

## Early Operative versus Nonoperative Management in the Treatment of Fragility Fractures of the Pelvis: A Propensity-Matched Multicenter Study

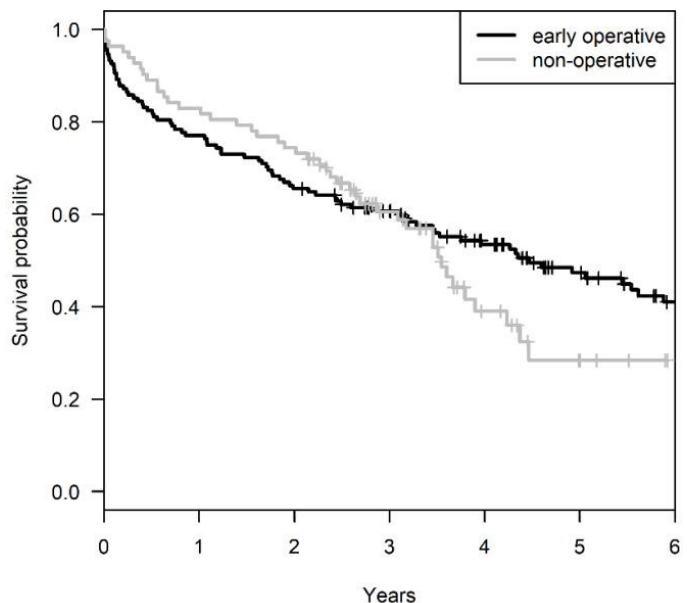
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**Purpose:** We sought to compare early operative treatment of geriatric pelvis fractures with nonoperative treatment regarding mortality and functional outcome.

**Methods:** In a retrospective propensity-score matched study, 230 consecutive patients with an isolated low-energy fracture of the pelvis aged 60 years or more and with a follow-up of at least 24 months were recruited from 1 of 2 trauma centers. In center 1, treatment consisted of a nonoperative attempt and early operative fixation if mobilization was not possible. In center 2, all patients were treated nonoperatively. Mortality was assessed using a national social insurance database. Hospitalization time and in-hospital complications were documented and a modified Majeed Score was obtained by phone interview from those who could be contacted. Unadjusted comparison, matched comparison (age, gender, and ASA [American Society of Anesthesiologists]), and a propensity score-matched analysis were conducted.

**Results:** One year after the initial hospitalization 34/148 patients (23%, 95% confidence interval [CI]: 17% to 31%) of the early operative group and 14/82 patients (17%, 95% CI 10% to 27%) of the nonoperative group had deceased ( $P = 0.294$ ) and nonoperative treatment also had a protective effect on survival during the first 2 years (hazard ratio of the non-linear effect: 2.86, 95% CI 1.38 to 5.94,  $P < 0.001$ ). However, patients in the early operative treatment group who survived the first 2 years had a better long-term survival. The functional outcome at the end of follow-up as measured by a modified Majeed score was not different between the 2 groups (early operative: 66.1, standard deviation [SD] 12.6 vs nonoperative: 65.7, SD 12.5,  $P = 0.910$ ).

**Conclusion:** A treatment concept with early operative fixation of patients who cannot be mobilized within 3 to 5 days has a beneficial effect on long-term survival. Patients with a life expectancy of less than 2 years, however, may not benefit from surgery regarding survival.



See the meeting app for complete listing of authors' disclosure information.