Sex Disparities in Elderly Trauma in Northern Iran

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Abstract

Introduction: Trauma is currently the ninth cause of mortality in the elderly. Several factors may have an impact on the outcomes after trauma in the elderly including background disease, sex, trauma severity, and age. The aim of this study was to understand the sex differences about trauma in this growing population.

Methods: In a cross-sectional study, the records of all the traumatic injured people above 60 years of age who were admitted to a main center of trauma hospital in north of Iran in 2012 were studied. Demographic data, characteristics of road traffic incidents, and in-hospital medical profiles were derived. The analysis of data was done by using the χ² test and T test with SPSS Ver. 18 software. A P value of < 0.05 was considered statistically significant.

Results: One thousand and eight-hundred thirty injured elderly patients were admitted during the study period. This amount accounted for 10.5% of the total injured. In this study 56.3% of victims were male with the mean age of 70.84±8.16 years in comparison to 71.65±8.59 years in women (P < 0.05). Sex differences were seen in Glasgow coma scale, place, mechanism of trauma, anatomical part injured, and in-hospital death rate (P < 0.05). Outdoor trauma was more prevalent in men and indoor trauma in women. The mechanisms causing trauma in both sexes were slipping and road traffic accidents, respectively. In men, head and neck were the most common anatomical sites injured, while most women suffered from injuries to the upper extremities.

Conclusions: It seems that elderly men are more at risk of severe injury with a higher mortality rate in comparison to elderly women. Keywords: Trauma, The Elderly, Sex Difference