Older Adults Take Longer to Achieve the Patient Acceptable Symptom State Following Primary Hip Arthroscopy for Femoroacetabular Impingement: A Retrospective Analysis with 2-Year Follow-up

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INTRODUCTION: Though most older adults are able to achieve adequate outcomes following hip arthroscopic procedures, they are at higher risk of failing to achieve certain outcome milestones such as the minimum clinically important difference (MCID), the substantial clinical benefit (SCB), and the patient acceptable symptom state (PASS). The purpose of our study was to assess the impact of age on time to achieving the MCID, SCB, and PASS following primary hip arthroscopy for femoroacetabular impingement (FAI).

METHODS: We conducted a retrospective review of a prospectively collected database of patients who had minimum 2-year follow-up. Subjects completed the modified Harris Hip Score (mHHS) prior to surgery and at three follow-up time points. Follow-up times were classified as 6 months (5-11 months), 1 year (12-23 months), and 2 years (24-35 months). MCID and SCB were defined as pre-to-postoperative increases in mHHS by ≥8.2 and ≥19.8, respectively, while PASS was defined as postoperative mHHS ≥74. Time to achievement of each milestone was compared between three age groups (20-35, 35-50, 50-75 years) using the interval-censored EMICM algorithm and generalized log-rank test. The effect of age was adjusted for BMI, sex, and baseline mHHS using an interval-censored proportional hazards model.

RESULTS: 303 patients were included in the analysis with 122 (40.3%) aged 20-35 years, 97 (32.0%) aged 35-50 years, and 84 (27.7%) aged 50-75 years. Across all age groups, a majority of patients achieved MCID, SCB, and PASS by 6-month follow-up. There were no significant differences between groups in time to achievement for MCID ($p = 0.69$) or SCB ($p = 0.52$). However, patients in the oldest group had significantly longer time to PASS than those in the youngest group, both in the unadjusted analysis ($p = 0.01$) and after adjusting for sex and BMI ($p = 0.01$).

DISCUSSION AND CONCLUSION: Though a majority of hip arthroscopy patients across all age groups will achieve the MCID, SCB, and PASS by 6-month follow-up, achievement of PASS is delayed among patients aged 50-75 years old. Patients in this age bracket may benefit from preoperative counseling to set appropriate expectations for their recovery timeline.