Surgery Plus PT Similar to PT Alone for Adults with Meniscal Tear and Osteoarthritis

Clinical Question
Is surgery or physical therapy (PT) more effective for patients with osteoarthritis and a meniscal tear?

Bottom Line
For middle-aged or older adults with osteoarthritis and a meniscal tear, there seem to be no significant differences between arthroscopic surgery plus PT and PT alone. A subset of patients who do not respond well to PT alone will eventually have surgery, but if they cross over to surgery within six months of beginning PT, their 12-month outcomes are not worse for the delay. (Level of Evidence = 1b)

Synopsis
For patients with osteoarthritis and a meniscal tear, surgery is the standard of care in the United States. This study randomized 351 persons 45 years or older with a meniscal tear and osteoarthritis on magnetic resonance imaging to receive surgical therapy plus PT or PT alone. Surgery consisted of arthroscopic partial meniscectomy and removal of loose bodies. PT consisted of land-based progressive home exercise that addressed inflammation, range of motion, strengthening, and aerobic conditioning. The mean age of patients was 58 years, 43% were men, and 85% were white. Analysis was by intention to treat, and groups were balanced at the start of the study. Interestingly, the left knee was more likely to be involved (58%), perhaps because that is the plant or pivot leg for right-handed persons. For example, right-handed high jumpers or long jumpers usually jump from the left leg. The primary outcome was improvement in the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score. There was no difference between the amount of improvement in the WOMAC score for patients in the surgery group compared with those in the PT group (20.9 points for surgery vs. 18.5 points for PT; difference = 2.4 points; 95% confidence interval, –2.4 to 6.5). There were no differences in pain or quality-of-life scores, either. Of the patients who were assigned to PT, approximately 30% crossed over to surgery within six months. These patients had less early improvement with PT than those who stuck with the PT program.

Study Information
Study design: Randomized controlled trial (nonblinded)
Funding source: Government
Allocation: Concealed
Setting: Inpatient (any location) with outpatient follow-up

MARK H. EBELL, MD, MS
Associate Professor
University of Georgia
Athens, Ga.