Does Intra-Hospital Transfer of Hip Fracture Patients Affect Time to Surgery Within the Same Hospital Network?

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Purpose: Some hospital systems have multiple sites at which hip fracture patients present and are admitted. However, within these systems, policy is to transfer all medically stable patients to 1 site for increased operating room availability and institutional expertise. The purpose of this study was to evaluate if intra-hospital transfers of hip fracture patients within 1 hospital network delays the time from admission to incision.

Methods: This was an IRB-approved study. A retrospective review of a consecutive series of hip fracture patients (AO/OTA 31A, 31B, 32A) was performed to identify all patients who presented to our academic medical center from 2016-2021 for index fracture treatment that required operative intervention. All patients were reviewed for demographic features, injury characteristics, admission and surgical hospital locations, hospital quality measures (notably the time from admission to incision), and outcomes. Patients were grouped into 2 cohorts: (1) transfer cohort, patients who were transferred between hospital sites before hip fracture repair, or (2) no-transfer cohort, patients who were not transferred before hip fracture repair. Univariable and linear regression analyses were conducted between the 2 cohorts.

Results: 1245 operative hip fracture patients were identified who met inclusion criteria; 1009 (81.0%) were transferred, while 236 (19.0%) were not transferred. There were demographic differences between the transfer and no-transfer cohorts, being that patients who were transferred were significantly younger (P<0.001), healthier (lower Charlson Comorbidity Index [P<0.001]), and more female (P<0.001). Patients who were transferred between hospitals had a shorter median time from admission to incision than those who remained at 1 site (16.65 hours transfer vs 34.04 hours no-transfer, P<0.001). Transfer patients had improved outcomes including a shorter length of stay (5.56 days vs 8.47 days, P<0.001), lower complication (P<0.001) and readmission rate (P<0.001), and decreased rate of 30-day, 90-day, and 1-year mortality (P<0.001). When controlling for demographic confounding variables, linear regression analysis demonstrated that patient transfer between hospital sites was associated with a shorter time to surgery (P<0.001).

Conclusion: The process of transferring hip fracture patients to a specialized center within the same hospital network does not delay the time from admission to incision and improves overall care quality.