2278: Mortality and Poor Short-Term Outcome Rates after Severe Traumatic Brain Injury in Patients Over 40

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Disclosures

No disclosures relevant to the subject material of this presentation.
Introduction

• Prognostication in severe traumatic brain injury may help guide treatment decisions in middle-age and older adults

• We assessed rates of mortality and poor outcome stratified by (1) decade of life and (2) initial GCS in a large institutional dataset
Methods

• Retrospective review of 9 years of data (2010-2018)
  • 635 patients identified
• Adults 40 years and older presenting with GCS 3 to 8 were studied
  • Analyses dichotomized between GCS 3 and GCS 4 - 8
• Poor outcome = mortality + hospice + discharge to long-term care facility
• Linear regression was performed
Results

• For patients with initial GCS 3, mortality in the fifth decade was 55% and increased at a rate of 9%/decade
  • R-squared = 0.913, p=0.003
  • Poor outcome in the fifth decade was 75% and increased at a rate of 7%/decade
  • R-squared = 0.996, p = 0.002

• For patients with initial GCS 4-8, mortality in the fifth decade was 15% and increased at a rate of 16%/decade
  • R-squared = 0.989, p = 0.001.
  • Poor outcome in the fifth decade was 45% and increased at a rate of 14%/decade
  • R-squared = 0.879, p = 0.018
Conclusions

• Strong linear relationships were present between age and probability of outcome in GCS 3 and GCS 4-8 groups
• These data may be used to guide discussions with family members of patients with severe TBI
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Summary Points

• Mortality and initial GCS are important prognostic factors in adult patients with severe TBI