

were categorized “quantity not sufficient.” Of those tested 44% were male, 20% were White, 20% Black, 6% Asian, and 54% other. Most had Medicaid (41%) Medicare (20%) or commercial insurance (22%). A minority (16%) were uninsured. Risk-factor information was collected on 157 of 300 patients (52%) with reactive HCV Ab tests of whom 23% had no identified risk factors. Targeted HCV screening based on risk factors and age would have missed 4% (12/300) of those with a reactive Ab test and 4% (4/100) of those with a positive VL.

**Conclusion:** Universal, non-targeted HCV screening identified a large number of patients with HCV (6% prevalence) and viremia (1.8% prevalence). Targeted screening would have missed a small but significant number of patients with active infection.

## 15 Impact of Trauma Levels on Survival of Patients Arriving with No Signs of Life to U.S. Trauma Centers

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**Objective:** Trauma level designation and verification are examples of healthcare regionalization aimed at improving patient outcomes. This study examines the impact of trauma levels on survival of patients arriving with no signs of life to trauma centers in the United States.

**Design and Method:** This retrospective study used the U.S. National Trauma Data Bank (NTDB) 2015 dataset. We performed a descriptive analysis followed by a bivariate analysis comparing variables by the trauma designation levels. A multivariate analysis assessed the effect of the trauma designation on survival to hospital discharge after controlling for potential confounding factors.

**Results:** We included 6160 patients without signs of life. The average age was 40.66 years ( $\pm 19.96$ ) with male predominance (77.3%). Most patients were transported using ground ambulance (83.5%) and were taken to Level I (57%) and Level II (32.4%) trauma centers. Blunt injuries were the most common (56.9%). Motor vehicle transport (38.5%) and firearm (33.8%) were the most common mechanisms of injury. Survival to hospital discharge among patients with no signs of life ranged from 13.7% at Level I to 27.9% at Level III. After adjusting for confounders, including the Injury Severity Score (ISS), higher survival was noted at Level II compared to Level I trauma centers.

**Conclusion:** Patients presenting without signs of life to Level II trauma centers had higher survival to hospital discharge compared to Level I and Level III centers. These findings can guide future prehospital triage criteria of trauma

patients in structured emergency medical services (EMS) systems and highlight the need for more outcome research on trauma systems.

## 16 Safety And Efficacy of Prehospital Paramedic Administration of Ketamine In Adult Civilian Population

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**Objective:** Opiates are addicting and have a high potential for dependency. Opiate-related overdoses now claim 130 American lives each day, and the opiate epidemic costs nearly \$80 billion annually. In past decades, opiates were a mainstay of prehospital treatment for acute traumatic pain in the civilian population. Ketamine is a N-methyl-d-aspartate receptor antagonist that has analgesic properties and may serve as an alternative agent for the treatment of acute traumatic pain in the prehospital setting. This study aimed to assess the safety and efficacy of ketamine administration by paramedics in a civilian prehospital setting for the treatment of acute traumatic pain.

**Design and Method:** This was a prospective, observational study conducted in the counties of San Bernardino, Riverside and Stanislaus in the state of California. The inclusion criteria were patients > 15 years of age with complaint of traumatic or burn-related pain. We excluded patients if they had received opiates prior to or concurrently with ketamine administration. Dose administered was 0.3 milligrams per kilogram (mg/kg) intravenously over five minutes with maximum dose of 30mg. Option to administer a second dose was available to paramedics if the patient continued to have pain after 15 minutes following the first administration. We conducted paired-T tests to assess the change in the primary outcome (pain score) and secondary outcomes (eg, systolic blood pressure [SBP], respiratory rate, and pulse). P value <0.05 was considered to be statistically significant.

**Results:** We included 368 patients in the final analysis. The average age was 52.9  $\pm$  23.1 years old, and the average weight was 80.4  $\pm$  22.2 kg. There was a statistically significant reduction in the pain score (9.13  $\pm$  1.28 vs 3.7  $\pm$  3.4, delta = 5.43  $\pm$  3.38, p<0.0001). Additionally, there was a statistically significant change in SBP (143.42  $\pm$  27.01 vs 145.65  $\pm$  26.26, 2.22  $\pm$  21.1, p = 0.0440), pulse (88.06  $\pm$  18 vs 84.64  $\pm$  15.92, delta = -3.42  $\pm$  12.12, p<0.0001), and respiratory rate (19.04  $\pm$  3.59 vs 17.74  $\pm$  3.06, delta = -1.3  $\pm$  2.96, p<0.0001).

**Conclusion:** This study suggests that the administration of a subdissociative dose of ketamine by paramedics in the