Hip Arthroscopy: Predictors of Ambulatory Surgery Center Utilization

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Introduction

• Hip arthroscopy (HA) is a minimally invasive procedure utilized to treat symptomatic femoroacetabular impingement (FAI).\(^1\)

• Prior studies comparing outpatient hospitals (OHs) versus ambulatory surgery centers (ASCs) found no difference in rates of postoperative complications,\(^2\) however, ASC utilization remains low.

• This study aims to investigate the predictors of ASC versus OH utilization for HA to better understand opportunities and barriers to moving HA patients to the ASC setting.
Methods

**Design:** Retrospective Cohort Study

**Data Set:** 2013-2017 IBM MarketScan Commercial Claims Encounter database

**Cohorts:** ASC vs. Outpatient Hospital setting

- Patients aged 18 to 65 undergoing debridement-only, FAI surgery or hip labral repair.

**Statistical analysis:** Multivariable logistic regression

- Primary Outcome: Odds ratio (OR) of ASC utilization
- Covariates: gender, age, geographical region of the U.S., insurance plan type, calendar year, Deyo-Charlson Comorbidity Index (DCCI) score, obesity/smoking/osteoarthritis status, surgeon/facility network status, peripheral nerve block (PNB) utilization, and procedure type.
Results

• 20,335 HA procedures were identified: 6,077 performed at ASCs and 14,258 at OHs.

• Surgeons were significantly more likely to be in-network when the procedure was performed at an ASC (OR:1.63; 95% CI: 1.35-1.96; p<0.001).

• ASC facilities themselves were less likely to be in-network (OR:0.59; 95% CI:0.49-0.70; p<0.001).

• ASC utilization increased over the study period (OR:1.09; 95% CI:1.07-1.12; p<0.001).
Results

- Geographical location, namely Southern U.S., patient age 45 to 54 years, debridement-only procedures, and High Deductible Health Plan (HDHP) and Consumer Driven Health Plan (CDHP) coverage increased ASC utilization (all p<0.05)
Conclusion

• Increasing ASC utilization for HA over the study period is consistent with broader trends.\(^3\)

• In keeping with strict ASC screening criteria for patients obesity, smoking status, and higher comorbidity burden had lower odds of ASC utilization.

• Older patients had higher odds of ASC utilization, likely due to the observed increased odds of debridement-only surgery being performed at ASCs due to shorter operative times.\(^4\)

• There are significant opportunities for the expansion of ASC utilization for HA procedures among patients; however, the facility out-of-network status of many ASCs may present a barrier to their increased utilization.
References


Thank You!