No One Is Too Sick for a Life Saving Operation!

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Purpose: The purpose of this study was to quantify and elucidate outcomes in patients with significant medical comorbidities who undergo fixation following hip fracture.

Methods: This study was approved by the Institutional Review Board. All patients who underwent surgical fixation of an OTA 31A/31B/32A hip fracture were identified. This dataset was queried for patients with extensive and severe comorbidity profiles, those who were deemed the "highest-risk" at presentation for hip fracture. Patients were classified as "highest-risk" by one or more of the following conditions: kidney failure on hemodialysis, cirrhosis Child class C, cardiac stents within 6 months, acute myocardial infarction (ST elevation or enzymes), severe mitral stenosis or critical aortic stenosis, severe pulmonary hypertension, need for neurosurgical intervention, or chronic heart failure (class 3 and 4). Each patient was reviewed for demographics, medical history, hospital quality measures (including need for pre-, intra-, or postoperative procedures), and outcomes. Descriptive statistics were performed to evaluate outcomes of this highly vulnerable population.

Results: Of 2846 hip fracture patients, 152 (5.3%) were deemed the "highest-risk," presenting with one or more of the above comorbidities. The mean age of patients was 81.77 ± 9.96 years. This cohort was admitted for an average of 8.48 ± 5.17 days and spent an average of 2.51 ± 4.56 days in the ICU. An immediate, pre- or postoperative intervention for medical stability was required in 42 (27.6%) patients. Only four (2.6%) patients required immediate intraoperative medical intervention during hip fracture repair, 114 (75.0%) patients experienced a minor complication while admitted for hip fracture, and 28 (25.0%) experienced a major complication. The most frequent inpatient complications were anemia (48.7%), acute kidney/renal failure (19.7%), and urinary tract infection (18.8%). Six (3.9%) patients expired during admission, 12 (7.9%) within 30 days of surgery, and 27 (17.8%) within 1 year of surgery. Of the entire cohort, 38 (25%) patients were readmitted within 30 days and 50 (32.9%) within 90 days.

Conclusion: Highest-risk hip fracture patients experience prolonged hospitalizations, concurrent procedures, and a high incidence of inpatient complications. Despite these challenges, most tolerated their hip fracture surgical procedures well, with a low need for intraoperative intervention while under orthopaedic care.