ABSTRACT

Background/Purpose: Low back pain (LBP) is a common source of disability in adults and highly prevalent in patients with painful hip pathology. Persistent LBP after hip arthroplasty is associated with lower self-reported function, however, the effect of pre-operative LBP in patients undergoing hip arthroscopy for FAI has not been evaluated. The purpose of this study was to determine whether improvements in self-reported hip function following arthroscopic surgery for femoroacetabular impingement (FAI) differed between those with and without reports of pre-operative low back pain.

Study Design: Cohort

Methods: Three hundred eighteen subjects undergoing primary hip arthroscopy for clinically and radiographically-confirmed FAI were recruited and consented. One hundred fifty-six of these subjects completed the International Hip Outcomes Tool (iHOT-33) and the Hip Outcome Score Activities of Daily Living Subscale (HOS-ADL) before, and six and 12 months after surgery. Subjects were grouped based on the self-reported presence or absence of LBP prior to arthroscopy. A repeated measures analysis of variance was used to determine the effects of time and low back pain on iHOT-33 and HOS-ADL scores.

Results: Seventy-five of 156 subjects (48.1%) reported LBP prior to surgery. A main effect of time was found for both outcome measures (p<0.001), demonstrating improvement in self-reported outcomes over the testing period. There was a main effect of group for the iHOT-33 (LBP: 52.0 [47.9,56.0]; no LBP 57.9 [53.9,61.8]; p = 0.043) but not for the HOS-ADL (LBP: 75.2 [72.2,78.2]; no LBP 78.8 [75.9,81.7]; p = 0.088) indicating that subjects with pre-operative LBP had poorer self-reported function per the iHOT-33 compared to those without LBP.

Conclusion: Self-reported hip function scores improved regardless of the presence of pre-operative LBP; however subjects with LBP reported poorer self-reported function per the iHOT-33 as compared to those without LBP up to 12 months post-operatively.

Level of Evidence: 3c

Key Words: Femoroacetabular impingement, low back pain, outcomes

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