

Meeting abstract

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Epidemiology and outcome of multiple trauma in the elderly population in a tertiary care hospital in southern Italy

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Background

It is estimated that, in Italy, by 2050 almost 35% of the population will be older than 65 years and 14% will be older than 80 years. As the elderly population grows, the fraction of geriatric trauma patients seen in trauma centers is rapidly increasing. Traumatic injuries in the elderly often represent a major medical and surgical challenge. Even a condition as simple as an isolated fracture can be life threatening in the geriatric population. Aim of the study is to identify incidence and pattern of distribution of injuries in the geriatric trauma patients, as well as short-term prognosis.

Methods

We performed a retrospective descriptive analysis of data collected from our trauma database on traumatic injuries occurring between January 1, 2007 and December 31, 2007. The study cohort was selected both on the basis of complexity of trauma and age. Geriatric trauma victims ≥ 70 years old with two or more different body areas affected were included. Demographics, pattern of distribution of multiple injuries and outcome of the elderly trauma patients were analyzed.

Results

A total of 899 geriatric trauma patients ≥ 70 years old were evaluated in the emergency department of the tertiary care University Hospital of Messina, throughout 2007. We identified a smaller cohort of 87 patients out of 899 who met the criteria for the study.

Age range was 70 to 97 years, with an average of 82.1 years. There were 42 male and 45 female patients.

The vast majority of the geriatric trauma cohort (24.3%) suffered head injury along with blunt chest trauma (28 pts), 8.7% of patients presented with head injury associated with either upper or lower extremities trauma (10 pts), 8.7% of patients suffered combined blunt chest trauma and extremities trauma (10 pts), 6.9% of patients were affected by blunt chest and abdominal trauma (8 pts).

Eleven patients required surgical treatment (mostly orthopedics procedures) and 76 were managed conservatively. There was no short-term mortality in this geriatric cohort.

Conclusion

Geriatric trauma admissions account for 23% of total hospital admissions and are projected to increase to 40% by 2050. Regardless of the mechanism of injury, closed head injuries and blunt chest trauma predominate in the setting of multiple traumas. Because of the loss of physiologic reserve secondary to the aging process, the burden of comorbidities and preexisting conditions, elderly trauma patients fare worse than the younger counterpart. Nevertheless, most of these patients will regain independent function and will be discharged home. Implementation of geriatric trauma programs and an even more aggressive approach to elderly trauma patients is mandatory in order to further improve outcomes of geriatric trauma victims.