Posterior Hip Precautions Do Not Impact Early Recovery at Total Hip Arthroplasty: A Multicenter Randomized Controlled Study

Matthew J. Dietz, MD, Adam E. Klein, MD, Brock A. Lindsey, MD, Stephen T. Duncan, MD, Jennifer Eicher, BS, Brett Smith, MD, Garen D. Steele, MD

Introduction: Posterior hip precautions have been routinely prescribed to decrease dislocation rates. The purpose of this study was to determine if the absence of hip precautions improved early recovery after total hip arthroplasty via the posterolateral approach.

Methods: We prospectively enrolled patients undergoing total hip arthroplasty via the posterolateral approach by fellowship trained surgeons at three centers. Patients meeting our selection criteria were randomized to No Hip Precautions (NHP) or Standard Hip Precautions (SHP) for six weeks following surgery. We recorded HOOS Jr., health state visual analog score and rate of pain scores, preoperatively, and at 2, 6, 24 weeks and one year postoperatively. We also noted any dislocation episodes. Standard statistical analysis was performed.

Results: From 2016-2017, 149 patients were randomized to NHP and 150 patients were randomized to SHP. There were no differences in demographics. There was no difference in the average cup size (p=0.156) or head diameter (p=0.05) for each group. The only difference in outcomes scores between the two groups was at 2 weeks the SHP group had an improved HOOS Jr score when compared to the NHP (p=0.03). There was no difference in outcome scores between at all other time points when compared to preoperative assessments. In the SHP group there were 3 recorded dislocations (2%) and one in the NHP group 0.6% (p=0.62). Ninety five percent of patients in the SHP reported following precautions, while 39% of the NHP reported self-imposed precautions (p=0.001).

Conclusions: In this randomized controlled multicenter study the absence of hip precautions in the postoperative period did not improve subjective outcomes which may be explained by self-limiting behavior of NHP patients. Further, with the numbers available for the study, there was no difference in the rate of dislocation between the two groups.