Duke University School of Medicine

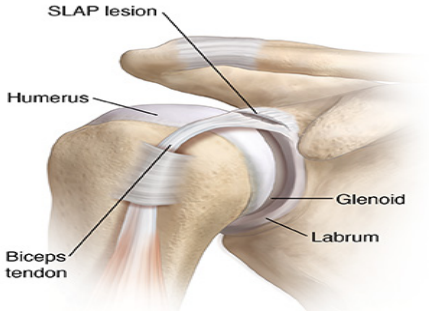
Doctor of Physical Therapy

Success of RTS Following Superior Labrum Anterior Posterior (SLAP) Tears in Overhead Athletes: A Systematic Review and Meta-Analysis

Nicholas Freijomil, SPT; Scott Peters, PT, DPT, ATC; Alexandra Millay, SPT; Tyler Sinda, SPT; Jordan Sunset, SPT; Michael P. Reiman, PT, PhD, ATC

Background

- A SLAP tear is an injury sustained to the glenoid labrum caused by repetitive stress to the shoulder, typically seen in overhead athletes.
- Reviews on superior labral anterior to posterior (SLAP) injuries have been reported in the literature. However, current reviews have not focused on success of an athlete's return to their previous level of sport or athletic performance.



https://www.saintlukeskc.org/health-library/slap-lesion-shoulder-joint

Purpose

- SLAP injury was originally described by Andrews et al in 1985. Despite the long history, SLAP injuries remain a prevalent problem among overhead athletes and contact athletes. The intent of this study is to systematically review and evaluate return to sport (RTS) after SLAP injury. We further discriminated between RTS and return to sports performance (RTSP) to determine additional performance metrics.

Methods

PRISMA

The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines were followed to evaluate methodology.

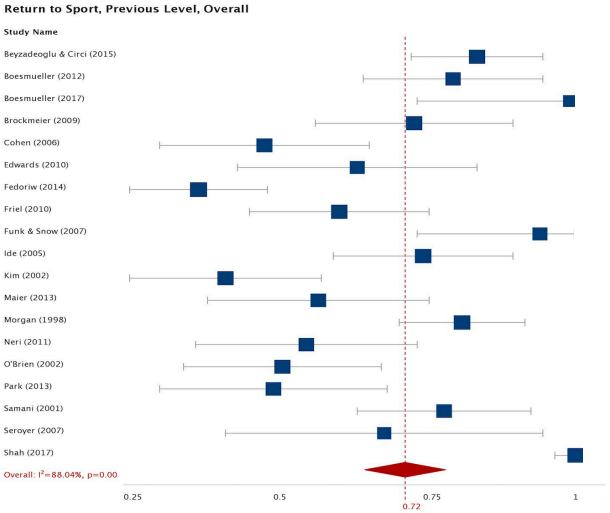
Study Design

A systematic review of randomized control trials, retrospective and prospective interventions, and observational studies with a population greater than 10 athletes investigating RTS for labral injury after surgical repair or conservative treatment.

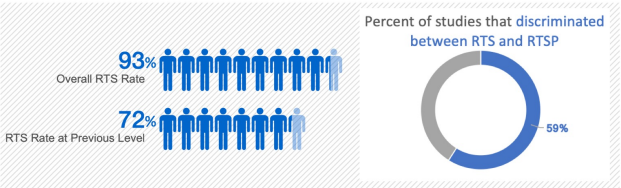
Databases

A computer assisted literature search of PubMed, CINAHL, Endbase, and SportDiscus databases utilized keywords related to RTS post-surgery for SLAP repair was implemented.

Analysis



Return to Sport (RTS) Rate



https://balldurham.com/2019/03/29/duke-baseball-blue-jays-offense-spoils-marcus-stromans-start/

Results

- 22 studies (617 athletes); all Level 3b or 4 evidence.
- 4 low quality and 18 moderate quality studies.
- Only 59% of studies discriminated between RTS and RTSP.
- Patient reported outcome measures (PROMs) were reported in 86% of studies.
- There was limited reporting of performance statistics, rehabilitation guidelines, return to sport criteria, and information regarding SLAP diagnosis in the available studies.

Clinical Relevance

- There is little consensus on identifying the appropriate time to surgically intervene for an athlete with a known SLAP lesion. The decision to undergo surgical intervention for SLAP injury is likely multifactorial. The current literature provides little guidance for the treating clinician to assist with this decision.
- Treating clinicians often have the question of when to return an athlete to sport, as well as how to best guide their return to sport progression. There has been a limited consensus regarding RTS decision-making for any athlete returning from an injury.
- We are hopeful that future research will better identify individuals with SLAP injuries that are optimal candidates for surgical intervention. This will ultimately lead to an increase in successfully returning athletes to their prior level of function.

Conclusions

Bottom Line:

- Rehabilitation programs for athletes trying to return to sport following SLAP repair are highly variable.
- Research determining successful rehabilitation techniques could improve consistency of treatment, potentially enhancing successful return to sport at previous level.
- There is limited evidence in return to sport performance after SLAP injury.

Acknowledgements / References

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