Return to Play following Arthroscopic Superior-Labrum Anterior-Posterior Repair – A Systematic Review

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INTRODUCTION:
The purpose of this study was to systematically review the rate and timing of return to play in athletes following arthroscopic superior-labrum anterior-posterior (SLAP) repair.

METHODS:
A systematic literature search based on PRISMA guidelines, utilizing the EMBASE, MEDLINE, and The Cochrane Library Databases, was conducted. Eligible for inclusion were clinical studies reporting on return to play following arthroscopic SLAP repair. Subgroup analysis was conducted looking at overhead and collision athletes, as well as military personnel ability to return to duty. Meta-analysis was performed to compare SLAP repair to biceps tenodesis in the subset of studies comparing these treatments directly. A p-value of < 0.5 was considered to be statistically significant.

RESULTS:
This review identified 40 studies including 1,655 cases meeting the inclusion criteria. The majority of patients were male (81.0%), with an average age of 31.7 years (range 15-75) and a mean follow up of 50.3 months. The overall rate of return to sport was 71.2%, with 64.4% returning to the same level at a mean of 8.4 months. In overhead athletes, the overall rate of return to play was 70.0% and the rate of return to preinjury level was 55.5%. In collision/contact athletes the overall rate of return to play was 77.2% and the rate of return to preinjury level was 70.2%. Among military personnel the overall rate of return to duty was 83.4% and 81.7% returned to preinjury level at a mean of 4.4 months. In the studies comparing SLAP repair and biceps tenodesis, there was a statistically significant difference in favor of biceps tenodesis (RR; 0.90, 95% CI, 0.81 to 0.99, $I^2 = 20\%$, $p = 0.03$).
DISCUSSION AND CONCLUSION:
Overall, a quarter of athletes were unable to return to play following arthroscopic SLAP repair. Additionally, in the comparative studies arthroscopic SLAP repair was shown to result in lower rates of return to play than biceps tenodesis. However, there was a high rate of return to play among the military population treated with arthroscopic SLAP repair.