Ten-Year Survivorship and Patient-Reported Outcomes in Patients Aged 40 And Over Following Primary Hip Arthroscopy for Femoro-Acetabular Impingement: A Propensity-Matched Analysis With A Benchmark Control Group

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Summary: This study collected survivorship and patient-reported outcome scores (PROs) at minimum ten-year follow-up in patients aged ≥ 40 years following primary hip arthroscopy with labral repair.

Data: Background: 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. Purpose: To report prospectively collected survivorship and patient-reported outcome scores (PROs) at minimum ten-year follow-up in patients aged ≥ 40 years following primary hip arthroscopy with labral repair. (2) To perform a sub-analysis comparing survivorship and outcomes for patients aged ≥ 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 years. Rates of achieving the minimal clinically important 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 ≥ 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 ≥ 40 years were propensity matched to 107 patients < 40 years. Patients aged ≥ 40 years demonstrated lower survivorship (78.3% vs. 91.6%), but lower rates of secondary hip arthroplasty (2.9% vs. 14.0%). Conclusion: Patients aged ≥ 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 ≥ 40 years demonstrated lower survivorship and lower rates of secondary hip arthroplasty compared to patients < 40 years.

Category: Hip/Groin/Thigh

Low Rates of Five-Year Secondary Surgery and Postoperative Complications after Primary Hip Arthroscopy in over 30,000 Patients

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Summary: In this large national study of primary hip arthroscopy, 90-day adverse events were low at 1.28%, and the five-year secondary surgery rate was 4.9%; age less than 20 years, female sex, and obesity were risk factors for secondary surgery, suggesting the need for increased surveillance in these patient groups.

Data: Background: Hip arthroscopy is frequently used to treat femoroacetabular impingement (FAI) and labral tears. However, large cross-sectional studies documenting rates and predictors of revision surgery at midterm follow-up after primary hip arthroscopy are lacking. Purpose: To evaluate 90-day complications, five-year secondary surgery rates, and risk factors for secondary surgery following primary hip arthroscopy performed for FAI and/or labral tears using a large national dataset. Methods: A retrospective analysis was conducted using the PearlDiver Mariner151 database. Patients with International Classification of Diseases (ICD)-10 diagnosis codes for FAI and/or labral tear undergoing primary hip arthroscopy with femoroplasty, acetabuloplasty, and/or labral repair between 2015 and 2021 were included. Those with concomitant ICD-10 codes for infection, neoplasm, or fracture were excluded, as were patients with a history of prior hip arthroscopy or total hip arthroplasty (THA), or age >70 years. Rates of complications within 90 days of surgery were assessed. Five-year rates of secondary surgery—revision hip arthroscopy or conversion to THA—were determined by Kaplan-Meier analysis, and risk factors for secondary surgery were identified by multivariate logistic regression. Results: A total of 31,623 patients underwent primary hip arthroscopy from October 2015-April 2021, with annual volumes ranging from 5,340 to 6,343 surgeries per year. Femoroplasty was the most frequent surgical procedure (performed in 81.1% of surgical encounters), followed by labral repair (72.6%) and acetabuloplasty (33.0%). Ninety-day postoperative complication rates were low, with 1.28% of patients experiencing any complication. The five-year secondary surgery rate was 4.9% (N=915 patients). Multivariate logistic regression identified age≥20 years (OR, 1.50; P<0.001), female sex (OR, 1.33; P<0.001), class I obesity (BMI 30-34.9 kg/m2: OR, 1.30; P=0.04), and class II/III obesity (BMI ≥35.0 kg/m2: OR, 1.29; P=0.02) as independent predictors of secondary surgery. Conclusion: In this study of primary hip arthroscopy, 90-day adverse events were low at 1.28%, and the five-year secondary surgery rate was 4.9%. Age less than 20 years, female sex, and obesity were risk factors for secondary surgery, suggesting the need for increased surveillance in these patient groups.

Category: Hip/Groin/Thigh

Timing From Symptom Onset to Hip Arthroscopy for Treatment of Femoroacetabular Impingement in Adolescent Patients

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