ACL Repair Recipients at Risk for Clinical OA

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WASHINGTON — Patients who undergo anterior cruciate ligament reconstruction may be at increased risk of developing clinical osteoarthritis, according to results from a 10-year follow-up study of 90 patients.

Interestingly, many patients reported not being aware of their condition, and nearly half noted that it had not affected their activity level, according to Justin Roe, M.D., who presented the findings at the annual meeting of the American Academy of Orthopaedic Surgeons.

Patients initially underwent endoscopic anterior cruciate ligament (ACL) reconstruction with patellar tendon autograft and interference screw fixation. The mean age was 25 years, and the patients were evaluated annually for 5 years, and again at 7 and 10 years after surgery, said Dr. Roe of the North Sydney Orthopaedic Sports Medicine Centre, Australia.

Outcomes were measured using the International Knee Documentation Committee (IKDC) Standard Evaluation and Lysholm knee scoring. Radiographs were taken at 2, 5, 7, and 10 years after surgery.

Five-year data were previously published. At 10 years, 84 patients still had intact grafts (six had ruptures); of these, 75 were evaluated. In that group, 18 patients had a contralateral rupture and 8 had surgery for meniscal or chondral symptoms.

Based on scores and radiographs, 48% had mild to moderate evidence of osteoarthritis, said Dr. Roe. At 2 years, 33% had an increase in pain when kneeling; by 10 years, 58% said they felt increased pain. A quarter of the patients had a loss of range of extension, compared with the contralateral knee, but it was less than five degrees in 20% of that group.

On laxity testing, 97% had a grade of 0-1 on Lachman and pivot shift testing, and 81% had less than 3 mm of tibial displacement.

Despite the clinical findings, 96% of patients said they felt their knee function was normal, and about half were still taking part in moderate to strenuous activity. The patients who were not as active said it was because of other lifestyle issues, Dr. Roe said.

Predictors of abnormal knee radiographs included increased age at surgery, increased laxity at 2 years and swelling with activity at 10 years, he said.

It is not clear why osteoarthritis is appearing in these knees. There is an injury to the entire knee with an ACL rupture. It's probable that the injury—and not the subsequent surgery—contributed most to the development of arthritis, he surmised. ■

COX-2 Inhibitor Spares Kidneys In Liver Cirrhosis

Short-term use of celecoxib did not affect renal function in patients with decompensated liver cirrhosis and ascites who participated in a small randomized trial.

In the double-blind study of 28 patients conducted by Joan Clària, Ph.D., of the University of Barcelona (Spain) and his colleagues, the glomerular filtration rate, renal plasma flow, and serum creatine levels worsened significantly in patients who received five therapeutic doses of naproxen during a 3-day period, compared with baseline values. None of these changes occurred in patients who received five therapeutic doses of celecoxib (Celebrex) or placebo (Hepatology 2005;41:579-87).

Naproxen significantly inhibited platelet aggregation and ex vivo thromboxane B2 synthesis and decreased urinary excretion of prostaglandin E2. Naproxen patients had significantly reduced diuretic and natriuretic responses to furosemide, which normally increases urine volume and urinary sodium excretion. Short-term celecoxib therapy does not reduce platelet or renal function, or response to diuretic drugs, in patients with decompensated cirrhosis, the authors concluded.

The analysis excluded seven patients who had hepatorenal syndrome at baseline and three patients who did not have measurements available to calculate glomerular filtration rate or renal plasma flow. A total of 20 patients who were initially randomized did not receive a study drug because their plasma renin activity was less than 4 ng/mL/per hour.

—Jeff Evans