Establishing a Hospital-Based Outpatient Joint Replacement Unit During COVID-19

Henry Matthew Dunn[1], Caleb Durst[2], Kevin Timur Rezzadeh, Eytan Debbi, Andrew I Spitzer[3], Guy D Paiement[2], Brad L Penenberg[4], Sean Rajaee[2]
[1]Cedars-Sinai, [2]Cedars-Sinai Medical Center, [3]Cedars-Sinai Department of Orthopaedic Surgery, [4]Cedars- Sinai Medical Center

INTRODUCTION:
In an effort to continue elective total hip arthroplasty (THA) and total knee arthroplasty (TKA) under pandemic conditions, an outpatient surgical unit (OSU) was established up at our tertiary care institution. Appropriate support services were redirected from the inpatient units to support postoperative mobilization protocols and expedited discharge. This study aims to describe our early experience with this outpatient joint replacement unit.
METHODS:
We retrospectively studied patients that underwent THA or TKA from January to June 2021, which represented the first six months of the OSU. The primary outcome was the frequency of same-day or next-day discharge after total joint arthroplasty. The most common reasons for delayed discharge were also analyzed. The secondary outcome was 90-day readmissions.
RESULTS:
There were 211 patients with 122 THAs and 89 TKAs. Mean age was 65.2 years (SD: 9.8 years) and mean BMI was 27.8 (SD: 4.8). Same-day discharges occurred in 37% of patients, with higher rates in the THA cohort (50%) than the TKA cohort (19%). Ninety-one percent of patients were discharged by postoperative day one, with similar rates for THA (92%) and TKA (91%). Of the 18 patients not discharged within one day of surgery, ten (56%) were discharged within two days and all were discharged within one week postoperatively. The most common reasons for delay were pain control/difficulty mobilizing (5 patients), postoperative hypotension (5 patients), and nausea/vomiting/dizziness (5 patients). Patients requiring specialized inpatient services included cardiac workup (2 patients), urinary retention requiring urologic consultation (1 patient), and treatment for acute DVT (2 patients). There were no readmissions within 90-days of surgery.
DISCUSSION AND CONCLUSION:
This study demonstrates successful implementation of a hospital-based outpatient joint replacement unit in the setting of the COVID-19 pandemic. In addition to efficiently and safely discharging over 90% of patients by postoperative day one, this hospital-based OSU provided a safety net for transfer and prompt medical attention for patients requiring inpatient stays and resulted in avoiding ED admissions within 90 days.