

Satisfaction following Total Joint Arthroplasty: The Impact of the COVID-19 Pandemic

Luke Garbarino, Garrett Scott Bullock¹, John Shepherd Shields

¹Mountain River Physical Therapy

INTRODUCTION:

The COVID-19 pandemic has been associated with increases in depression, anxiety, and decreased life satisfaction. The mental health of total joint arthroplasty patients can drastically affect their outcomes. The purpose of this study was to determine if patient reported outcomes following total hip or total knee arthroplasty changed during the COVID-19 pandemic.

METHODS:

Data was collected on 2,091 patients undergoing unilateral primary total joint arthroplasty between November 2019 and January 2022, who completed patient reported outcomes (PROs) surveys up to 1-year postoperatively. PROs collected included pain scores, Patient-Reported Outcomes Measurement Information System (PROMIS-10), Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), Hip Disability and Osteoarthritis Outcome Score, Joint Replacement (HOOS, JR) and Knee Injury and Osteoarthritis Outcome Score, Joint Replacement (KOOS, JR). A date of March 18, 2020 was chosen to delineate the “Pre-COVID” and “COVID” groups as this coincides with regional shutdowns. A mixed effects regression was performed on patient reported outcomes..

RESULTS:

A total of 283 patients were in the “Pre-COVID” group and 1,808 patients in the “COVID” group. There were no significant differences between the “Pre-COVID” and “COVID” groups for the patient reported outcomes at any time point. PROMIS-10 [Unadjusted: 0.8 (95% CI: -0.3, 1.9); Adjusted: 1.0 (95% CI: -0.2, 2.1)] and WOMAC [Unadjusted: -0.1 (95% CI: -4.1, 3.9); Adjusted: -1.5 (95% CI: -5.7, 2.6)] scores showed no difference across time points. THA and TKA patients showed similar patient reported outcome scores preoperative and postoperatively across both groups (HOOS JR: Unadjusted: 1.9, Adjusted: 1.7; KOOS JR: Unadjusted: 1.3, Adjusted: 1.8).

DISCUSSION AND CONCLUSION:

The COVID-19 pandemic has altered many aspects of healthcare, including total joint arthroplasty. Though there have been significant changes in both the pre-operative and post-operative care of these patients, the results of this study indicate that patient reported outcomes following TKA and THA have remained durable.

