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How Are We Using Patient Reported Outcomes In Patients With FAI: Which Score Is Best?

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Introduction

- Patient reported outcomes PROs are used to determine patient outcomes.
- The commonly used PROs for FAI treatment outcomes are the mHHS and the HOS.

Hypothesis: we hypothesized that mHHS would highly correlate with pain and satisfaction in older patients, while HOS (specifically Sports Subscale – SS) would be more highly correlated to pain and satisfaction scores in younger patients.

Methods

Consecutive patients undergoing primary hip arthroscopy for FAI with a minimum of 2 year outcome were reviewed using our institution's hip registry between 1/2012 and 1/2014.

- The primary PROs collected were the HOS-ADL, HOS-SS, and mHHS.
- Subjective outcomes included VAS pain and satisfaction scores.
- Age based bivariate analysis was used to calculate the correlation between PRO scores, VAS pain and satisfaction scores.

Results

- 397 of the 489 patients in the hip repository had a minimum of 2 year follow up data.

The average age was 33.7, with quartiles identified as :14.9-23.8, 24.2-33.4, 33.5-42.2, and >42.3 years-23, 24-33.

	Preop Scores	Postop Scores	P-value
HOS-ADL	66.5	85.8	0.001
HOSS-SS	43.7	72.1	<0.001
mHHS	58.0	76.4	<0.001

Average Patient reported outcomes scores both preop and postop

Results

- Confirming the hypothesis, younger patients (1st and 2nd quartiles: 14.9-23.8, 24.2-33.4,; r2=0.66) demonstrated increased correlation between satisfaction scores and HOS-SS scores compared to older patients (3rd quartile 33.5-42.2,:; r2=0.5 , and fourth quartile >42.3 years-23, 24-33,; r2=0.35)
- All PRO scores highly correlated with each other as well as the benchmark outcomes ($p<0.0001$)
- The HOS-ADL most highly correlated with the mHHS (r2=0.74) and HOS-SS scores (r2=0.69), and less correlated with postoperative pain (r2=0.5), pain improvement (r2=0.63), and satisfaction (r2=0.56).

Conclusions

- HOS-SS is a better PRO for determining postoperative outcomes in younger patients as opposed to mHHS and HOS-ADL scores that are focused on activities of daily living.

- All PROs among all age groups correlated with postoperative pain and satisfaction outcomes.