

Surgery or Nonsurgical Management for Degenerative Rotator Cuff Tears?

In a randomized trial, surgery conferred benefit only in patients with full-thickness tears.

Patients with rotator cuff tears and subacute or chronic shoulder pain often are referred for surgery if they don't respond to conservative treatment. In clinical trials, nonsurgical and surgical management generally have yielded similar outcomes for patients with partial-thickness tears. But for those with full-thickness tears, a few trials have shown better outcomes with surgery.

This latest trial included patients who presented with at least 3 months of subacromial shoulder pain (mean, 1 year) and rotator cuff tears not attributable to high-energy trauma. All patients initially underwent a 3-month course of physical therapy, and 187 patients (mean age, 56) without satisfactory improvement were randomized to continued conservative management or surgery. On magnetic resonance imaging, rotator cuff tears were full thickness in half of patients. Outcomes were assessed at 2 years.

In intent-to-treat analysis of patients with partial-thickness tears, pain and function scores improved similarly in the surgical and nonsurgical groups. However, in those with full-thickness tears, improvement in pain was significantly greater with surgery than with nonsurgical treatment (i.e., mean decrease of 37 vs. 24 points on 100-point pain scale); in full-thickness patients, shoulder function scores also improved to a greater extent with surgery. Although 12 non-surgical patients crossed over to surgery and 36 patients randomized to surgery opted not to have it, per-protocol analyses and intent-to-treat analyses yielded similar outcomes.

COMMENT

These results generally support those of previous studies. In middle-aged and older patients with subacromial pain and degenerative rotator cuff tears who have undergone physical therapy, surgery tends to benefit only those with full-thickness tears. However, some patients improve without surgery, so that approach also is reasonable. — **Allan S. Brett, MD**

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Sederqvist S et al. Non-surgical and surgical treatments for rotator cuff disease: A pragmatic randomised clinical trial with 2-year follow-up after initial rehabilitation. Ann Rheum Dis 2021 Jun; 80:796. (<https://doi.org/10.1136/annrheumdis-2020-219099>)