

Revision THA in Obese Patients Is Associated with High Reoperation Rates at Short Term follow Up

Michael H. McGraw, MD, Gwo-Chin Lee, MD, Nicholas Pulos

Introduction: Prior studies have shown obese patients to be at increased risk of complications following joint replacement surgery. However, there is little information on the outcomes of revision THA in this patient population. The purpose of this study is to evaluate the intraoperative and postoperative outcomes in obese patients undergoing revision THA.

Method: We retrospectively reviewed 259 consecutive revision THAs performed at our institution. The reason for revision was loosening in 158, infection in 37, instability in 31 and periprosthetic fractures in 19. We identified a subgroup of patients with BMI >35 (N=52) (Group I) and compared perioperative factors including operative time; complications defined as intraoperative fracture, excessive blood loss > 2000 ml, and immediate postoperative thromboembolic event; transfusions requirements; 90 day-readmissions; and reoperations to patients undergoing revision THA with BMI < 35 (Group II).

Results: The average follow up was 29 months (range 24-69). The average BMI was 41.5 and 26.4 in groups I and II respectively. There were no significant differences in operative time, post operative length of stay, ICU admission rates, and transfusion requirements between the 2 groups. 10 patients (19%) in group I was readmitted to the hospital within 90 days following revision THA compared to 29 patients (15%, $p=0.452$) in group II. Finally, there was a significantly higher rate of reoperation in the obese group compared to controls. 23 (44.2%) patients in group I required reoperation compared to 53 (26.8 %) in the obese group ($p=0.025$). The most common reasons for reoperation in the obesity group were dislocation and infection.

Conclusion: Revision THA in obese patients was associated with significantly higher reoperation rates at a mean of 29 months follow up. Increased BMI does not only impact the outcomes of primary THA but has significant impact on the success of revision THA.