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LETTER TO THE EDITOR

Comments on: ''Arthroscopic treatment of rotator cuff tear in the over-60s: Repair is preferable to isolated acromioplasty-tenotomy in the short term,'' by C. Dezaly, F. Sirveaux, R. Philippe, F. Wein-Remy, J. Sedaghatian, O. Roche and D. Molé, published in Orthop Traumatol Surg Res 2011;97S:S125—30☆

We have read the article by Dezaly et al. with great interest. The advanced statistical analysis of the prospective randomized single-center study, in a population aged 60 years or older, shows that successful arthroscopic tendon repair of supraspinatus tear ''more or less extended to the infraspinatus'' gives statistically better short-term functional results than arthroscopic non reconstructive surgery.

We would appreciate an explanation of the validity of the weighted Constant scores (which differ very little from the unweighted scores that can be calculated based on Tables 2 and 3) used for the statistical analyses.

We were surprised by the frequency of the recurrent tears (32%), although the ruptures had been deemed ''repairable.'' This frequency of recurrent tears can be explained by a poor choice of preoperative ''repair feasibility'' criteria: preoperative fatty degeneration (FD) of the supra- and infraspinatus less than or equal to grade 2. A previous study [1] showed that with ''simple'' (no muscle-tendon advancement) suturing, performed as open surgery, a grade 1 fatty degeneration (for supraspinatus, infraspinatus, and subscapularis muscles) seemed to be the fatty degeneration cutoff between postoperative tendon integrity and a recurrent tear. This study also showed that the fatty degeneration index (FDI) threshold between the cuff that remained intact and the cuff prone to recurrent tear seemed to be grade 1. Preoperative FD of the infraspinatus and the supraspinatus greater than grade 1 and less than or equal to grade 2 seems compatible with successful suturing only if the sutures were tensionless after excision of the abnormal macroscopic parts of the tendon stumps using, if necessary, muscle-tendon advancement [2,3]. This is one of the reasons, other than the extent and number of complete preoperative infraspinatus tears with ''more or less extensive tear,'' for which it would have been useful to determine the preoperative FD values of the rotator cuff muscles and the FDI values.

We regret that the functional results of the successful suturing were only studied in relation to the preoperative tendon retraction and that the relations between preoperative FDI values and the functional results were not examined. The function of a shoulder with a continuous cuff, assessed using an unweighted Constant score, depends on the function of the cuff muscles given by the FDI value [4] if the shoulder joints and muscles other than the cuff are normal [5]. Perhaps this type of study would have made it possible to show that at an equivalent FDI, the results of successful arthroscopic suturing seemed better than those of open suturing.

Finally, it is unfortunate that the authors did not evaluate FD of the cuff muscles that remained intact at the 1-year follow-up. In this case they could perhaps have shown that if active postoperative rehabilitations were similar, that successful arthroscopic suturing did not lead to increased FD and FDI values [4], which have been observed after open suturing (which, with an equivalent preoperative FDI, could explain the possibly better functional results of successful arthroscopic suturing).

Disclosure of interest

The author declares that he has no conflicts of interest concerning this article.

References

[1] Goutallier D, Postel JM, Gleyze P, Leguilloux P, Van Driessche S. Influence of cuff muscle fatty degeneration on anatomic and functional outcomes after simple suture of full-thickness tears. J Shoulder Elbow Surg 2003;12:550—4.
[2] Goutallier D, Postel JM, Lavau L, Bernageau J. Impact of fatty degeneration of the supraspinatus and infraspinatus muscles on

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☆ The authors of the article have not submitted a response to this letter.

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the prognosis of surgical repair of the rotator cuff [in French]. Rev Chir Orthop Reparatrice Appar Mot 1999;85:668—76.
[3] Goutallier D, Postel JM, Van Driessche S, Godefroy D, Radier C. Tension-free cuff repairs with excision of macroscopic tendon lesions and muscular advancement: results in a prospective series with limited fatty muscular degeneration. J Shoulder Elbow Surg 2006;15:164—72.
[4] Goutallier D, Postel JM, Radier C, Bernageau J, Zilber S. Long-term functional and structural outcomes in patients with intact repairs one year after transosseous rotator cuff repair. J Shoulder Elbow Surg 2009;18(4):521—8.
[5] Goutallier D, Postel JM, Radier C, Bernageau J, Godefroy D, Zilber S. How repaired rotator cuff function influences Constant scoring. Orthop Traumatol Surg Res 2010;96(5):500—5.

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