Paper #5

Allergies and Preoperative Narcotic Use Predict Failed Same-Day Discharge After Joint Replacement

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Introduction: Identification of predictors of failure of same-day discharge (SDD) is critical for selecting appropriate candidates. In this study, we evaluated patient factors associated with failure of SDD in patients undergoing elective primary total joint arthroplasty (TJA) in a hospital setting.

Methods: We performed a retrospective review of all consecutive patients who underwent primary total knee arthroplasty (TKA) and total hip arthroplasty (THA) at a multi-specialty hospital between January 2018 and February 2020 by one of three surgeons. All preoperatively designated Same Day Rapid Discharge Protocol (SDRP) patients were included. Patient demographics, co-morbidities, and clinical data were collected. Analysis was performed to assess risk factors for failed SDD.

Results: Of the 2,615 TJA (1,425 TKA, 1,190 THA) performed over the study period, 271 were SDRP patients (80 TKA, 191 THA). SDRP designation was lower for TKA than THA (5.6% vs. 16.1%, $p<0.001$). Overall, 45 patients failed SDRP (16.6%). The failure rate was similar in TKA and THA (18.8%, 15.7%, $p=0.54$). The most common reasons for failure of SDRP were hypotension (11, 24.4%), long-acting spinal anesthetic (11, 24.4%) and nausea (5, 11.1%). Greater than 2 self-reported drug allergies (OR 3.9) and preoperative narcotic use (OR 2.3) were associated with failure of SDRP. Age, gender, BMI, ASA class, and prior TJA were not significantly associated with failure of SDRP ($p>0.05$).

Conclusions: Success of SDD after primary THA and TKA with protocolized patient selection in a hospital setting was greater than 80%. Hypotension, long-acting spinal anesthetic and nausea accounted for 60% of failures of SDD. Patients who had more than 2 self-reported drug allergies or used preoperative narcotics were at high risk for failure of a planned SDD after primary THA or TKA.

Notes