Obesity Class is Not Associated with Rate, Timing, or Invasiveness of Early Reintervention after THA.

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INTRODUCTION:
Body mass index (BMI) cutoff values have been proposed to determine eligibility for elective total hip arthroplasty (THA) in obese patients. However, the relationship between the severity of obesity and reinterventions remains poorly understood. We evaluated whether the World Health Organization (WHO) Obesity Class is independently associated with the risk, invasiveness, or timing of reinterventions after THA in obese patients.
METHODS:
7,714 patients with a BMI ≥ 30 kg/m² underwent elective, unilateral THA for primary osteoarthritis between 2016 and 2022 at a tertiary care institution. The patients were grouped according to the WHO Obesity Classification: Class 1 (59.8%, n=4,607); 2 (26.7%, n=2,049); and 3 (13.5%, n=1,058). Chart review was conducted to identify individuals who underwent any closed or opened reintervention requiring anesthesia and determine reintervention characteristics including invasiveness and timing. Univariate analysis was performed to identify variables associated with an increased risk for reoperation, its invasiveness and timing. Multivariable regression was performed correcting for risk factors.

RESULTS:
Seventy-two patients (0.93%) required at least one reintervention, with 18 undergoing two or more. The reintervention rates for Class 1, 2, and 3 were 1% (n=46), 0.8% (n=17), and 0.9% (n=9), respectively. Six minor procedures (8.3%), 29 open procedures with or without liner exchange (40.3%), and 37 revisions with acetabular and/or femoral component exchange (51.4%) were performed. In multivariate analysis, the WHO Obesity Class was not associated with the rate (p=0.48) or timing (p=0.54) of reinterventions. Solely Female sex was independently associated with earlier reintervention (p=0.018). Univariate analysis showed no difference in invasiveness (p=0.54).
DISCUSSION AND CONCLUSION:
In this large cohort treated in a tertiary care center, the WHO Obesity Class was not associated with different risk, invasiveness and timing of reinterventions. Policies that preclude patients from proceeding with elective THA based solely on BMI may have limited efficacy in reducing reoperations following THA.