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AAOS: Most With Massive Rotator Cuff Tears Can Avoid Surgery

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How often do conservative measures provide satisfactory results for patients with massive rotator cuff tears? About three times out of four, according to a North Carolina orthopedic surgeon who wanted to be able to answer this question for his patients at Blue Ridge Bone & Joint in Asheville, but could not find information anywhere in the literature.

Gordon Groh MD will present results of his own inquiry as a poster at the annual meeting of the American Academy of Orthopaedic Surgeons, now under way in Chicago.

Groh analyzed all 117 patients seen for symptomatic, chronic, massive rotator cuff repair treated between 2009 and 2011, who were initially offered conservative measures (subacromial steroid injection, over-the-counter anti-inflammatory medications, and physical therapy with emphasis on anterior deltoid strength). Ultimately, 87 of these patients (75%) were able to forgo surgery. After 12 months, pain scores improved from a pretreatment mean of 6.1 to 2.6 post-treatment, mean forward elevation increased from 114 degrees to 137 degrees, and mean UCLA scores increased from 17 to 27.

These results were significantly better than those for the 30 patients who ultimately required surgery. What determines the difference? The North Carolina orthopedist plans further analysis to assess variables that predict which patients are likely to show satisfactory results from nonsurgical interventions.

Most who had surgery underwent reverse total arthroplasty, for which he says "the literature is replete with good outcomes," adding that his manuscript pending publication in the *Journal of Shoulder and Elbow Surgery* will reveal complication rates lower than previously reported.

For patients with glenohumeral arthritis, reports about total shoulder arthroplasty at the AAOS meeting suggest positive results, but not permanent ones. A team headed by Mark Frankle MD assessed 83 patients with shoulder arthritis treated at the Florida Orthopaedic Institute between 2004 and 2006. They found a greater than five-fold improvement in pain scores (Visual Analogue Scale down from 6.6 to 1.3) and nearly a doubling of shoulder function (American Shoulder and Elbow Score 22 to 39).

However, nothing good will last forever for many relatively young patients who have shoulder replacement. An eight-center study from France and Germany found that total shoulder arthroplasty led to improvements in functional outcome (assessed by forward flexion and Constant score) in 98% of 52 patients younger than 55. However, as to the primary outcome—revision—results were not so promising.

About a third will need a repeat procedure if they expect a comfortable retirement: The 10-year survival of the implants was only 62.5%.