Can A Rotator Cuff Tear Repair Itself?

Trying to decide if you should have that rotator cuff surgery done? The findings from this study might help you. Many adults who have a rotator cuff tear consider waiting to see if the shoulder will heal on its own without surgery. The goal of this study was to observe over time what happens to full-thickness rotator cuff tears that are treated conservatively (nonoperative treatment).

There has always been a question whether rotator cuff tears can heal without surgery. It is clear that painful symptoms can be treated effectively without surgery. But does the torn tendon actually regenerate itself? And if the tear does heal (or at least decrease in size) -- is the tissue quality of the healing site normal tendon tissue or scar tissue? This study does not look at the quality of tissue repair but does evaluate size of the tear over time.

Ultrasound imaging was used to diagnose 61 tears in 51 adults 60 years old and younger. Follow-up ultrasounds were taken two to three years later. Patient age, sex (male or female), size of the tear, and patient symptoms were compared with the results of the ultrasound.

They found that half of the tears got worse (larger in size) over time and that an increase in tear size was accompanied by increased shoulder pain. One-fourth of the total group developed a second full-thickness rotator cuff tear. The rest of the group (26 tears accounting for 43 per cent of the total) were unchanged (not better or worse).

Analysis of the data did not show any link between the change in tear size and patient age, trauma as a cause of the initial problem, or size of the original tear. There did not appear to be any correlation between new tears and sex or trauma as a cause of the first tear. There was a clear relationship between increasing shoulder pain and the original rotator cuff tear getting larger in size.

The authors suggest that based on their findings, it looks like rotator cuff tears can get better -- but most do not. Younger, more active adults with rotator cuff tears may want to consider surgery early on for full-thickness tears.

Ultrasound images that show scar tissue rather than normal tendon tissue support a decision for surgery. Predicting who will recover and who will develop a worse tear (or additional tears) remains unknown.

Further study is needed to help sort out this aspect of recovery in the decision-making process. Anyone with a rotator cuff tear who develops increasing shoulder pain should consider having a repeat ultrasound done to see if the tear has increased in size or another tear has developed. Worsening of the rotator cuff problem (or a new tear) signals the need for surgical repair.

Reference: Ori Safran, MD, et al. Natural History of Nonoperatively Treated Symptomatic Rotator Cuff Tears in Patients 60 Years Old or Younger. In The American Journal of Sports Medicine. April 2011. Vol. 39. No. 4. Pp. 710-714.