

# Are Short-term Outcomes of Hip Arthroscopy in Patients 55 Years and Older Inferior to Those in Younger Patients?

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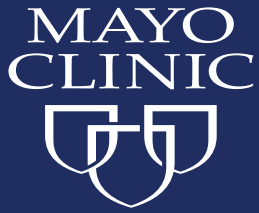
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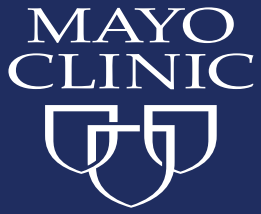
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# Conflict of Interest Disclosures

Author Name	Disclosures
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Bruce A Levy	Arthrex, Inc: Paid consultant Arthritis Foundation: Research support Ceterix: Research support Histogenics: Research support

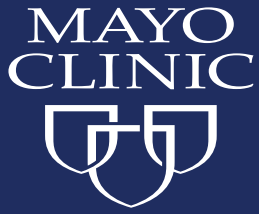


# Purpose

- Evaluate the clinical outcomes of patients 55 years and older who are undergoing hip arthroscopy
- Compare outcomes with those of patients younger than 55 years.

# Methods

- 201 patients undergoing primary hip arthroscopy for FAI without radiographic arthritis (Tönnis grade  $<3$ ) were isolated from a prospective database and stratified by age to  $<55$ -year and  $\geq 55$ -year groups.
- Patients were evaluated preoperatively and 1 and 2 years postoperatively using the modified Harris Hip Score (mHHS) and Hip Outcome Score (HOS: functional scores, as well as Activities of Daily Living [ADL] and Sport subscales).
- A Wilcoxon signed rank sum test was used to evaluate the differences in outcome scores between the cohorts at each interval.



# Results:

## Table 1 Primary and Concomitant Procedures of Patients Undergoing Hip Arthroscopy for FAI

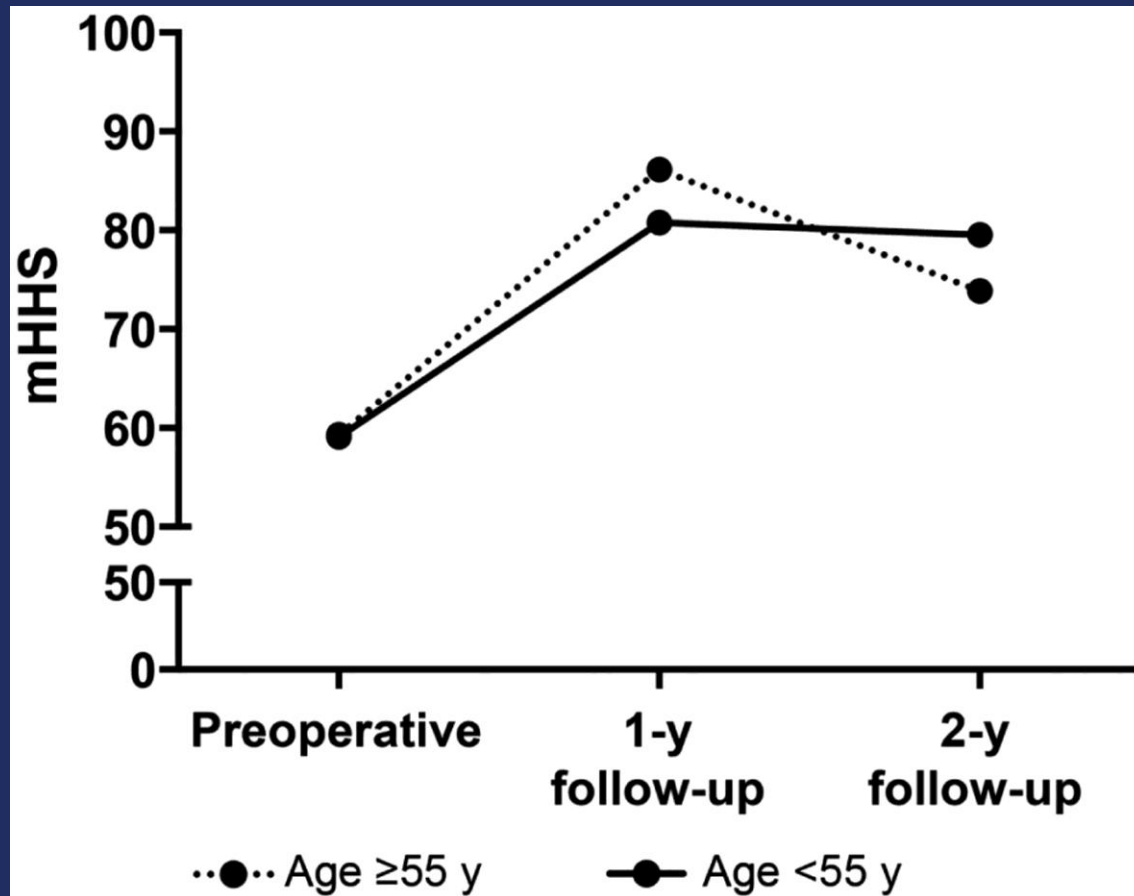
	<b>&lt;55 Years (n = 174)</b>	<b>55 Years (n = 27)</b>	<b>P-value</b>
Primary procedure	111 (64)	6 (22)	<.001
Labral repair	63 (36)	21 (78)	
Labral debridement	174 (100)	27 (100)	N/A
Cam resection	174 (100)	27 (100)	N/A
Pincer resection	174 (100)	19 (70)	<.001
Additional procedures			
Chondroplasty/microfracture	10 (6)	19 (70)	<.001
Capsular Closure	80 (46)	9 (33)	.29

