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The supporting "vulnerable" pillar of the elderly - severe spine injuries after low-energy trauma in polytraumatized patients over 65 years of age

Introduction

In polytraumatised patients over 65 years of age, severe spine injuries are the most common after low-energy trauma, next to traumatic brain injuries. The aim of this study was to evaluate the survival rate, clinical parameters, surgical therapy and complications considering fracture level.

Material and Methods:

We retrospectively analysed patients ≥ 65 years of age with an ISS ≥ 16 and after low-energy trauma with a severe spine injury between 2011-2016 who were admitted to our trauma room in a level I trauma center. Al ow-energy trauma was defined as a fall below 3m.

Results

We were able to include 27 patients (12 female, 15 male) in our study after low-energy trauma with a severe spine injury. The average ISS was 24±7, the average age was 75±7 years. There were 11 (40%) cervical spine, 8 (30%) thoracic spine, 3 (11%) lumbar spine and 4 cervical spine and thoracic spine as well as 2 thoracic spine and lumbar combination injuries. 3 (11%) patients deceased.

Conclusion

In contrast to patients after high energy trauma in younger age with fractures in the lumbar spine, the most frequent level of spine injury after low-energy trauma was the cervical spine in 40% of patients over 65 years an 30% in the thoracic spine. The treatment is complex, complicated and should be performed in specialized spine centers with experience in the treatment of geriatric trauma patients.