

IMPACT OF GENDER ON EARLY MEDICAL COMPLICATIONS AND MORTALITY AFTER HIP FRACTURE IN ELDERLY PATIENTS

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Introduction. Hip fractures are associated with high morbidity and mortality in older adults. While gender disparities are suggested in the literature, specific differences in early medical complications and mortality remain a subject of investigation.

Objectives. To analyze gender impact on comorbidities, complications, and 3-month mortality in orthogeriatric patients.

Materials and Methods. Observational study on 382 consecutive patients (mean age 84.7 ± 7.8 years; 75.4% women) admitted to the Orthogeriatric Unit of Baggiovara Civil Hospital between January 1st and December 30th, 2024. All patients underwent a Comprehensive Geriatric Assessment (CGA). Clinical, biochemical, and functional variables were analyzed. Multivariate analysis (logistic regression) was performed to identify predictors of 3-month mortality.

Results. Men had a significantly higher comorbidity burden

(CIRS-com: 4.35 vs 3.72; $p=0.002$). Women showed poorer nutritional status (MNA: 9.2 vs 10.3; $p=0.001$). Surprisingly, no significant gender differences were observed in terms of sarcopenia (SARC-F: 4.92 vs 5.31; $p=0.223$). During hospitalization, men experienced significantly higher rates of delirium (43.5% vs 27.0%; $p=0.003$), perioperative infections (44% vs 31.6%; $p=0.031$), and thromboembolic events (DVT 4.3% vs 0.4%; $p=0.004$). Three-month mortality was significantly higher in men (11.4% vs 2.2%; $p=0.029$). In the multivariate analysis, after adjusting for age, frailty, delirium, and comorbidities, male sex emerged as the best independent predictor of 3-month mortality (OR 5.27; $p=0.083$).

Conclusions. Male sex is associated with a five-fold increased risk of medium-term mortality and higher post-operative complications, highlighting the need for early prevention and intensive follow-up in this population.