

Fate of the Morbidly Obese Patient Who Is Denied Total Joint Arthroplasty

Joshua A. Shapiro, MD, Patrick R. Taylor, BA, Arvind Narayanan, MD, Christopher W. Olcott, MD, Daniel J. Del Gaizo, MD

Introduction: The purpose of this study was to investigate the outcomes of patients denied total hip arthroplasty (THA) or total knee arthroplasty (TKA) due to morbid obesity ($BMI > 40 \text{ kg/m}^2$).

Methods: We performed an observational study at our tertiary center with a minimum 2-year follow up. Patients denied arthroplasty were contacted and provided a self-administered survey including the Harris Hip Score (HHS) or Knee Society Score (KSS). Statistical analysis included an unpaired student t-test with significance set at $p < 0.05$.

Results: 2,819 individuals were identified. 125 (4.4%) were denied THA or TKA due to morbid obesity. 24 of those (19.2%) met requisite weight and underwent arthroplasty at our institution. The remaining 101 were contacted: 31 (30.7%) agreed to participate including 7 (22.6%) with hip and 24 (77.4%) with knee arthritis. The average age at denial was 59.1 vs. 62.6 years at survey. Of those denied THA ($n=7$), three (42.9%) sought second opinions and received an average of two additional denials. None achieved a BMI under 40 kg/m^2 or received THA. The average HHS (/100) at survey was 34.6 ± 13.1 . Of those denied TKA ($n=24$), thirteen (54.2%) sought second opinions and received an average of 0.75 additional denials. Five (38.5%) subsequently received TKA at an outside institution, with an average BMI of $49.2 \pm 6.3 \text{ kg/m}^2$ compared to $47.8 \pm 5.3 \text{ kg/m}^2$ at our denial ($p=0.71$). One (20.0%) developed prosthetic joint infection. One (4.2%) achieved requisite BMI (39.6 kg/m^2) but did not undergo arthroplasty. There was no difference in KSS Pain (/50) or Function (/100) between those denied TKA (8.8 ± 11.5 ; 34.1 ± 22.5) and those who subsequently underwent TKA elsewhere (13.0 ± 19.9 ; 28.0 ± 43.1) ($p=0.55$; 0.68).

Conclusions: At a minimum 2-year follow up, 80.0% never achieved a BMI under 40 kg/m^2 . Those who sought another opinion were often denied again due to obesity. In the small subset of patients that ultimately underwent arthroplasty by another surgeon, outcomes were poor and similar to non-arthroplasty.