

Ten-Year Outcomes of Hip Arthroscopy for the Treatment of FAI and Labral Tears in Patients with Obesity

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INTRODUCTION:

Obesity is a recognized adverse prognostic factor across various surgical interventions. This study aimed to conduct a long-term analysis of patients with obesity who underwent hip arthroscopy for femoroacetabular impingement (FAI) and labral tears with a comparative analysis to a control group with normal weight.

METHODS: Data was retrospectively analyzed for patients who underwent hip arthroscopy as treatment for FAI and labral tears between 2008 and 2013 with a body mass index (BMI) ≥ 30 kg/m². Included patients had complete pre- and postoperative PROs and VAS at minimum 10-years follow-up. Rates of revision surgery and conversion to total hip arthroplasty (THA) were compared. A subanalysis based on BMI subgroups was completed. Patients were propensity matched to a control group of normal weight patients (BMI 20-24.99 kg/m²) in a 1:1 ratio by sex, age at surgery, Acetabular Outerbridge Grade, and capsular treatment.

RESULTS: 266 patients were included for study. Obese patients displayed significant improvements across all PROs and high patient satisfaction. Moreover, morbidly obese patients (BMI ≥ 40 kg/m²) reached MCID and PASS for mHHS at significantly lower rates. Obese patients started with significantly lower baseline preoperative scores for all PROs. Both groups reported similar magnitudes of improvement at minimum 10-year follow-up for NAHS, HOS-SSS, and VAS, reaching comparable postoperative scores. Both groups achieved MCID and PASS for mHHS, NAHS, and HOS-SSS at similar rates ($p < 0.05$). Obese patients had a higher frequency of conversion to THA with a relative risk of 2 ($p < 0.01$).

DISCUSSION AND CONCLUSION: Hip arthroscopy for the treatment of FAI and labral tear in patients with obesity yielded significant sustainable improvements in the long term, which were equivalent to a benchmark matched control group of normal-weight patients. However, patients with obesity had a 2-fold relative risk of conversion to THA. Morbidly obese patients did not experience significant improvements in functional PROs and achieved clinical threshold at lower rates and should therefore be approached with caution.