



# Primary survey: Highlights from this issue

doi:10.1136/emered-2022-212883

Edward Carlton

Opening the Emergency Medicine Journal this month is an absolute privilege for me as an Editor and Clinical Academic. The first author list includes some familiar names to me; Martin Than and Louise Cullen are esteemed Antipodean academics who have guided me as collaborators and mentors throughout my career. More junior authors include Tom Roberts, Jamie Vassallo and Laura Goodwin, whom I have had the pleasure in mentoring, at least in part. Some may cite nepotism, although I had no influence in selection of papers this month. For me though, the overarching messages in this familiarity are three-fold: first, Emergency Medicine continues to be a young and growing academic speciality. Second, publication is just one part of the journey; I am well aware of the background work (and the contributions of other authors) in getting to this stage. Lastly, mentorship is absolutely key to academic career development. Well done to all the authors in this month's edition of the EMJ, lets explore what we have on offer.

In our Editor's Choice this month Vassallo and colleagues unveil the new NHS Major Incident Triage Tool, discussing its grounding in evidence and describing the core principles behind its development. A rapid, reliable, reproducible triage tool that can be applied to both adults and children is an improvement over complicated prior algorithms.

What are the take home messages from the three papers evaluating thunderclap headache this month? The first by Roberts and colleagues is an impressive secondary analysis from a large international cohort which confirms thunderclap headache remains a high-risk presentation with over 10% of patients having a significant underlying pathology (and not just subarachnoid haemorrhage). Reassuringly, however, Waltons' systematic review and meta-analysis of the diagnostic literature confirms that CT within 6 hours

of headache onset does have a very high sensitivity to rule-out subarachnoid haemorrhage. Although sensitivity of CT drops significantly to  $\leq 90\%$  when undertaken beyond 6 hours in this meta-analysis, this only included two older studies. Therefore, single centre retrospective observational work conducted by Martin Than's group that demonstrates very high sensitivity for aneurysmal subarachnoid haemorrhage by third generation CT, even up to 48 hours, provides proof-of-concept for future practice changing research in this area.

As the days draw in and energy bills rise it is pertinent that we include two original research articles exploring pre-hospital temperature management. Our Reader's Choice from Laura Goodwin and colleagues in Bristol is a mixed methods study of paramedics that attempts to explain why only 2.7% of pre-hospital births have a temperature recorded. My son is included in these data, having been delivered at home in a snow storm in 2018, I confess I have no idea if his temperature was recorded. A lack of awareness of the importance of temperature management is highlighted as a barrier in the qualitative interviews here. Our second paper from Epstein and colleagues in Israel explores the effectiveness of various active and passive rewarming devices for hypothermia using a neatly designed torso model, finding performance is variable. A key practical tip is the use of an insulating layer between devices and the skin to prevent thermal injury. Picking back up on the theme of hypothermic infants, the In Perspective paper by Ramgopal *et al* for the Febrile Young Infant Research Collaborative highlights the challenge of sorting those with hypothermia due to benign reasons from those with serious underlying disease.

Even as emergency physicians, there are certain resuscitation situations that raise our stress levels. What can we do to

mitigate the impacts of this on our performance? Groombridge *et al* from Australia provide us with insights here with a survey and qualitative study of clinicians. Simple strategies around communication, using a structured approach and improved training emerge as themes we will all recognise. Above all though, stress is a normal response.

Novel biomarkers continue to emerge in the field of cardiac diagnostics. While high-sensitivity troponin assays have been with us for over a decade, they continue to be refined, point-of-care tests are now being optimised and entirely new tests come and go. Meek *et al* compare the potential real world impacts of a pathway based around the new Beckman high-sensitivity troponin I assay, to older assays, and find it is safe and effective. Ashburn and colleagues potentially put the nail in the coffin of the biomarker Monocyte Chemoattractant Protein-1, by demonstrating it has no added value in risk stratification. While this study is limited by a low prevalence of adverse events, this is a familiar story when new tests emerge. Anyone remember H-FABP? Professor Louise Cullen, who has done so much over the last decade to inform our practice in this area, is lead author on our Practice Review point-of-care testing with high-sensitivity troponin, alongside two other legends of the field, Paul Collinson and Evangelos Giannitsis. It is a privilege to publish their insights into the potential for this emerging technology.

And do have a read of our Sono Case Series, and letters from readers, that often serve as an additional form of peer review. It is great to see such broad, original and clinically relevant content, from researchers across the world, both emerging and world-leading.

**ORCID iD**Edward Carlton <http://orcid.org/0000-0002-2064-4618>