

prehospital setting is an effective analgesic in selected adult trauma patients. Additionally, ketamine did not demonstrate the adverse effects (eg, respiratory failure or hypotension) typically seen in opioid administration.

17 Prognostic Factors of Poor Outcome in Geriatric Traumatology Patients in the Emergency Department

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Background and Objective: Identification of elderly trauma patients who are likely to have poor outcome may help the emergency physician to provide better management. We sought to evaluate the current management of geriatric traumatology patients in our emergency department (ED) and to identify the prognostic factors of poor outcome in elderly traumatic patients.

Design and Methods: We conducted a retrospective study in an ED over a period of one year, based on file analysis of 768 trauma elderly patients. We included all patients older than 65 years admitted to the ED after a fall, and we excluded critical patients. Epidemiological, clinical, biological, therapeutic, and evolution criteria were collected. We defined poor outcome by mortality at day 28, and we used multivariate logistic regression to obtain the probability of a death at 28 days.

Results: We enrolled 768 patients in the study. Mean age was 78 years [71-85], and the gender ratio was 2.07. Comorbidities included the following: hypertension N = 426 (23%); dyslipidemia N= 257 (14%); diabetes N = 150 (9%); osteoporosis N= 136 (8%); prosthetic orthopedic equipment N = 124 (7%); history of fall N = 139 (8%); dementia N=138 (7%); and depression N=138 (7%). Of the cases involving falls, 67% were of less than two meters. We found that 76.87% of the population took at least three medications. The over-all mortality was 2.2% with 11 patients dead at day 28.

We performed a univariate logistic regression to select the best predictors of mortality at 28 days, which were reduced to three in multivariable logistic regression: the C-reactive protein (CRP) test with an odds ratio (OR) at 1.01 and confidence interval (CI) 95%, 1.00 – 1.01, p = 0.05; the Index Severity Score (ISS) face with an OR at 2.24 and CI 95%, 1.12 – 4.47, p = 0.02; and the hospitalization rate with an OR at 1.71 and CI 95%, 1.07 – 2.72, p = 0.02.

Conclusion: CRP, the ISS face, and being hospitalized appear to predict poor outcome in elderly traumatic patients admitted in the ED. Future prospective and multicentric studies are needed to validate these findings.

18 Can Prehospital Personnel Accurately Triage Patients for Large Vessel Occlusion Strokes?

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Objective: The Field Assessment Stroke Triage for Emergency Destination (FAST-ED) score has been shown to have a higher predictive value compared to the National Institutes of Health Stroke Scale (NIHSS) to identify large vessel occlusion strokes (LVOS). The study suggested that patients with a score of 4 or greater should be taken directly to a comprehensive stroke center where endovascular intervention is available rather than to the closest emergency department (ED). However, the score in this study was assessed when a stroke patient had already arrived at the hospital. To date, no study has been done to validate using the FAST-ED score in the prehospital setting. Our study compares prehospital FAST-ED scores with FAST-ED scores done by emergency medicine senior resident or attending physicians when patients arrive in the ED.

Design and Methods: Miami-Dade County emergency medical services (EMS) personnel were trained to calculate a FAST-ED score for any patient suspected of having an ischemic stroke or transient ischemic attack in the field (EMS FAST-ED). When the patient arrived in the ED of a comprehensive stroke center a physician completed a FAST-ED score (ED FAST-ED). Both numbers were recorded. Imaging was taken in accordance with hospital stroke guidelines. We excluded from the study intracranial hemorrhages seen on the non-contrast brain computed tomography. LVOS were defined as complete or partial occlusion of the internal carotid artery, middle cerebral artery, and basilar artery.

Results: We studied 130 patients whose ages averaged 73.2±18 years. LVO was detected in 28 of 130 patients (22%). There were no differences between the medians for EMS FAST-ED scores (3 [interquartile ratio (IQR) 1-4.25]) and the medians for the physician-generated scores (4 [IQR 1-6]; p = 0.696, Mann-Whitney U test.). Further, the median of the differences between the individual EMS and the ED scores were not different from zero (median for the differences = 0 [IQR -1, 2]; p = 0.67, Wilcoxon signed-rank sum test). In addition, EMS FAST-ED scores were strongly correlated with the physician FAST-ED scores (r² = 0.26; p<0.001).

For scores ≥4 EMS FAST-ED had a sensitivity of 0.57 and a specificity of 0.70, and ED FAST-ED scores had a sensitivity of 0.68 and a specificity of 0.72. The area under the receiver operating characteristic curve for EMS was