

Multicenter Outcomes After Hip Arthroscopy:

***Seven Years Later, Where Are We Now?
Epidemiology & Experience From The MASH
Study Group***

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Disclosure of Interest

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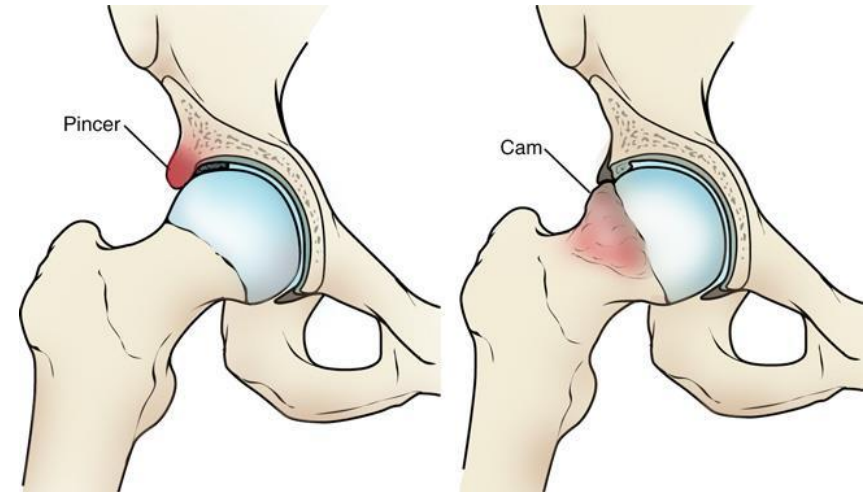
Outline

- **Background**
- **Hypothesis**
- **Methods**
- **Results**
- **Discussion**
- **Conclusion**
- **References**



Background

- Hip arthroscopy is rapidly growing for conditions like femoroacetabular impingement (FAI), labral tears, and cartilage damage
 - Delays total hip arthroplasty
- Epidemiologic data is essential to understand trends and outcomes
- Unclear how patient demographics are evolving in face of rapidly growing knowledge base



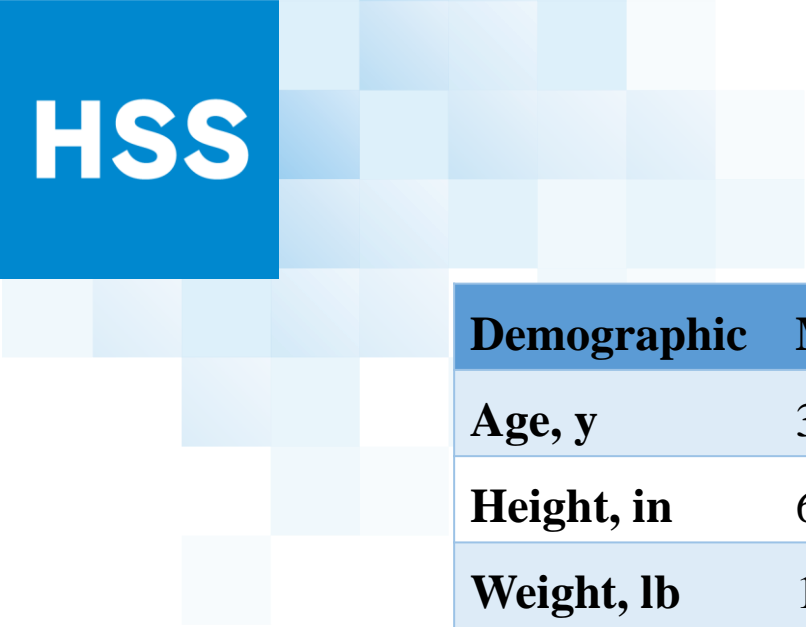
Hypothesis

- **The patient population undergoing hip arthroscopy will have a lower average Body Mass Index (BMI), younger age, less severe reported symptoms at the time of surgery, and shorter preoperative symptom duration than 2017 data reported.**



Methods

- **7,570 patients from 10 U.S. centers enrolled between 2014–2023**
- **Demographics, PROMs, symptom duration, imaging, and surgical findings**
- **Variability in data collection tools and surgeon compliance affected the functional sample size**
 - **Variable-specific denominators during analysis**



Demographics

Demographic	Mean	Minimum	Maximum
Age, y	33.9	11.4	83.3
Height, in	67.2	55	81
Weight, lb	158.2	80	340
BMI	24.5	14.8	44.9
<u>Sex</u>			
Female	56.8%		
Male	28.3%		
Not Recorded	15.0%		
<u>Laterality</u>			
Right	54.10%		
Left	45.90%		
Smoker	2%		

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PROMs

Baseline with 2 Year Follow-Up	Baseline Mean	Minimum	Maximum	2 Yr Mean
<i>Modified Harris Hip Score</i>	56.8	23	89	77.5
<i>Hip Outcome Score</i>				
ADLs	66.1	13.2	100	87.7
Sports	39.8	0	94.4	74.3
VAS	46.5	0	85	18.86
<i>International Hip Outcome Tool</i>	33.8	0	99	72.8
<i>PROMIS</i>				
Anxiety	54.9	32.8	75.5	50.8
Depression	49.3	35.1	69.6	46.7
Pain Interference	62.1	38.7	77.8	52
Physical Function	40.6	23.2	72.7	49.4



Diagnoses





Labral Pathology	3832	98.2%
Tear Complexity		
Mild	932	24
Moderate	1626	42
Severe	1073	28
Not Specified	201	6
Labral Bruising	1651	43.1
Labral Degeneration	1139	29.7
Other		
Ligamentum Teres Tear	394	10.3
Gluteus minimus/maximus tear	78	2
Septic Arthritis	2	0.1
Femoral Impingement cyst	21	0.5
Acetabular Bone Cyst	57	4.2

<div> <div>HSS</div> <div>Surgical Details</div> </div>		
Procedure	n	%
Labral Surgery	3832	98.8
Repair	2860	74.6
Reconstruction	811	22
Combination	148	3.8
Other		
Femoroplasty	3472	89.5
Synovectomy	2619	67.5
Acetabuloplasty	1298	33.5
Acetabular Chondroplasty	1083	27.9
Femoral Chondroplasty	163	4.2
Trochanteric Bursectomy	159	4.1
Subspinous	142	3.7
Acetabula/Femoral Microfracture	102	2.6
Psoas Release	58	1.5
Core Decompression	11	0.3

Comparison

- **Isolated pincer impingement sharply declined**
 - ~30% to ~2%
- **Less pre-operative mechanical symptoms**
 - 23.4% vs. 38.1%
- **Arthritis and cartilage damage were less frequent**
 - Tonnis grade ≥ 2 at 1.0% vs 1.5%
- **Longer symptom duration before surgery**
 - Higher % for 1–2 years compared to 4–12 months
- **Patients are younger**
 - 33.9 vs 34.6 years
- **Patients are lower BMI**
 - 24.5 vs 25.9

Discussion

- **PROMs improved across the board as expected**
 - **HOS-ADL, HOS-Sport, iHOT-12, PROMIS, VAS**
- **Rate of preoperative injections dropped significantly, from 94% in 2017 to 51%, potentially due to data showing injections as post-operative complication risk factors**
- **Hypothesis**
 - **Younger patients** 
 - **Lower BMI** 
 - **Less severe pre-operative symptoms** 
 - **Shorter duration of symptoms** 

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