

Even If You Live Alone, There is No Place Like Home After Total Joint Arthroplasty

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INTRODUCTION:

This prospective study evaluated the safety and efficacy of direct to home discharge for total joint arthroplasty (TJA) patients living alone.

METHODS:

Data was collected for a consecutive series of patients undergoing primary, unilateral total hip arthroplasty (THA) or total knee arthroplasty (TKA) for a six-month period. Home support for two weeks after discharge was identified as the primary variable. Patients were classified as living alone (investigational group) or living with others (control group). Length of stay, 30-day post-discharge complications, hospital readmissions, emergency department visits, unscheduled office visits, and reoperations were recorded. Functional outcomes (HOOS/KOOS and SF12) were administered preoperatively, at one month, and at six months. Visual analog scale (VAS) pain was assessed weekly for the first postoperative month and VAS satisfaction evaluated after three months. Time off assistive devices, return to driving, and return to work were assessed. Statistical analysis was performed using a linear mixed-effect model adjusting for potential confounders.

RESULTS:

A total of 638 patients were identified (364 THA and 274 TKA), of which 97.5% THA and 92.3% TKA were discharged directly home after hospitalization. Some 17.1% of THA and 16.5% of TKA patients were living alone. No significant baseline demographic differences were found between those living alone and those not. THA and TKA patients living alone did have longer hospitalizations (1.1 days vs. 1.0 days; $p=0.05$ and 1.9 days vs. 1.3 days; $p<0.0001$). Evaluation of day of discharge showed that 15.1% of patients with support at home and 37.2% of patients living alone were discharged after postoperative day one. There was no significant difference in 30-day post-discharge complications, hospital readmissions, ED visits, unscheduled office visits, reoperations, functional outcome measures, weekly VAS pain, time off assistive walking devices, return to driving, and return to work. At two weeks, more patients with support at home were satisfied with their discharge (92.7% vs. 79.5%; $p=0.0003$) and would have preferred discharge to home again (95.4% vs. 88.2%; $p=0.018$). However, satisfaction scores had become equivalent at 90 days. With a mean cost of \$11,402 for Medicare patients, inpatient rehab would need to prevent 1.24 readmission events or 15.9 ED visits to be considered cost-effective.

DISCUSSION AND CONCLUSION:

Patients who live alone can expect a safe and effective recovery when discharged directly home after THA or TKA. A strategy of extending the initial hospitalization for patients living alone instead of automatically designating these patients for discharge to a rehab facility is considerably more cost-effective.