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## Regarding "Arthroscopic Superior Capsular Reconstruction With Acellular Dermal Allograft for the Treatment of Massive Irreparable Rotator Cuff Tears"

I wish to thank and congratulate Pennington et al.[1] for their article titled "Arthroscopic Superior Capsular Reconstruction With Acellular Dermal Allograft for the Treatment of Massive Irreparable Rotator Cuff Tears: Short-Term Clinical Outcomes and Radiographic Parameters of Superior Capsule Distance." In this article, the authors published their short-term clinical and radiographic outcome following superior capsular reconstruction. There is, however, an inconsistency in this article that I believe is important to address.

In the Methods section of the article, the authors state the following: "Postoperative advance imaging with MRI [magnetic resonance imaging] was only performed on those patients who expressed dissatisfaction with their level of pain, or who had insufficient functional improvement in terms of strength and range of motion."[1] The issue is that in the Results section under the Failure subheading, it is stated: "Currently, we are obtaining advanced imaging of all of our patients to evaluate graft incorporation; however, we have had 3 radiographically revealed graft failures on MRI in patients reporting dissatisfaction."[1] The following is further stated in the same section: "These patients represent a failure rate of 4.5% (4/88 shoulders). All 3 radiographic failures we observed occurred at the greater tuberosity of the humerus attachment site."[1]

Thus, in the Methods section, the authors report that MRI was only obtained in "patients with dissatisfaction," whereas in the Results section, readers may be left with an impression that MRI was obtained in all patients to evaluate graft incorporation. I believe that it is very important for this to be clarified, because it is stated that there were "3 radiographic failures." What is important is 3 of how many patients? If it is 3 of the 4 dissatisfied patients (if only the dissatisfied patients had postoperative MRI), then the radiographically MRI failures rates may have been much higher if all patients (satisfied and dissatisfied) had postoperative MRIs, as we know from previous publications in which all patients were scanned that patients have significant improvement in their outcome scores despite a high rate of incomplete healing with postoperative superior capsular reconstruction.[2] If all patients had postoperative MRI leading to a radiological MRI failure rate of 3 in 88 (which is extremely low), then the Methods section should be corrected. Otherwise, the Results section should be clarified so that one is not left with the impression that all patients had advanced imaging with MRI after surgery to evaluate graft incorporation.

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## Author Reply to "Regarding 'Arthroscopic Superior Capsular Reconstruction With Acellular Dermal Allograft for the Treatment of Massive Irreparable Rotator Cuff Tears'"


I wish to thank Dr. Narvani for his insightful reading of our article. As stated in our outcome analysis,[1] we are in the process of obtaining magnetic resonance imaging follow-up on all of our patients who have undergone the superior capsular reconstruction procedure. He is correct in noting that this article discusses radiographic failure in only those patients who underwent imaging owing to an unacceptable outcome. Our radiographic failure rate of 4 in 88 only accounts for these unsatisfied patients and most likely does not reflect the true imaging failure rate. As Dr. Navani referenced, Denard et al.[2] noted radiographic a healing rate of 45% in a similar patient population. We do believe that the clinical satisfaction rates are the most notable and important factor, however, as general healing (on magnetic resonance imaging) of large rotator cuff repairs without superior capsular reconstruction is known to be quite poor. On completion of imaging of shoulders included in our series, a clearer picture of superior capsular reconstruction healing rates will become more known, and a follow-up article will likely be written to further describe these findings.

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