

Outpatient Fracture Surgery: Should We Be Concerned?

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Purpose: With rising health-care costs and insurance-carrier push against non-emergent hospital admission, treatment of lower-extremity fractures is shifting towards outpatient procedures rather than inpatient hospitalizations. Lower-extremity fractures distal to the hip do not always require inpatient level care, but rather can be discharged from the post-anesthesia care unit (PACU). This study seeks to compare complications and readmissions between patients treated for similar lower-extremity fractures as outpatient versus inpatient.

Methods: This study was a retrospective review of 500 consecutive patients with a lower-extremity fracture distal to the hip treated by 1 surgeon between January 2012 and December 2017 at 1 academic medical center. Patients were identified using International Classification of Diseases (ICD)-9 and 10 codes. Chart review was conducted to identify patient demographics, injury information, length of stay, readmission, and complication data. Patients staying 24 hours or less including their procedure were considered to be outpatient. Patients staying longer than 25 hours including their procedure were considered to be inpatient. Binary logistic regression and χ^2 analyses were performed using IBM SPSS to assess for differences between inpatients and outpatients in regard to readmissions and complications after controlling for demographics and injury characteristics.

Results: We identified 127 patients (25.4%) who met inclusion criteria. Of these 5, (3.9%) had foot fractures, 37 (29.1%) had ankle fractures, 29 (22.8%) had fractures of the tibial or fibular shaft, 48 (37.8%) had fractures affecting the knee, and 8 (6.3%) had distal femur fractures that did not interrupt the articular surface. There was no difference in the proportion of patients receiving spinal anesthesia between inpatient and outpatient groups ($P = 0.173$). After controlling for age, Charlson Comorbidity Index (CCI), wound status, and fracture type, we found that there was no difference between inpatient and outpatient cohorts in terms of complications, infection, readmission, or mortality ($P = 0.564$, $P = 0.232$, $P = 0.718$, $P = 0.999$). When the cutoff for inpatient classification was raised to 36 hours, still no significant difference existed in complications, infection, readmission, or mortality ($P = 0.117$, $P = 0.138$, $P = 0.077$, $P = 0.997$).

Conclusion: Outpatient fracture surgery for isolated lower-extremity fractures distal to the hip is safe and effective. As the population both increases and ages, more low-risk surgeries should be considered outpatient procedures rather than inpatient hospital admissions to lower costs, save resources, and reduce risk to both the hospital and the patient.