

Abstract 6 gender difference

Gender differences in comorbidity and complications after hip fracture - a prospective cohort study of 1,943 Swedish patients

Background: Hip fracture patients are often elderly with a poor health status and they are therefore prone to suffer complications. Complications have been suggested as a cause for excess mortality after hip fracture. Gender differences have been observed, but still need to be better understood. The aim of the current study was to investigate gender differences in a hip fracture population with respect to comorbidity and complications, and to find factors associated with complications related to gender.

Methods: In a multicenter prospective cohort study including 1,943 patients ≥ 65 years with hip fractures, gender differences in comorbidity and complications were analysed, both in the total population and in subgroups with regard to specific complications. Logistic regression analyses were performed to find factors associated with each complication.

Results: Seventy-five percent of the patients were women. Mean age in women was 84 (65-103) and in men 82 (65-101). Male gender was associated with more comorbidity compared to female; a history of stroke, malignancy, pulmonary disease or Parkinson's disease were more prevalent in the male group. Fifty-five percent of all patients suffered from one or more complication of which the most frequent were urinary tract infection, 31% women vs. 23% men ($p=0.001$), pressure ulcer, 21% women vs. 24% men (ns), cardiac complication, 14 % women vs. 18 % men ($p=0.016$) and pneumonia, 6% women vs. 14% men ($p<0.001$). These gender differences remained significant after performing logistic regression analyses. Apart from gender, cognitive dysfunction, pulmonary disease and time to surgery (> 24 h) also emerged as frequent associated factors in the complication subgroups. Four-month mortality rates were higher among the men in two of the subgroups: pressure ulcer, 19% women vs. 31% men ($p=0.007$) and cardiac complication, 25%, women vs. 41% men ($p=0.005$).

Conclusion: In this study of patients sustaining a hip fracture, complication rates were high, with differences between genders. Men suffered from more comorbidity and the incidences of cardiac complication and pneumonia were higher in the male group. Care strategies that include considerations for gender differences need to be developed.