



AB121. Major spinal trauma in the elderly: a retrospective review

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Background: Traumatic injuries are among the leading cause of death and disability worldwide. Major trauma has seen a demographic shift in recent years from the young to the elderly. However, whether a similar trend in those undergoing operative intervention for major spinal trauma remains to be elucidated. The study aims to compare the presentation and outcomes of patients >65 years of age sustaining major spine trauma to those <65 years at a tertiary spine referral centre.

Methods: The local Trauma Audit Research Network (TARN) database was analysed to select patients admitted between November 2015 and May 2019. Demographic,

injury severity, comorbidity, mortality, interventions, mechanism of injury and length of hospital stay were recorded and analysed.

Results: A total of 471 patients underwent operative intervention for spinal trauma. 73.7% of these were over 64 years of age. Among the younger population, road traffic collisions were the most common mechanism of injury (37.1%) followed by high falls (>2 m) (31.7%), while low falls (<2 m) (63.3%) was the most common mechanism among the older population. Patients >65 years old had significantly longer length of stay (21 *vs.* 14 days) and suffered higher 30-day mortality rates (1.8% *vs.* 0.6%).

Conclusions: Major orthopaedic spine trauma in older people is associated with significantly higher mortality rate as well as higher length of hospitalization. Even though, severity of injury is similar for both young and old patients, the mechanism of injury for the older population is of typically much lower energy compared to the high energy trauma affecting younger patients.

Keywords: Frailty; geriatric trauma; low-energy trauma; road traffic accident; spinal

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