view of what resurfacing can do. With some of the marketing around this, patients get confused."

Another choice, osteotomy, rarely is indicated for patients with JIA. In this population, the joint often is too stiff and severely involved, and the bone too osteopenic.

Hip involvement is the most common cause of limited mobility in JIA, affecting 30%-60% of patients. The ultimate results of nontreatment include a fixed flexion deformity, adduction, and greater internal than external hip

rotation. Other potential consequences of hip deformity are excessive lumbar lordosis, fixed flexion deformity of the knees, genu valgum, and external tibial torsion.

Therefore, early identification of JIA is essential. "We need to get on top of these situations early," he said. "The younger you are when arthritis starts, the more likely it is to lead to persistent disability in later life."

Consider preoperative disease activity, upper limb involvement, and adjacent joint involvement, which can be important considerations for rehabilitation. Assess range of motion when a patient is under anesthesia.

In arthritic knees, Dr. Witt said that intra-articular steroids in combination with physiotherapy and rehabilitation are the front-line protocol. Surgery is a second-line option if the first interventions do not yield significant improvements.

Leg length discrepancies are common in children with knee involvement. A discrepancy or a valgus deformity can be corrected with epiphysodesis. "Remember this option," Dr. Witt said. "It is a painless way of correcting this condition. It takes advantage of growth potential."

Fixed flexion deformity (FFD) in combination with a valgus is a common presentation of an arthritic knee. "We are generally good at correcting the FFD. If it's a severe deformity, such as a 60-degree FFD, it may require some soft-tissue release in addition to knee replacement," he said.

In addition, "extreme osteoporosis is associated with active disease and is the enemy," Dr. Witt said. "Many of these patients have been immobile for a long time, and immobility is bad for the skeleton."

Total knee replacement studies in children with JIA all have had short follow-up. Studies of long-term outcomes of knee replacement are warranted, Dr. Witt said. ■

# TNF Inhibitors Improve Mortality in Rheumatoid Arthritis

BY NANCY WALSH  
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BARCELONA — Treatment with tumor necrosis factor blocking drugs has been shown for the first time to improve mortality in rheumatoid arthritis, Dr. Lennart Jacobsson said at the annual European Congress of Rheumatology.

Patients with rheumatoid arthritis (RA) have an increased mortality, compared with the healthy general population, particularly from cardiovascular causes, and methotrexate treatment has been shown to confer a survival benefit. This benefit now has been extended to treatment with anti-tumor necrosis factor (TNF) drugs in a cohort of 921 Swedish patients enrolled in the South Swedish Arthritis Treatment Group register, said Dr. Jacobsson of the department of rheumatology, Malmö University Hospital.

They were compared with 1,016 patients with RA in the same area of Sweden who were not treated with anti-TNF drugs, and were found to have an adjusted hazard ratio (HR) of 0.65 for death after controlling for age, sex, disability, and baseline comorbidities. "There was a 35% risk reduction with treatment with anti-TNF therapy."

There were 188 deaths in the combined groups during 7,077 patient-years. Of these, 63 deaths were in men during 1,817 patient-years, and 125 were in women during 5,260 patient-years. After controlling for age, disability,

and comorbidity, mortality was significantly reduced in women treated with anti-TNF drugs, with an adjusted HR of 0.52, but not in men, whose adjusted HR was 0.95 (Ann. Rheum. Dis. 2007;66:670-5).

When the mortality rates in women who had RA with and without anti-TNF therapy were compared with those of the general Swedish female population, there was an increased risk of death of 70%-80% in those not treated with the drugs. "But in women with RA treated with anti-TNF therapy, the risk is comparable with that of women of the same age in the general Swedish population," Dr. Jacobsson said. The lack of significance in men could reflect insufficient numbers or the men's higher baseline risk for death, he said.

There are numerous unanswered questions about the benefits of the TNF blocking drugs. "Is there a role for TNF inhibitors in non-RA groups to prevent cardiovascular events? Are the effects of TNF blockers additive to those of methotrexate? Preliminary data from our register indicate that this is the case," he said.

This question of potentially additive cardiovascular benefits of TNF blockers and methotrexate was addressed in a separate presentation at the meeting.

Dr. Gurkirpal Singh of Stanford (Calif.) University performed a nested case-control study using data from Medi-Cal, the Medicare program for California. The patients with RA who received a TNF inhibitor, methotrexate, or

other disease-modifying antirheumatic drugs (DMARDs) between January 1999 and June 2005 were included.

Among the 19,233 RA patients who were identified, 13,383 were taking methotrexate, 14,958 were on other DMARDs, and 4,943 were receiving a TNF inhibitor. During 74,006 patient-years of follow-up, there were 441 cases of acute myocardial infarction. Cases were risk set matched with four controls for age, gender, and date of MI.

Current exposure to TNF inhibitors, as monotherapy or in combination with methotrexate or other DMARDs, was compared with methotrexate monotherapy, and all analyses were adjusted for multiple potentially confounding risk factors including surrogate variables for smoking and dyslipidemia. Analysis revealed that combination TNF inhibitor-methotrexate treatment significantly reduced the risk of acute MI, compared with methotrexate monotherapy, with an adjusted relative risk (RR) of 0.20, Dr. Singh reported.

No statistical differences were seen when combination TNF inhibitor-methotrexate therapy was compared with TNF blocking monotherapy (RR 1.17), when compared with anti-TNF therapy combined with other DMARDs (RR 1.78), or for other DMARD therapies without methotrexate (RR 0.88). Combined TNF inhibitor-methotrexate therapy is associated with a reduction in the risk of acute MI by 80%, compared with methotrexate monotherapy in patients with RA, Dr. Singh concluded. ■