

Minimum Five-Year Outcomes of Staged Bilateral Hip Arthroscopy for Femoroacetabular Impingement Syndrome

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Disclosures

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

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Background



Bilateral hip symptoms are known to be a common finding in patients with femoroacetabular impingement (FAI) in the general population.



Bilateral FAI may raise patient concerns in terms of inherent risks involved or the eventual need for surgical management of the contralateral side.



There is a paucity of literature reporting mid-term outcomes following bilateral hip arthroscopy. Few studies have examined the effect of the time interval between staged bilateral surgical procedures

Purpose



The primary purpose of this study to compare minimum 5-year outcomes between patients who underwent staged bilateral hip arthroscopic surgery for FAI to a propensity-score matched unilateral hip arthroscopy control group and secondarily, to investigate the impact of time interval between staged bilateral procedures on PROs.



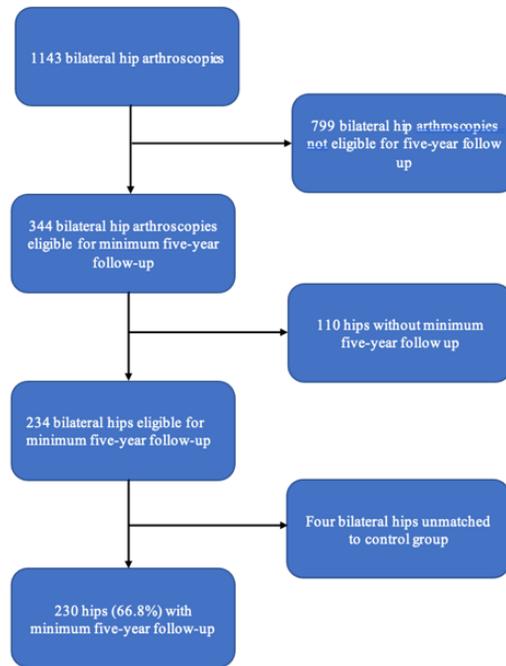
Methods

- Patients undergoing primary hip arthroscopy for FAIS
- Minimum 5-year PROs were collected
 - mHHS, NAHS, HOS-SSS, VAS
- Propensity match 1:1 to a unilateral hip arthroscopy control group (based on age, sex, and BMI)
- A sub-analysis was performed to determine impact of time interval between staged procedures



Results

- Total of 115 patients (230 hips) with a mean age of 32.0 ± 13.6 years (bilateral cohort).
- Bilateral:
 - 154 hips (66.9%) → Female
 - 76 hips (33.0%) → Male
- Unilateral:
 - 155 hips (67.3%) → Female
 - 75 hips (32.6%) → Male



Results

- Both groups showed significant improvements in mHHS, NAHS, HOS-SSS, and VAS at minimum 5-year follow-up.
- The unilateral cohort had a significantly higher rate of achieving the minimally clinical important difference (MCID) for the NAHS (P =.003). Both cohorts showed high rates of survivorship (97.4% vs 98.3%).

MCID, PASS	Unilateral, n (%)	Bilateral, n (%)	P-value
mHHS			
MCID (7.6, 8.3)	190 (82.6%)	185 (80.4%)	.271
PASS 74	187 (81.3%)	178 (77.3%)	.144
HOS-SSS			
MCID (11.6, 12.1)	174 (75.6%)	167 (72.6%)	.231
PASS 75	133 (57.8%)	136 (59.1%)	.388
VAS			
MCID (-1.1, -1.2)	57 (24.7.5%)	65 (28.2%)	.197
NAHS			
MCID (8.1, 9.5)	190 (82.6%)	166 (72.1%)	.003
iHOT-12			
PASS 65	165 (71.7%)	175 (76.0%)	.147

Results: Sub-Analysis

- In the sub-analysis, it was found that patient who underwent staged hip arthroscopy < 3 months apart had higher rates of achieving PASS for mHHS, and MCID for NAHS and VAS (P =.016, P =.040, P =.005 respectively).
- Analysis found that a time interval < 3 months was associated with 1.98 times higher likelihood of achieving PASS for mHSS, and 2.12 times higher likelihood of achieving MCID for NAHS.

MCID, PASS	< 3 months, n (%)	> 3 months, n (%)	P-value
mHHS			
MCID (9.7, 10.6)	82 (71.9%)	78 (67.2%)	.219
PASS 74	95 (83.3%)	83 (71.5%)	.016
HOS-SSS			
MCID (16.4, 16.8)	84 (73.6%)	78 (67.2%)	.143
PASS 65	81 (71.0%)	80 (68.9%)	.364
VAS			
MCID (-1.5, -1.6)	30 (26.3%)	43 (37.0%)	.040
NAHS			
MCID (9.3, 11.1)	90 (78.9%)	74 (63.7%)	.005
PASS 85.6	78 (68.4%)	67 (57.7%)	.103
iHOT-12			
MCID (13.2, 15.7)	35 (30.2%)	33 (28.4%)	.055
PASS 65	85 (74.5%)	83 (71.5%)	.304



Discussion/Conclusion

- Patients who underwent unilateral and bilateral hip arthroscopic surgery for FAI achieved significant improvement in PROs at minimum 5-years follow-up, with comparable results between groups.
- After dividing the bilateral cohort by time between procedures, patients with <3 month interval had greater magnitude of improvement. A time interval ≤ 3 months was associated with two times higher likelihood of achieving PASS for mHSS, and MCID for NAHS.



Strengths

- First study to investigate impact of the time interval between bilateral hip procedures
- Matched study design.
- Multiple PROs reported



Limitations

- Nonrandomized study.
- Retrospective design.
- Single Center-Single surgeon



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