



# Primary survey: highlights from this issue

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Many medical journals run themed issues where authors are invited to submit articles, usually around a specific clinical condition, and coordinated by guest editors. We have long debated whether we should take this approach at the *Emergency Medicine Journal*. Perhaps the sheer variety of conditions we see on a day-to-day basis in emergency medicine means that a broader approach to publication of our monthly issues should be maintained. However, this month, our authors have done the hard work for us with four original manuscripts and an accompanying commentary around the specific condition of acute aortic syndromes (AAS). An informal themed issue.

Many readers will be familiar with this month's Editor's Choice, the Diagnosis of Acute Aortic Syndrome in the Emergency Department (DAShED) study: a triumph in research delivery. This prospective study recruited >5000 participants in just a 40-day window across 27 UK EDs. The striking findings demonstrate the low prevalence of AAS and the low pick-up rate of current diagnostic strategies—under 3% of CT aortograms performed were positive. Sadly, none of the decision rules they examined performed adequately as rule-out strategies. The excellent accompanying commentary by Peter Jones, appropriately entitled 'Finding the needle in the haystack', discusses both the research delivery and clinical implications of this work in more detail, with the suggestion that more research is needed. DAShED provides a focus on where that research should be targeted. Jones' commentary also discusses the survey of current practice in AAS diagnostics and management published as a research letter by members of the DAShED group and the Aortic Dissection Charitable Trust (who developed the prominent Think Aorta Campaign). This survey highlights that a more unified approach to diagnosis and management is needed. However, with



more research required to optimise diagnostics and a rare (although catastrophic) diagnosis, we may be at a cross-roads here. Indeed, in their population-based retrospective cohort study from Canada, Ohle *et al* demonstrate that miss-rates of AAS remain high (at 12.5%) but have not changed in the last decade. While they found AAS was more likely to be missed in non-teaching/non-cardiac centres, and those with centres with less access to CT, these findings again speak to more work being needed around improved diagnostic strategies and a unified approach. Raising awareness may not be enough.

Our fourth AAS paper this month focusses on when we have successfully made the diagnosis. It is pleasing to see a truly multiprofessional approach to the development of consensus recommendations for the interhospital transfer of patients with AAS using Delphi methodology. Consequently, this group have developed robust and sensible recommendations which when implemented will serve to reduce heterogeneity in care in this important area of management, at least.

Our next three original research articles are broadly under the theme of trauma. The first is a retrospective study from the USA, of isolated traumatic brain injury patients on anticoagulants that explores the effects of two options for reversal; the

expensive andexanet alpha and cheaper four-factor prothrombin complex concentrate (4F-PCC). While no differences in clinical outcomes were detected between reversal agents, the retrospective nature of this work provides proof-of-concept that 4F-PCC could be examined within randomised controlled trials. A further retrospective cohort study from Canada examines older patients with isolated orthopaedic injuries and provides valuable data around predictors of adverse events and highlights the importance of multi-morbidity in this vulnerable group. The final trauma themed study focusses on the challenging area of major incident triage. Due to obvious complexities in obtaining real-world data on major incident triage tool performance, a group led out of Birmingham, UK, cleverly use the Trauma Audit and Research Network (TARN) database of nearly 60 000 patients as a surrogate to develop a novel tool which performed well (sensitivity >97%) when externally validated on a military registry.

Moving away from clinical themes, our final two papers this month reaffirm the variety of emergency medicine. Our Reader's Choice is a research letter that examines Coroner's concerns related to care in ED when patients die. Delays in care come out on top here—not surprising perhaps, although we would encourage you to have a read and note the other important areas where care falls below standard. And finally, a systematic review and meta-analysis from authors in Portugal explores diuretics versus volume expansion in patients with normotensive PE. Although limited by a small number of studies in this area, these exploratory findings may surprise some of our readers.

As spring comes, the ED corridors will hopefully become peaceful again, and I will still have no idea as to the best approach to aortic dissection diagnosis.

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