Arthroscopic surgery for knee osteoarthritis? Just say no

For most patients with osteoarthritis of the knee, arthroscopic surgery offers little benefit.

**Practice changer**
Do not recommend arthroscopic surgery to adults with osteoarthritis of the knee. Treat knee pain with medical and physical therapy instead.¹,²

**Lavage and debridement: The (questionable) effects**
Arthroscopic knee surgery involves lavage (to remove particulate material, such as cartilage fragments) and debridement (to smooth the articular surfaces). Theoretically, this widely used surgery reduces synovitis and improves joint motion, resulting in a decrease in pain and an improvement in function. But what does the latest research tell us?

A randomized controlled trial (RCT) by Moseley et al in 2002 found arthroscopic knee surgery to be of no benefit for moderate to severe OA.² Because this finding was so contrary to current practice, the authors’ conclusion was not widely accepted. Arthroscopic surgery continued to be used for moderately severe knee arthritis.³ Indeed, the 2008 guidelines from the American Academy of Orthopaedic Surgeons (AAOS) state that “arthroscopic partial meniscectomy or loose body removal is an option in patients with symptomatic OA of the knee who also have primary signs and symptoms of a torn meniscus and/or a loose body.”⁴

**Knee pain related to OA is a common complaint in the office setting, and primary care physicians use many medical and physical interventions to manage the symptoms. If these fall short in patients with more advanced disease, however, physicians often recommend an orthopedic surgery consult to consider surgical management.**

**Do you refer patients with knee OA for arthroscopic surgery?**

- Never
- Rarely
- Often
- Always

Go to [www.jfponline.com](http://www.jfponline.com) and take our Instant Poll
These findings echo those of Moseley et al’s 2002 single-blinded RCT, in which researchers assigned 180 patients to arthroscopic surgery or sham surgery, and found surgery to be of no benefit.² That study was criticized because of its methodology; the researchers used an outcome measure that was not validated and failed to exclude patients with more advanced disease and malalignment, who might be expected to have a poor response to surgery. The 2008 study by Kirkley et al had no such methodological flaws and, in retrospect, it appears that these perceived flaws did not account for the negative findings of the 2002 study.

WHAT’S NEW?

● No room for doubt

Evidence from the new RCT confirms the findings of the 2002 trial. It clearly shows that arthroscopic surgery for knee OA is not beneficial, even in patients with mechanical symptoms. Kirkley’s study avoided the criticism of the earlier study by using a validated outcome measure, excluding patients with malalignment, and performing a subgroup analysis of patients with mechanical symptoms. We now have 2 studies that show no benefit from arthroscopic knee surgery in patients with OA, whether or not they have mechanical problems.

So what can you do for patients with moderate to severe knee pain from osteoarthritis? Offer them medical and physical therapy (TABLE) and the assurance that there is nothing to be gained from arthroscopic surgery.

CAVEATS

● Large meniscal tears: An exception to the rule

These findings do not necessarily apply to patients with evidence of large meniscal tears.
cal tears. This subset of knee OA patients may benefit from surgical management.

CHALLENGES TO IMPLEMENTATION

What to say to patients seeking a referral

Patients may have read about arthroscopic knee surgery or know someone who underwent the procedure and come to you asking for a referral to an orthopedic surgeon. In such a case, we suggest a straightforward approach.

Discuss arthroscopic surgery’s proven lack of benefit and offer equally effective conservative therapies. For patients who may be eligible for a total knee replacement, a referral to an orthopedic surgeon for evaluation is appropriate.

Acknowledgements

The PURLs Surveillance System is supported in part by Grant Number UL1RR024999 from the National Center for Research Resources, a Clinical Translational Science Award to the University of Chicago. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Center for Research Resources or the National Institutes of Health.

References