



A Multi-center, Prospective, Randomized Study of Outpatient vs. Inpatient Total Hip Arthroplasty

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Introduction: This study prospectively evaluates patient-reported satisfaction with outpatient (<12hr stay) vs. inpatient (overnight stay) THA in a broad patient population and determines predictive factors for patients unable to be discharged on the planned day.

Methods: A prospective, randomized control trial was performed with two institutions from July 2014 to March 2015. Patients were included if BMI<40kg/m², age<75 years, and they were not wheelchair- or walker-bound preoperatively. 220 patients were randomized to outpatient or inpatient hospital stay. Both groups received the same preoperative counseling, perioperative anesthesia/analgesia, and physical therapy. The following variables were measured: visual analog scale (VAS) satisfaction and pain scores, complications and unplanned physician visits, and the number of phone calls to the surgeon's office.

Results: The outpatient and inpatient groups had similar age (60.3 vs. 60.7 years, respectively, p=0.80), gender (p=0.44), BMI (27.2 vs. 28.4 kg/m², p=0.20) and preoperative comorbidities (p=0.39). At 4 weeks, satisfaction with the procedure was higher in the outpatient group (88 vs. 80, p=0.003), while satisfaction with the discharge timing was the same (outpatient 88%, inpatient 89%, p=0.97). On the day after surgery, the outpatient group experienced more pain (VAS 3.7 vs. 2.7, p=0.003). There were a similar number of complications, physician visits, and phone calls to the surgeon's office between the groups (p=0.32). 26% of patients randomized to outpatient required inpatient stay, and 6% of patients randomized to inpatient left on the day of surgery, with no patient factors identified as predictive of discharge failure.

Conclusion: This Level 1 study demonstrates that patients discharged the same day as their THA have slightly higher satisfaction scores but higher pain scores on the day after surgery. There are no differences in early complications, physician visits, readmissions, and calls to the surgeon's office postoperatively. However, even with standardized protocols, some patients may require overnight stay.