

Outcomes of revision posterior shoulder capsulolabral repair in adolescents

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I (and co-authors) have disclosures unrelated to the content of this presentation.



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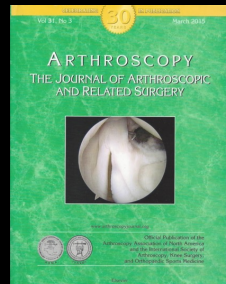
Introduction

Literature endorses arthroscopic posterior capsulolabral repair in:

- Contact / collision athletes
- Overhead athletes

Arner JW, et al. Arthroscopic Stabilization of Posterior Shoulder Instability Is Successful in American Football Players. *Arthroscopy*. 2015

McClincy MP et al. Posterior Shoulder Instability in Throwing Athletes: A Case-Matched Comparison of Throwers and Non-Throwers. *Arthroscopy*, 2015.



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Introduction:

Arthroscopic Capsulolabral Reconstruction for Posterior Shoulder Instability is Successful in Adolescent Athletes

McClincy, M, Arner JW, Thurber L, Bradley JP D JPO 2018

- 68 athletes, avg age 17.2 (range 14-19), 3.75yr fu
- Mean ASES scores improved from 48.6 to 85.7
- 89% return to play
 - 71% pre injury level
- 8.5% failure rate

✓ Arthroscopic posterior capsulolabral recon is a reliable tx in the adolescent population



Risk Factors and Outcomes of Revision Arthroscopic Posterior Shoulder Capsulolabral Repair



*Bradley JP, Arner JW, Jayakumar S, Vyas D AJSM
2018*

- 297 pts, mean age 20.1, 8.9yr f/u
- Risk factors: female sex, dominant shoulder, cuff tear, ≤ 3 anchors, smaller glenoid bone width.
- Revision rate: 6.4%
- RTP: non-revision group 78.6%, revision group 61.6% (p=0.28)

✓ Revision NOT a risk factor for retirement from sport



Introduction

- Outcomes of revision arthroscopic posterior capsulolabral repair in **adolescents** are not well defined.



Hypothesis

- Adolescent athletes have **higher risk** for revision posterior capsulolabral repair and **have poorer resulting outcomes**
 - PROs
 - RTP



Methods

- Retrospective cohort analysis (**non-revision vs revision**)
 - 11-19 yo athletes
 - Prior arthroscopic posterior capsulolabral repair
 - 2+ year f/u
- Exclusion criteria:
 - MDI
 - Concomitant anterior repair



Methods

- Outcome measures:
 - RTP
 - ASES
 - VAS
 - Patient reported: ROM, strength, satisfaction



Results

	Non-Revision (n=165)	Revision (n=17)	P
Sex			
Male	125	7	.002
Female	40	10	
Mean Age (y)	14.0	17.4	.07



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Results

	Non-Revision (n=165)	Revision (n=17)
Football	58	3
Baseball	26	2
Softball	16	1
Wrestling	15	2
Basketball	11	1
Swimming	12	4
Lacrosse	4	0
Cheerleading	4	3
Track	2	1
Other	16	0



Results

PROs	Non-Revision (n=165)	Revision (n=17)	p
ASES	87.1	76.1	0.007
VAS	1.7	2.9	0.01
Good ROM	94.5%	76.5%	0.03
Normal strength	55.5%	29.4%	0.07



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Results

	Non-Revisions (n=165)	Revisions (n=17)	p
Return to Play	85.9%	70.6%	.095
Same level	23.7%	41.1%	.10
Unable	14.1%	29.4%	
Satisfaction (%)	93.2	88.2	.45

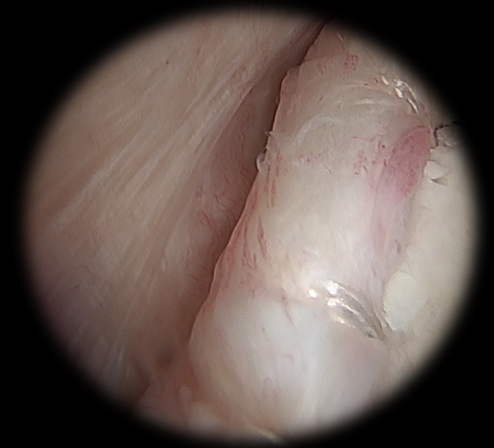


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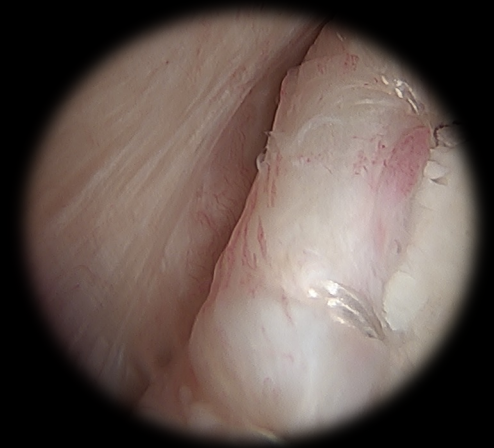
Limitations

- Only 17 revisions
- Subjective scoring systems
 - VAS, ASES



Conclusions

- Adolescents have slightly higher revision rate (9.3%) vs. total population (6.4%)
- Adolescent revisions have poorer PROs, but maintain high satisfaction (88.2%)
- No sig. difference in RTP





Thank you

