## Ten-Year Survivorship and Patient-Reported Outcomes in Patients Aged 40 and Over Following Primary Hip Arthroscopy: A Propensity-Matched Analysis with a Benchmark Control Group

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INTRODUCTION:

Arthroscopic labral repair has been shown to result in favorable short- and mid-term outcomes. Yet, the durability of outcomes in older patients remains controversial. The purpose of this study is to report prospectively collected survivorship and patient-reported outcome scores (PROs) at minimum ten-year follow-up in patients aged  $\geq$  40 years following primary hip arthroscopy with labral repair. (2) To perform a sub-analysis comparing survivorship and outcomes for patients aged  $\geq$  40 years and patients aged < 40 years.

METHODS: Data were prospectively collected and retrospectively reviewed on all patients who underwent primary hip arthroscopy between February 2008 and December 2011. Patients aged ≥ 40 years who underwent labral repair were included. Preoperative and minimum ten-year follow-up for the modified Harris Hip Score (mHHS), Non-Arthritic Hip Score (NAHS), Hip Outcome Score-Sports Specific Subscale (HOS-SSS), and Visual Analog Scale (VAS) for pain were collected. Exclusion criteria were prior ipsilateral hip surgery/conditions, Tönnis grade > 1, hip dysplasia, or worker's compensation. Propensity-score matching was utilized to compare patients aged ≥ 40 years to patients < 40. Rates of achieving the minimal clinically importance difference (MCID), patient acceptable symptomatic state (PASS) and hip joint survival from conversion to total hip arthroplasty (THA) were reported.

RESULTS: Of the 113 hips eligible for analysis, 91 hips (80.5%) had minimum ten-year follow-up. There were 64 females (70.3%) and 27 males (29.7%) with mean age and BMI of 47.8 years and 25.8 kg/m², respectively. The ten-year survivorship for patients aged  $\geq$  40 years was 75.8%, and there was significant improvement in all PROs and VAS from baseline to minimum ten-year follow-up. Patients achieved MCID/PASS at high rates for all PROs and VAS. Sixty-nine patients aged  $\geq$  40 years were matched to 107 patients < 40 years. Patients aged  $\geq$  40 years demonstrated lower survivorship (78.3% vs. 91.6%), but lower rates of secondary hip arthroscopy (2.9% vs. 14.0%).

DISCUSSION AND CONCLUSION:

Patients aged  $\geq$  40 years who underwent primary hip arthroscopy with labral repair demonstrated a survivorship of 75.8%, significant improvement in PROs, and achieved MCID/PASS at high rates at minimum ten-year follow-up. Sub-analysis revealed comparable PROs, but patients  $\geq$  40 years demonstrated lower survivorship and lower rates of secondary hip arthroscopy compared to patients < 40 years.