2256: Factors Associated with Presenting Neurologic Exam in Patients with Supratentorial Epidural Hematomas

Phillip Bonney
Casey Jarvis
Tatsuhiro Fujii
Steven Giannotta
Disclosures

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

• The decision to evacuate an epidural hematoma (EDH) often depends on GCS, yet a number of variables affect GCS in trauma patients.
• We explored the association between demographic and injury variables in patients with EDH
Methods

• Retrospective review of patients with EDH between May 2015 – May 2018
  • Patients were excluded if a devastating intradural hematoma was present
• Logistic regression was performed
Results

- 129 patients
- Median EDH volume 8 mL (interquartile range 2 – 23 mL)
- Concurrent intradural hemorrhages
  - Any: 71%
  - Contusions: 50%
  - Subarachnoid hemorrhage: 47%
  - Subdural hematoma: 40%
- Initial GCS
  - 13-15: 51%
  - 9-12: 16%
  - 3-8: 33%
Results

• Factors associated with GCS (thresholds of GCS<13 and GCS<9)
  • Other hemorrhages
  • Increased midline shift
  • Substantial polytrauma
• Factors not associated with GCS
  • Age
  • Ethanol intoxication
  • EDH location
Conclusions

• The presence of additional intracranial hemorrhages and polytrauma were associated with worse neurologic exam in patients with EDH
Summary Points

• Confounders of the initial neurologic assessment of EDH patients may lead to over-utilization of surgical evacuation of EDH