Global Research Highlights

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Annals of Emergency Medicine

http://www.acep.org/annals/

Official journal of the American College of Emergency Physicians
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When safety event reporting is seen as punitive

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Study objective

Reporting systems are designed to identify patient care issues so changes can be made to improve safety. However, a culture of blame discourages event reporting, and reporting seen as punitive can inhibit individual and system performance in patient safety. This study aimed to determine the frequency and factors related to punitive patient safety event report submissions, referred to as Patient Safety Net reports, or PSNs.

Methods

Three subject matter experts reviewed 513 PSNs submitted between January and June 2019. If the PSN was perceived as blaming an individual, it was coded as punitive. The experts had high agreement (κ = 0.84–0.92), and identified relationships between PSN characteristics and punitive reporting were described.

Results

A total of 25% of PSNs were punitive, 7% were unclear, and 68% were designated nonpunitive. Puntitive (vs nonpunitive) PSNs more likely focused on communication (41% vs 13%), employee behavior (38% vs 2%), and patient assessment issues (17% vs 4%). Nonpunitive (vs punitive) PSNs were more likely for equipment (19% vs 4%) and patient or family behavior issues (8% vs 2%). Puntitive (vs nonpunitive) PSNs were more common with adverse reactions or complications (21% vs 10%), communication failures (25% vs 16%), and noncategorized...
events (19% vs 8%), and nonpunitive (vs punitive) PSNs were more frequent in falls (5% vs 0%) and radiology or laboratory events (17% vs 7%).

**Conclusion**

Punitive reports have important implications for reporting systems because they may reflect a culture of blame and a failure to recognize system influences on behaviors. Non-punitive wording better identifies factors contributing to safety concerns. Reporting systems should focus on patient outcomes and learning from systems issues, not blaming individuals.

**African Journal of Emergency Medicine**

http://afjem.com

The official journal of the African Federation for Emergency Medicine, the Emergency Medicine Association of Tanzania, the Emergency Medicine Society of South Africa, the Egyptian Society of Emergency Medicine, the Libyan Emergency Medicine Association, the Ethiopian Society of Emergency Medicine Professionals, the Sudanese Emergency Medicine Society, the Society of Emergency Medicine Practitioners of Nigeria and the Rwanda Emergency Care Association

**Measuring patient experience in the emergency department: a scoping review**

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**Introduction**

Measuring patients’ experience in the emergency department can be an avenue through which the patients are able to evaluate their own care experience, and this may provide guidance for healthcare professionals in addressing quality improvement. This scoping review aimed to identify and examine existing tools that measure patients’ experience in the emergency department.

**Methods**

A scoping review was carried out to synthesize evidence from a range of studies in order to describe the characteristics of each study and their sample, and to describe the tools used to measure patients’ experience in the emergency department.

**Results**

Out of the 308 articles retrieved, results of the first and second level screening yielded ten articles for inclusion using nine different experience tools/questionnaire in the emergency department.

**Conclusion**

Measuring patients’ experience in the emergency department is a global concern, however research conducted in low-to-middle-income countries is very limited and such research in Africa appears to be absent. Getting consumers
of care to evaluate their experience may help healthcare professionals to identify discrepancies in care and plan possible strategies to address them. These descriptors may ultimately be used in developing validated algorithms to assist dispatch decisions. In this way, we hope to expedite the correct level of care to these time-critical patients and prevent the unnecessary dispatch of limitedly available ALS paramedics to inappropriate cases.

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Emergency Medicine Journal

http://emj.bmj.com
Official Journal of the Royal College of Emergency Medicine

Effect of tranexamic acid on intracranial haemorrhage and infarction in patients with traumatic brain injury: a pre-planned substudy in a sample of CRASH-3 trial patients

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Background

Early tranexamic acid (TXA) treatment reduces head injury deaths after traumatic brain injury (TBI). We used brain scans that were acquired as part of the routine clinical practice during the CRASH-3 trial (before unblinding) to examine the mechanism of action of TXA in TBI. Specifically, we explored the potential effects of TXA on intracranial haemorrhage and infarction.

Methods

This is a prospective substudy nested within the CRASH-3 trial, a randomised placebo-controlled Trial of TXA (loading dose 1 g over 10 min, then 1 g infusion over 8 h) in patients with isolated head injury. CRASH-3 trial patients were recruited between July 2012 and January 2019. Participants in the current substudy were a subset of trial patients enrolled at ten hospitals in the UK and four in Malaysia, who had at least one CT head scan performed as part of the routine clinical practice within 28 days of randomisation. The primary outcome was the volume of intraparenchymal haemorrhage (ie, contusion) measured on a CT scan done after randomisation. Secondary outcomes were progressive intracranial haemorrhage (post-randomisation CT shows > 25% of volume seen on pre-randomisation CT), new intracranial haemorrhage (any haemorrhage seen on post-randomisation CT but not on pre-randomisation CT), cerebral infarction (any infarction seen on any type of brain scan done post-randomisation, excluding infarction seen pre-randomisation) and intracranial haemorrhage volume (intraparenchymal + intraventricular + subdural + epidural) in those who underwent neurosurgical haemorrhage evacuation. We planned to conduct sensitivity analyses excluding patients who were severely injured at baseline. Dichotomous outcomes were analysed using relative risks (RR) or hazard ratios (HR), and continuous outcomes using a linear mixed model.

