"Together, We Can Go Further"
KSES 2026
The 33rd Annual International Congress of the Korean Shoulder and Elbow Society
March 27(Fri) ~ 28(Sat), 2026
BEXCO, Busan, Korea

- Abstract No. : F-0068
- Category : Shoulder
- Detail Category : Rotator cuff

Clinical Outcomes of an Arthroscopic Merged Lateral-Row Suture-Bridge Technique for Combined Supraspinatus and Subscapularis Repair

Kai-Lan Hsu [1], Fa-Chuan Kuan [1], Wei-Ren Su [1]
Orthopedics, National Cheng Kung University Hospital , Taiwan[1]

Introduction and Background

The arthroscopic merged lateral-row suture-bridge technique has been applied for combined supraspinatus (SSp) and subscapularis (SSc) repair. This study aimed to evaluate the clinical and radiographic outcomes following this procedure and to identify risk factors associated with retear of either tendon.

Material and Method

This retrospective study included patients treated with the arthroscopic merged lateral-row suture-bridge technique for combined SSp and SSc repair between July 2021 and July 2023, with a minimum two-year follow-up. Clinical outcomes, including range of motion, ASES, and Constant–Murley scores, were assessed preoperatively and at two years postoperatively. MRI was performed at six months to assess tendon integrity. Patients were classified into four groups: both healed, isolated SSp retear, isolated SSc retear, and combined retear. Clinical outcomes were compared, and risk factors for retear were analyzed using odds ratios.

Results

A total of 141 patients (68 men, 73 women; mean age 61.7 years) were included. Both tendons healed in 110 patients (78.0%), while 18 (12.8%) had isolated SSp retear, 5 (3.5%) had isolated SSc retear, and 8 (5.7%) had combined retear. The overall retear rates were 18.4% for the SSp and 9.2% for the SSc. All groups demonstrated significant improvements in ASES and Constant–Murley scores, as well as forward elevation and abduction. However, postoperative abduction was significantly lower in the combined retear group compared with the healed group. SSp atrophy was a significant risk factor for SSp retear, whereas fatty infiltration of the SSc and a higher Lafosse classification were significant predictors of SSc retear.

Conclusions

The arthroscopic merged lateral-row suture-bridge technique is effective for combined SSp and SSc repair. Risk factors for retear of each tendon appear to be independent and do not significantly influence one another.