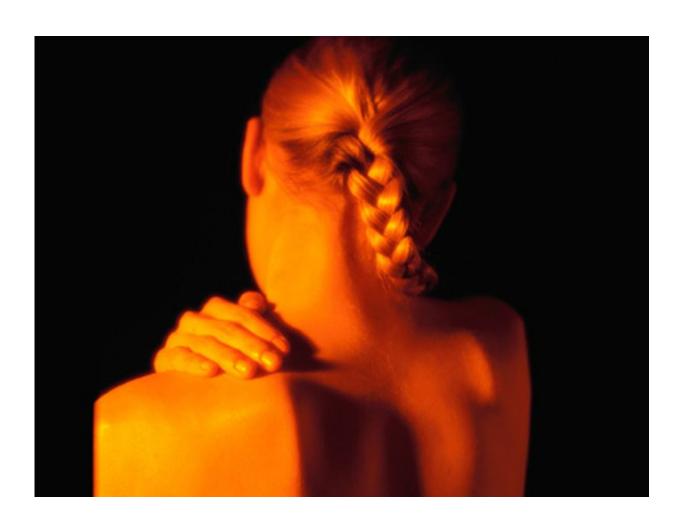# Pre-op fat fractions in rotator cuff muscles ID post-op retear

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(HealthDay)—Magnetic resonance (MR) imaging of preoperative fat

fractions within the rotator cuff muscles may be able to help predict postoperative retear, according to a study published in the August issue of *Radiology*.

Taiki Nozaki, M.D., Ph.D., from St. Luke's International Hospital in Tokyo, and colleagues conducted a prospective study to determine the degree of [postoperative](link) fatty degeneration within muscles. They recruited 50 patients with full-thickness supraspinatus tears. Using a two-point Dixon MR imaging sequence they quantified the degrees of preoperative and postoperative fatty degeneration; the mean signal intensity on in-phase and fat [images](link) was measured by two radiologists. At baseline preoperative and at postoperative one-year follow-up, MR imaging estimates of fatty degeneration were calculated. Preoperative fat fractions were compared for the failed-repair and intact-repair groups.

The researchers found that the failed-repair group had significantly higher preoperative fat fractions in the supraspinatus [muscle](link) than the intact-repair group (37.0 versus 19.5 percent; P

"MR imaging quantification of preoperative fat fractions by using a two-point Dixon sequence within the rotator cuff muscles may be a viable method for predicting postoperative retear," the authors write.

One author disclosed financial ties to Nihon Medi-Physics.

More information: [Full Text (subscription or payment may be required)](link)

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