

# AAOS Publishes Clinical Practice Guidelines for Rotator Cuff Tears

It seems like everybody knows someone who has had a rotator cuff problem. With over half a million new rotator cuff injuries or tears each year, it's highly likely you may find yourself in this same group. Older adults (65 years old and older) have the highest incidence of rotator cuff tears. Research shows that more than half of the adults in this age group have a rotator cuff tear -- many without even knowing it!

With the aging of the many Baby Boomers (folks born between 1946 and 1964), it's likely that the number of patients with rotator cuff disease showing up in the surgeon's office will continue to increase. Surgeons are anticipating this problem and asking how to optimize treatment?

The answer isn't straightforward (do this or do that) because there are so many issues that affect the decision-making process. For example, when should patients receive conservative (nonoperative) care and when should they have the tear repaired surgically? Should treatment vary depending on when the tear occurred (i.e., is the tear acute meaning it happened recently or is it chronic -- it's been there a long time).

Should everyone who is recommended to have surgery really go through with it? What if they have known risk factors that predict a poor result (like people who smoke or who have diabetes or other serious health concerns)? And what about the surgery? Is there one procedure that works best for each type, size, shape, and location of tears? Does everyone benefit equally from the same rehab program (either when part of a conservative program or post-operatively after surgery)?

There are so many questions to consider, the American Academy of Orthopaedic Surgeons has published Clinical Practice Guidelines (CPGs) for the care and management of rotator cuff tears. The guidelines consist of 14 recommendations based on all available current (high-quality) evidence in the literature. The full guidelines are available on line at the American Academy of Orthopaedic Surgeons website ([www.aaos.org/guidelines](http://www.aaos.org/guidelines)) but we will summarize them for you here.

First of all, there is agreement among all the physicians who came up with these guidelines that "if it's not broke, don't fix it." In this case that means, if a person has a rotator cuff tear but it doesn't hurt and doesn't bother them, then don't do surgery to repair it. Anyone who does have painful symptoms, loss of motion, decreased strength, and altered function should consider having surgery.

The evidence was inconclusive more often than not. Answers to many questions are lacking. Does exercise help? If so, what kind of exercise? Should you have the joint injected with a steroid and numbing agent? Does ice work better than heat? When would electrical stimulation be effective? When should you take a nonsteroidal antiinflammatory medication? These are questions that must be investigated further before any recommendations can be made.

And that's just on the side of conservative care. When it comes to recommendations about surgery, the waters get even murkier. Should the surgeon use suture anchors to reattach the torn tendon to the bone or is it better to drill a tunnel through the bone and thread the tendon through to anchor it down? Should the surgeon perform the surgery using an open incision, arthroscopic repair, or the more recently developed mini-open approach? Once again, the evidence is inconclusive on these points.

Okay, so how about after rotator cuff surgery? Do patients really need to wear those slings and pillows that hold the arm away from the body? When should range-of-motion exercises be started after surgery? How quickly can motion and strength be progressed? What's the best way to manage pain during all this treatment? Don't know, don't know, don't know.

What did the evidence support? There was weak support for doing surgery to repair chronic, full-thickness rotator cuff tears that cause pain and other disabling symptoms. Early surgery following the acute tear may have better outcomes than waiting until the problem becomes chronic. If the tear is only a partial one and doesn't go all the way through the tendon, then

conservative care with inflammatory meds and physical therapy may really be acceptable choices.

As for negative predictive risk factors (e.g., smoking, diabetes, infection) the panel could not tell surgeons they should or shouldn't advise against surgery unless the MRI showed a significant tear, the patient was elderly, or the patient had a Worker's Compensation claim. And these risk factors did not predict a poor outcome 100 per cent of the time.

The panel concluded there is a definite lack of strong evidence to help guide surgeons. The path in choosing the best treatment for optimal outcomes in patients with rotator cuff tears isn't clear. Every patient deserves an individual evaluation with all factors and variables taken into consideration.

Clearly, there is a need for future research -- and as this summary shows, scientists can choose almost any aspect of the management of rotator cuff tears to investigate at this point. Acute tears must be studied as well as chronic tears. The comparison of conservative care versus surgical should be explored for all types of tears. And what type of surgery is advised for acute, chronic, partial thickness, and full-thickness tears would be helpful for patient and surgeon.

Reference: Ken Yamaguchi, MD. New Guideline On Rotator Cuff Problems. In AAOS Now. January 2011. Vol. 5. No. 1. Pp.1, 46-47.