

Labral Hip Reconstruction in Adolescents and Young Adults Yields Positive Functional Outcomes a 5-Year Follow-Up but May Pose a Higher Risk for Revision Hip Arthroscopy



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Disclosures

I (and/or my co-authors) have something to disclose.

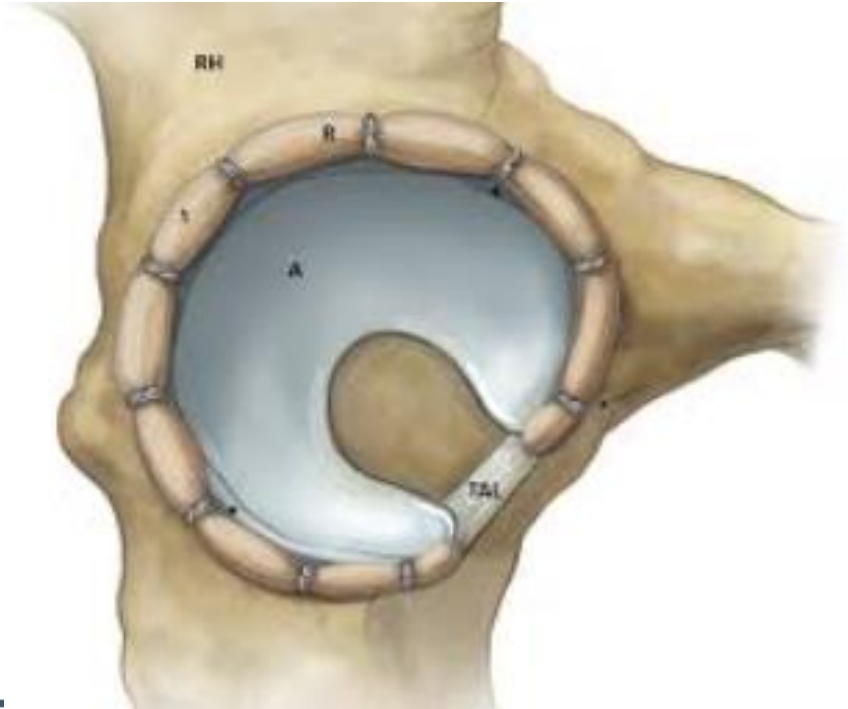
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Introduction

- For irreparable labral tears, labral reconstruction has demonstrated favorable mid- and long-term outcomes in adult populations for both primary and revision surgeries.



Introduction

- Adolescents and Young Adults are often physically active, higher expectations, and seek long-lasting results
- There are short term case reports showing favorable outcomes of labral reconstruction in this population, but long-term outcomes remain to be determined.

Purpose

- To report minimum 5-year outcomes of adolescents and young adults undergoing hip arthroscopy with labral reconstruction with a secondary comparison of these results to a control group of adolescents and young adults undergoing labral repair.

Methods

- Exclusion Criteria:
 - Unwillingness
 - Worker's compensations claims
 - Dysplasia (LCEA < 18)
 - Tonnis osteoarthritis grade > 1
 - Inflammatory joint disease
- 1:1 propensity match
 - Age at surgery
 - Sex
 - BMI
 - Type of surgery (primary or revision hip arthroscopy)
 - Capsular treatment
 - Preoperative Tonnis grade

Table 1. Demographics

	Control (Repair)	Reconstruction	P Value
Eligible hip arthroscopy with follow-up*	419	28	-
Matched Cases*	24	24	-
Primary	10	10	
Revisions	14	14	
Sex†			
Male	11 (45.8%)	11 (45.8%)	1
Female	13 (54.2%)	13 (54.2%)	1
Age at Surgery (yr)‡	19.43 ± 1.88	19.35 ± 2.10	0.85
BMI (kg/m ²)‡	24.01 ± 2.62	25.49 ± 3.78	0.13
Follow-up time (mo)‡	88.94 ± 32.18	74.46 ± 31.82	0.26
Beighton	3.75 ± 3.30	3.25 ± 3.28	1

*The values are given as the number of cases

†The values are given as the number of patients, with the percentage in parentheses.

‡The values are given as mean and the standard deviation, with the range in parentheses.

