

Incidence of Non-simultaneous Contralateral Neck of Femur Fractures: A Single-Center Retrospective Cohort Study

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Abstract:

Nonsimultaneous contralateral neck of femur (NOF) fractures are associated with significant morbidity and mortality in the elderly population. This retrospective cohort study aimed to assess the incidence, risk factors, and outcomes of these fractures in patients treated at a single center between 2011 and 2023. Data were sourced from the National Hip Fracture Database for individuals aged 60 years and older who sustained a contralateral NOF fracture following an initial hip fracture. Of 9,165 patients, 511 (5.57%) experienced a contralateral fracture, with a mean interval of 1.8 years between injuries. The average age was 84.5 years, and 77.6% were female. Common comorbidities included dementia (35.8%), recurrent falls (8.4%), and osteoporosis (9%). Intracapsular fractures were the most frequent, accounting for 60.1% of cases. Post-discharge, only 38.1% of patients returned to their usual residence, and independent mobility declined substantially after the first fracture, with just 51.8% maintaining independence. The overall mortality rate was 65.7%, with an average of 2.03 years between the second fracture and death. These findings highlight the high vulnerability of this patient population and underscore the need for targeted prevention strategies, including fall prevention, osteoporosis management, and tailored care for individuals with cognitive impairment. Further research is warranted to develop predictive tools and evaluate early interventions aimed at improving outcomes in this high-risk group.