Clinically Meaningful Improvements After Hip Arthroscopy for Femoroacetabular Impingement in Adolescent and Young Adult Patients Regardless of Gender.


Abstract

BACKGROUND: The objective of this study was to determine if adolescent and young adult patients undergoing hip arthroscopy for symptomatic femoroacetabular impingement (FAI) experience clinically meaningful improvements in functional outcome scores.

METHODS: A consecutive series of patients under age 18 who underwent primary hip arthroscopy for symptomatic FAI was identified using our institution’s hip registry. Demographics, preoperative radiographic measurements, and preoperative and postoperative patient-reported outcome scores [Hip Outcome Score (HOS), Activity of Daily Living (ADL), and Sports-Specific Subscale (SS), and modified Harris Hip Score (MHHS)] were collected. Percentage of patients achieving minimum clinically important difference (MCID) and patient acceptable symptom state (PASS) were determined using published cutoffs for HOS and MHHS in FAI patients.

RESULTS: Forty-three patients met study inclusion criteria, and 37 patients (86%) were available at a minimum follow-up of 2 years. Mean age was 17.0±1.4 years, 70% were female, and 8.1% had an open proximal femoral physis. All competitive high school and college athletes were able to return to sport. Patients experienced significant improvements following hip arthroscopy in HOS-ADL, HOS-SS, and MHHS scores (all P<0.0001). MCID was achieved in 81% of patients (27/34) for HOS-ADL, 97% (33/34) for HOS-SS, and 84% (27/32) for MHHS. PASS was achieved for 76% of patients (26/34) for HOS-ADL, 79% (27/34) for HOS-SS, and 81% (26/32) for MHHS. Lower body mass index but not age or sex was correlated with a greater improvement in MHHS scores (r=0.39; P=0.03). There were 2 minor complications and no revision surgery.

CONCLUSIONS: Adolescent and young adult patients experienced statistically significant improved functional outcomes 2 years after hip arthroscopy for FAI. In addition, these outcomes can be achieved with a low complication rate and a high return to preoperative activity. Approximately 80% of patients achieved clinically significant outcomes based on MCID and PASS criteria. Patient improvements in MHHS were equal regardless of age or sex; however, lower preoperative body mass index led to greater postoperative MHHS improvements.

LEVEL OF EVIDENCE: Level IV-therapeutic case series.