Results

- Similar magnitudes of improvement between both groups and comparable postoperative scores for all evaluated patient reported outcomes as shown in Table 4 (p > 0.05)

Table 4. Patient-Reported Outcomes

	Control (Repair) (n =24)	Reconstruction (n = 24)	P Value
mHHS			
Preoperative	56.08±16.27	60.09±18.35	0.38
Postoperative 5-y	83.14±22.49	82.75±19.78	0.93
Pre vs Post 5-y Δ	28.32±21.53	21.12±24.73	0.32
Pre vs post 5-y P value	< 0.01	< 0.01	
NAHS			
Preoperative	62.85±18.36	57.87±16.58	0.37
Postoperative 5-y	85.11±14.99	82.19±21.15	0.69
Pre vs Post 5-y Δ	23.53±20.21	23.19±24.25	0.96
Pre vs post P value	< 0.01	< 0.01	
HOS-SSS			
Preoperative	41.73±23.66	36.95±24.71	0.51
Postoperative 5-y	72.57±27.58	76.64±27.59	0.45
Pre vs Post 5-y Δ	32.18±33.25	36.55±37.91	0.71
Pre vs post P value	< 0.01	< 0.01	
VAS			
Preoperative	5.15±2.40	6.12±2.40	0.2
Postoperative 5-y	2.04±1.78	2.79±2.92	0.33
Pre vs Post 5-y Δ	-3.31±2.58	-3.19±3.27	0.9
Pre vs post P value	< 0.01	< 0.01	
Satisfaction 5-y	8.00±1.85	7.20±2.67	0.32

*The values are given as the mean and the standard deviation in points.

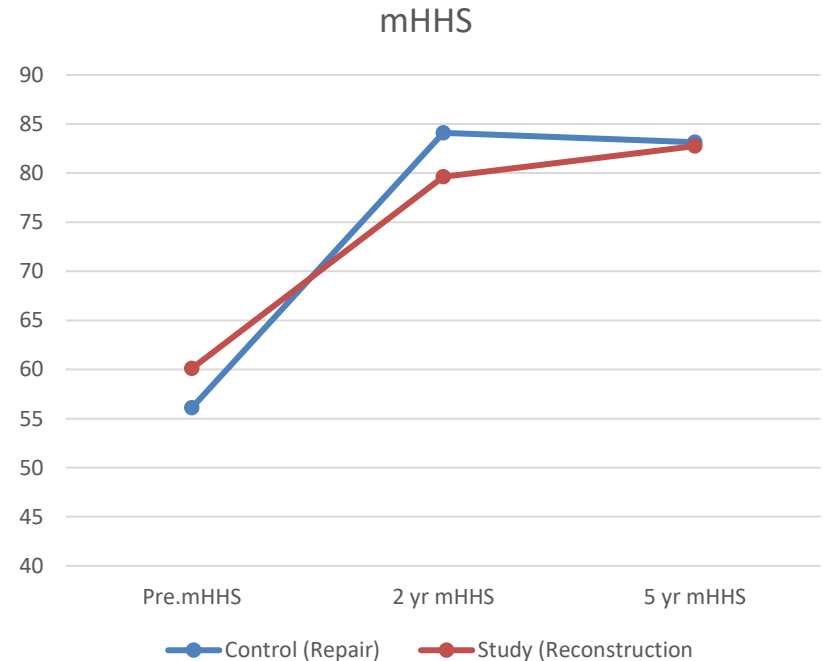
mHHS – Modified Harris Hip Score, NAHS – Non-Arthritic Hip Score, HOS-SSS – Hip Outcome Score Sport-Specific Subscale, VAS – Visual Analog Scale.

Revisions

- Two patients (8.33%) in the labral reconstruction group underwent revision arthroscopy. In the repair group, one patient (4.2%) required revision hip arthroscopy

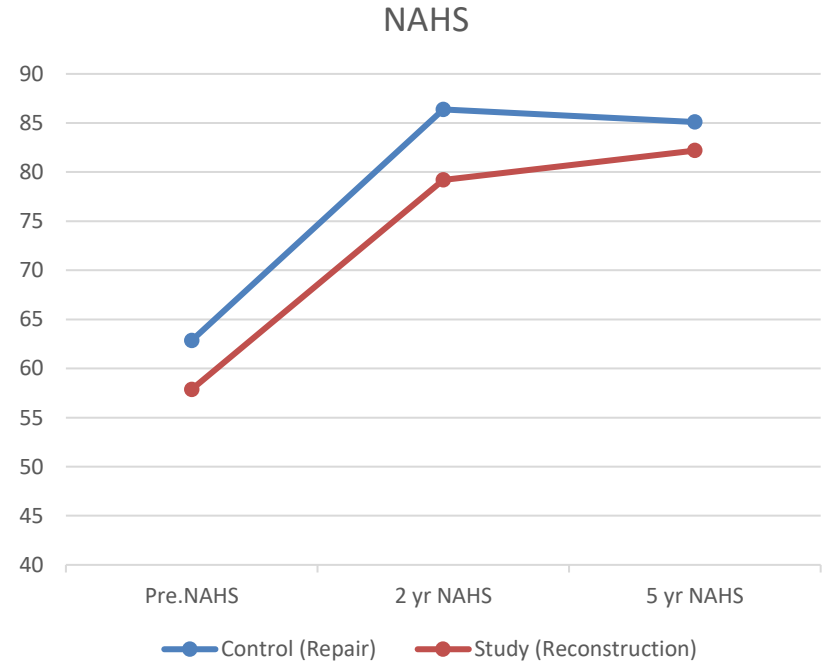
Conclusions

- Patients in reconstruction group reported 95% survivorship free of THA at a minimum 5-year follow-up.
- Reconstruction group achieved similar postoperative PRO scores to control group who underwent labral repairs.

