

VARIATION OF SYMPTOMS ENDORSEMENT IN SUBSCALE DSM-5 PTSD CLUSTERS IN OUTPATIENT TRAUMA CLINIC

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Learning Objectives: To evaluate the subscale severity scores in each of the four DSM-5 posttraumatic stress disorder (PTSD) symptom clusters in the outpatient clinic of an urban, level one trauma center. A further understanding of subtypes of PTSD may assist in improved treatment that can target specific symptom clusters. **Methods:** This prospective pilot study consisted of consecutive patients seen in the outpatient clinic from July 2015 to January 2016. We evaluated the frequency of meeting diagnostic criteria for each of the four DSM-5 PTSD symptoms with the PCL-5 survey. The 20 item self-report questionnaire is further subdivided into four symptoms clusters: intrusions (cluster B), avoidance (C), negative alterations in cognitions and mood (D), and alterations in arousal and reactivity (E). To be considered provisionally diagnosed with PTSD, a severity score of at least 2 (“moderate”) for 1 B item (questions 1–5), 1 C item (questions 6–7), 2 D items (questions 8–14) and 2 E items (questions 15–20) is required. **Results:** We evaluated 100 consecutive subjects in the outpatient trauma clinic. 33 (33%) met the cluster B diagnostic criteria for PTSD, 23 (23%) met the cluster C diagnostic criteria, 19 (19%) in cluster D, and 26 (26%) in cluster E. The clusters were evaluated independently regardless of patient provisional PTSD diagnosis. **Conclusions:** Patients in our outpatient trauma clinic endorsed more symptoms from cluster B (intrusions) and cluster E (alterations in arousal and reactivity) than clusters C (avoidance) and D (negative alterations in cognitions and mood). Evaluating subscale scores may help identify areas that can be targeted, improving intervention and enhancing prevention for patients at high risk for PTSD.

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IMPROVED FUNCTIONAL DISCHARGE STATUS DESPITE HIGHER COMPLICATION RATES AT LEVEL I TRAUMA CENTERS

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Learning Objectives: We sought to compare outcome measures besides mortality between level I and level II trauma centers, including complication rates and functional status at discharge (FSD). We hypothesized level I trauma centers would have lower complication rates and higher FSD compared to level II counterparts. **Methods:** All adult (≥ 18) admissions to the Pennsylvania Trauma Outcome Study database from 2003–2015 with severe injuries (Injury Severity Score [ISS] ≥ 16) were queried. Transfer out, burn, and penetrating trauma patients were excluded from analysis. Total in-hospital complication rate, as well as rates of the three most prevalent complications (pneumonia, urinary tract infection [UTI], deep vein thrombosis [DVT]) were compared between level I and II centers in univariate analysis. Adjusted total in-hospital complication analysis was conducted using multilevel modeling. A generalized linear mixed model assessed the adjusted impact of trauma center level on FSD in non-fatal cases. Significance was defined as $p < 0.05$. **Results:** A total of 67,144 patients met inclusion criteria (level I: $n=40,315$ [60%]; level II: $n=26,829$ [40%]). Unadjusted total complication rate was significantly higher at level I centers (level I: $n=10,699$ [27%]; level II: $n=5,268$ [20%]; $p < 0.001$). The three most prevalent complications were all significantly higher at level I centers: pneumonia (level I: 8.0%; level II: 5.5%; $p < 0.001$), UTI (level I: 6.4%; level II: 3.2%; $p < 0.001$), and DVT (level I: 4.3%; level II: 2.7%; $p < 0.001$). Level I centers remained significantly associated with increased total complications in adjusted analysis (AOR: 1.37, 95%CI 1.15–1.63; $p < 0.001$). FSD was found to be significantly higher at level I centers in adjusted analysis (AOR: 1.34 95%CI 1.24–1.44; $p < 0.001$) (Figure 1). **Conclusions:** Despite a higher complication rate, severe trauma patients managed at level I centers had increased functional status at discharge. In a state where previous research has found similar rates of mortality between center types, severely injured patients may be better managed at level I centers when considering other outcome measures.

USING PCL-5 TO ASSESS PREVALENCE OF POSTTRAUMATIC STRESS DISORDER IN OUTPATIENT TRAUMA CLINIC

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Learning Objectives: To explore the prevalence of posttraumatic stress disorder (PTSD) in the outpatient clinic of an urban, level one trauma center. PTSD has an estimated lifetime prevalence of 6.8% among American adults. There is a need to assess patients after hospital discharge to determine who may develop PTSD. **Methods:** This prospective pilot study consisted of consecutive patients evaluated in the outpatient clinic from July 2015 to January 2016. We screened the patients with the PCL-5 survey. A score of 33 or more warrants further assessment. **Results:** We evaluated 100 consecutive subjects in the outpatient trauma clinic. 11 (11%) had a PCL-5 score greater than 33. A one sample t-test comparing the provisional prevalence of PTSD in this study population with the US adult population (3.5%) showed significant difference ($p = .0001$). **Conclusions:** Patients in our outpatient trauma clinic had an incidence more than triple the prevalence of PTSD in the US adult population. Follow-up assessment may be beneficial in determining whether these patients eventually develop PTSD. Early identification of PTSD symptoms after trauma and hospital admission may help in prevention and intervention for PTSD in this population.

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VASOPRESSOR USE FOLLOWING TRAUMATIC INJURY: A SYSTEMATIC REVIEW

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Learning Objectives: Vasopressor use following traumatic injury is not recommended by trauma guidelines, but wide regional variations in practice exist. Although excessive vasoconstriction is harmful, these agents may have a role to play as fluid-sparing adjuncts to resuscitation. This systematic review aims to compare resuscitation with early vasopressors to standard resuscitation with regards to patient-important outcomes in adults with traumatic shock. **Methods:** We performed a search of MEDLINE, EMBASE, ClinicalTrials.gov and the Central Register of Controlled Trials (no date restriction), in addition to a hand-search of conference proceedings (2005–2016). Pairs of reviewers screened titles and abstracts, assessed full-text articles for eligibility, performed risk of bias assessments and extracted data independently and in duplicate. Study selection consisted of clinical trials and controlled observational studies comparing early vasopressor use to standard resuscitation for adult patients in shock following traumatic injury. **Results:** Of 7 486 citations, we retrieved 17 full-text articles and included 6 studies (1 clinical trial and 5 observational studies), including 2 published exclusively as abstracts. Vasopressor use was associated with increased mortality in all observational studies (unadjusted OR [95% CI] range: 2.31 [1.19–4.48] to 7.39 [4.90–11.16]) and all of these had a high risk of bias, in particular confounding by indication. The only identified clinical trial was underpowered to detect an effect on patient-important outcomes (mortality RR [95%CI] 1.24 [0.64–2.43]). We identified two ongoing clinical trials, but no results were available. **Conclusions:** There are insufficient data to exclude either significant benefit or significant harm associated with vasopressor use following traumatic injury. There is a strong impetus for future high-quality clinical trials that address patient-important outcomes such as long-term quality of life and neurological function.

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INTRAOPERATIVE FLUID THERAPY IN VIDEO-ASSISTED THORACOSCOPIC ESOPHAGECTOMY: A RETROSPECTIVE STUDY

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Learning Objectives: Video-assisted thoracoscopic esophagectomy (VATS-E), a minimally invasive surgical technique, has been reported to be associated with lower mortality and morbidity. However, there are few studies about the relationships of perioperative management and complications in patients undergoing VATS-E. This study was conducted to investigate the association between intraoperative fluid management