Results

One thousand seven hundred and sixty-seven patients were included in this substudy. One-third of the patients had a baseline GCS (Glasgow Coma Score) of 3 (n = 579) and 24% had unilateral or bilateral unreactive pupils. 46% of patients were scanned pre-randomisation and post-randomisation (n = 812/1767), 19% were scanned only pre-randomisation (n = 341/1767) and 35% were scanned only post-randomisation (n = 614/1767). In all patients, there was no evidence that TXA prevents intraparenchymal haemorrhage expansion (estimate = 1.09, 95% CI 0.81–1.45) or intracranial haemorrhage expansion in patients who underwent neurosurgical haemorrhage evacuation (n = 363) (estimate = 0.79, 95% CI 0.57–1.11). In patients scanned pre-randomisation and post-randomisation (n = 812), there was no evidence that TXA reduces progressive haemorrhage (adjusted RR = 0.91, 95% CI 0.74–1.13) and new haemorrhage (adjusted RR = 0.85, 95% CI
When patients with unreactive pupils at baseline were excluded, there was evidence that TXA prevents new haemorrhage (adjusted RR = 0.80, 95% CI 0.66–0.98). In patients scanned post-randomisation (n = 1431), there was no evidence of an increase in infarction with TXA (adjusted HR = 1.28, 95% CI 0.93–1.76). A larger proportion of patients without (vs with) a post-randomisation scan died from head injury (38% vs 19%: RR = 1.97, 95% CI 1.66–2.34, p < 0.0001).

Conclusion

TXA may prevent new haemorrhage in patients with reactive pupils at baseline. This is consistent with the results of the CRASH-3 trial which found that TXA reduced head injury death in patients with at least one reactive pupil at baseline. However, the large number of patients without post-randomisation scans and the possibility that the availability of scan data depends on whether a patient received TXA, challenges the validity of inferences made using routinely collected scan data. This study highlights the limitations of using routinely collected scan data to examine the effects of TBI treatments.

Efficacy of a fast-track pathway for managing uncomplicated renal or ureteral colic in a hospital emergency department: the STONE randomized clinical trial of Sonography and Testing of a Nephrolithiasis Episode

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Objective

To evaluate a fast-track pathway utilizing point-of-care (POC) testing and sonography as soon as uncomplicated renal or ureteral colic is suspected and to compare the POC clinical pathway to a standard one.

Methods

Unblinded randomized controlled clinical trial in a hospital emergency department (ED). We enrolled patients with suspected uncomplicated renal or ureteral colic and randomized them to a POC or standard pathway (1:1 ratio). Duration of ED stay, treatments, the proportion of diagnoses other than uncomplicated colic, and 30-day complications were analyzed.

Results

One hundred forty patients were recruited between November 2018 and October 2019; data for 124 were analyzed. The mean (SD) total time in the ED was 112 (45) min in the POC arm and 244 (102) in the standard arm (p < 0.001). Treatments, alternative diagnoses, and complication rates did not differ.

Conclusion

The use of a fast-track POC pathway to manage uncomplicated colic in the ED is effective and safe. It also reduces the amount of time spent in the ED.
Young–Burgess classification: inter-observer and inter-method agreement between pelvic radiograph and computed tomography in emergency polytrauma management

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Background

While there are intrinsic differences in the pros and cons between plain radiographs and computer tomography, the role of pelvic radiographs in polytrauma management is diminishing as computer tomography scans are becoming more accessible. Previous studies found varying results in the inter-observer agreement in pelvic radiograph interpretations.

Methods

Three hundred and sixty-nine patients with pelvic trauma were recruited from the trauma registries of four designated trauma centres in Hong Kong, each having one set of anteroposterior pelvic radiographs and pelvic computer tomography scans. Pelvic radiographs were classified by two emergency physicians using Young–Burgess classification, and pelvic computer tomography scans classified by an experienced radiologist. Disagreed pelvic radiographs were evaluated by a senior emergency physician to make a final decision before comparing with computer tomography scans. Cohen’s kappa was used to measure the inter-observer and the inter-method agreements, in the groups ‘mechanism of injury’, ‘stable versus unstable fractures’ and ‘complete classification’.

Results

Inter-observer agreements of plain radiograph classification for ‘mechanism of injury’, ‘stable versus unstable fractures’ and ‘complete classification’ were moderate to substantial (κ = 0.72, 0.60 and 0.55, respectively). Inter-method agreement for the three groups between plain radiographs and computer tomography were fair to moderate (κ = 0.42, 0.59 and 0.38, respectively).

Conclusion

The inter-method agreement between plain pelvic radiographs and computer tomography scans was fair in classifying pelvic fractures, and moderate in detection of unstable pelvic fractures. If the patient is haemodynamically unstable or when computer tomography is unavailable, it is reasonable to obtain plain radiographs to screen for unstable pelvic fractures to expedite early intervention. A review in the education approach and material of Young–Burgess classification may improve inter-observer agreement.