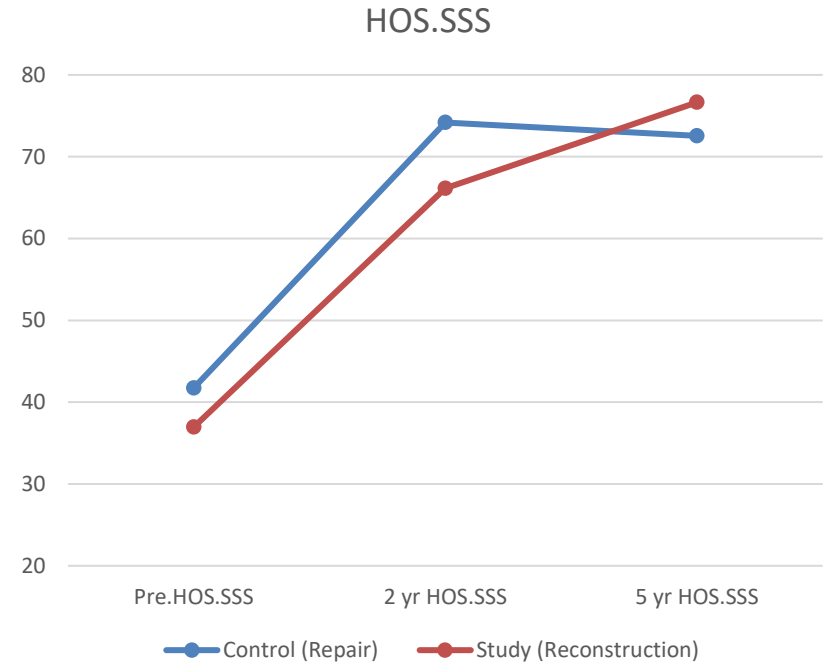
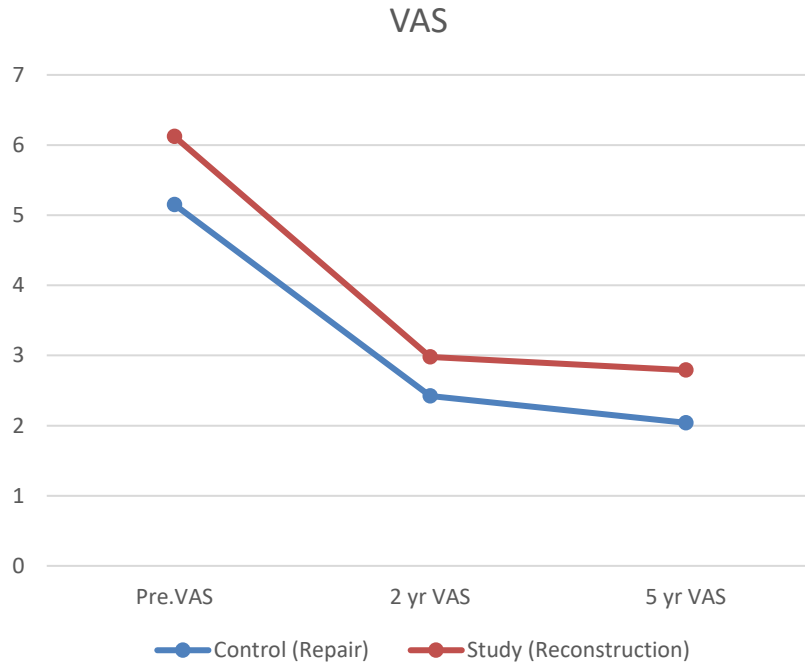


Conclusions

- Figures demonstrating durability for each labral treatment.



Conclusions



References

- Domb BG, El Bitar YF, Stake CE, Trenga AP, Jackson TJ, Lindner D. Arthroscopic Labral Reconstruction Is Superior to Segmental Resection for Irreparable Labral Tears in the Hip: A Matched-Pair Controlled Study With Minimum 2-Year Follow-up. *Am J Sports Med.* 2014;42(1):122-130. doi:10.1177/0363546513508256
- Domb BG, Hartigan DE, Perets I. Decision Making for Labral Treatment in the Hip: Repair Versus Débridement Versus Reconstruction. *J Am Acad Orthop Surg.* 2017;25(3):e53-e62. doi:10.5435/JAAOS-D-16-00144



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