## Results

- The <55-year group included 174 patients (mean age,  $37 \pm 12$  years), and the  $\geq 55$ -year group included 27 patients (mean age,  $61 \pm 5$  years).
- The  $\geq 55$ -year cohort underwent labral debridement more frequently (78% vs 36%;  $P = .02$ ) and were more likely to have full-thickness cartilage defects (22% vs 4%;  $P = .04$ ).
- mHHS in both groups improved significantly from baseline, without significant differences at 1 year (86 [ $\geq 55$  years] vs 81 [ $< 55$  years];  $P = .53$ ) or 2 years (73.88 [ $\geq 55$  years] vs 79.54 [ $< 55$  years];  $P = .06$ ).
- Patients  $< 55$  years had significant improvements over patients  $\geq 55$  years in the HOS subscales for ADL score (85.6 vs 75.2;  $P = .03$ ), ADL rating (80.1 vs 70.0;  $P = .004$ ), Sport score (70.2 vs 55.6;  $P = .04$ ), and Sport rating (70.2 vs 58.0;  $P = .04$ ).

## Results:

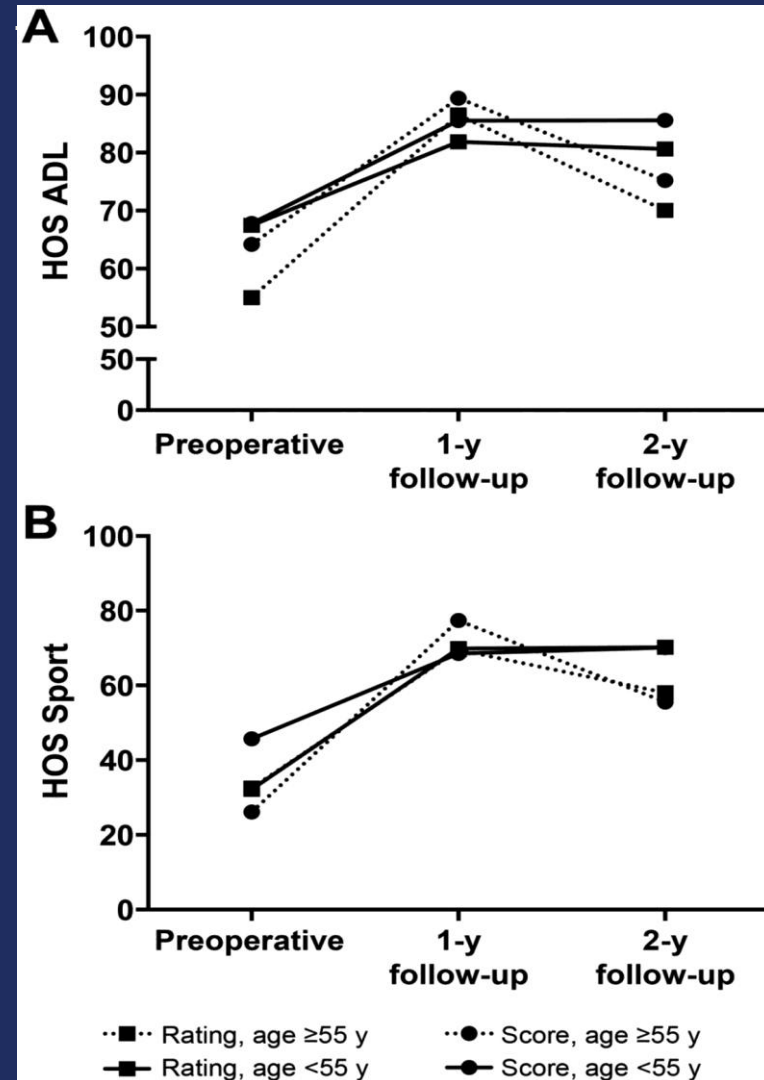
Figure 1: Modified Harris Hip Score (mHHS) after hip arthroscopy in patients <55 years and those ≥55 years.



# Results:

Figure 2: Hip Outcome Score (HOS) results after hip arthroscopy in patients <55 years and those ≥55 years: (A) Activities of Daily Living (ADL) subscore and (B) Sport subscore.

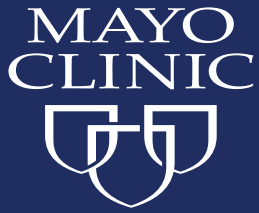
Preoperative and 1-year Sport subscore and rating for ≥55 and <55 years are superimposed because of similar scores; 2-year Sport subscore and rating for <55 years are also superimposed





## Conclusion

- Although younger patients had superior HOS outcomes reported at 2 years compared with older patients after hip arthroscopy for FAI, both groups had significant improvement compared with their baseline.
- Carefully selected patients 55 years and older without radiographic arthritis may benefit from hip arthroscopy.



# References

- 1 Ben Tov T, Amar E, Shapira A, Steinberg E, Atoun E, Rath E. Clinical and functional outcome after acetabular labral repair in patients aged older than 50 years. *Arthroscopy*. 2014;30(3):305-310.
2. Cooper AP, Basheer SZ, Maheshwari R, Regan L, Madan SS. Outcomes of hip arthroscopy: a prospective analysis and comparison between patients under 25 and over 25 years of age. *Br J Sports Med*. 2013;47(4):234-238.
3. Kamath AF, Componovo R, Baldwin K, Israelite CL, Nelson CL. Hip arthroscopy for labral tears: review of clinical outcomes with 4.8-year mean follow-up. *Am J Sports Med*. 2009;37(9):1721-1727.
- 4 Philippon MJ, Briggs KK, Carlisle JC, Patterson DC. Joint space predicts THA after hip arthroscopy in patients 50 years and older. *Clin Orthop Relat Res*. 2013;471(8):2492-2496.