

Arthroscopic Supraspinatus Tendon Repair with a Modified Mattress Locking Stitch

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Purpose

To compare the clinical results and failure rates of arthroscopic rotator cuff repair using a Modified Mattress Locking Stitch (MMLS) versus simple stitch repair.

Materials and Methods

Between December 2004 to January 2006 seventy-eight cases of arthroscopically repaired full thickness rotator cuff tears were evaluated prospectively. All tears were between 1.5–3 cm in size. The average age was 53.4 (39~68) years old and mean follow-up duration was 31.1 (24~37) months. Thirty-nine individuals (group I) underwent arthroscopic repair using a MMLS. Thirty-nine individuals (group II) underwent arthroscopic repair using a simple stitch. Post-operative pain VAS, ADL, UCLA score were obtained on 12 months (6–36). We compared the results statistically by Mann-Whitney U test. In both group, MRI was obtained at 6 to 36 months after repair.

Results

Between groups, VAS of pain, ADL and UCLA score were not significantly different (all, $p > 0.05$). 92.3 % in group I, 89.7% in group II showed excellent or good results at the final follow-up ($p > 0.05$). Satisfaction rate was 94.9 % (37 cases) in group I, 89.7% (34 cases) in group II ($p < 0.05$). Radiographic failure was seen in 6 case out of 36 (16.7%) in group I, and 9 cases out of 30 cases (27.4%) in group II ($p < 0.05$).

Conclusion

Arthroscopic repair of medium sized (1.5~3 cm) full thickness rotator cuff tears using a MMLS improves patient satisfaction rates and radiographic repair integrity in comparison to simple stitch repair.

Clinical Relevance

This study highlights the importance of the MMLS for arthroscopic rotator cuff repair.

Key Words: Rotator cuff-Modified Mattress Locking Stitch-Shoulder arthroscopy