



# Highlights from this issue

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Edward Carlton, *Associate Editor*

## Editor's Choice: Controversies in Sepsis

In this issue of the *Emergency Medicine Journal (EMJ)* we have two papers exploring tools to predict critical illness in sepsis. Two retrospective cohort studies, in ED patients with suspected sepsis/infection, evaluate the diagnostic accuracy of the relatively novel qSOFA (Sepsis-3 2016) in comparison to existing sepsis prediction tools such as the National Early Warning Score (NEWS), SIRS and serum lactate measurements. The first multicentre US analysis of 3743 patients, by Rodriguez and colleagues (*see page 350*), compares qSOFA with existing tools in predicting death, vasopressor use or ICU admission within 72 hours of ED attendance. By demonstrating and improved, or similar specificity for the primary outcome across a range of scores, the authors conclude that qSOFA criteria performed as well or better than existing tools in predicting critical illness. The second single centre UK analysis of 1818 patients, by Goulden and colleagues (*see page 345*), again compares qSOFA with existing tools, including the widely used NEWS, in predicting in-hospital mortality and ICU admission. The authors argue that by demonstrating equivalent or superior performance of NEWS in comparison to qSOFA, that the value of qSOFA could be called into question in institutions where NEWS was already in use.

In the accompanying commentary to these analyses, Bernard Foëx eloquently appraises the data and raises some pertinent points which will be relevant to practicing EM clinicians (*see page 343*). The question remains unanswered as to how best to apply such prediction tools in the undifferentiated ED population, in whom sepsis may be just one possible cause of critical illness, and the focus on sepsis risks prioritising this as a cause

of critical illness or deterioration at the expense of other diagnoses.

## Swabs and spinal fluid

Continuing the infection theme, in this issue we include a short report by Acquisto *et al* (*see page 357*), who evaluate the use of nasal swabs for MRSA rapid screening in patients with skin and soft tissue infections. In comparison to wound culture, nasal swabs had a high diagnostic accuracy for the presence of MRSA (Positive Predictive Value 85.7%). At a time when antibiotic guardianship is increasingly important, the use of rapid screening for resistant infection may improve our prescribing practices in future.

Garcia and colleagues (*see page 361*) take a further step forward in limiting antibiotic prescribing in their evaluation of an outpatient management strategy for children at low risk of bacterial meningitis. This multicentre observational analysis from Spain explores an outpatient management strategy (without antibiotics) in paediatric patients with a clinical suspicion of meningitis, pending cerebrospinal fluid culture results. Of 182 children, 45 were identified as low risk for bacterial meningitis within the ED and managed as outpatients without antibiotics, none of whom were finally diagnosed with bacterial infection. While this strategy may well need refining, we welcome initiatives that reduce antibiotic prescribing and allow more patients to be managed on outpatient ambulatory pathways.

## Exploring gender in Pre-Hospital care

Importantly, at *EMJ*, we are seeing an increasing number of manuscripts exploring potential gender disparities in emergency care. By undertaking a retrospective registry analysis of out of hospital cardiac arrest patients in New Zealand,

Dicker and colleagues (*see page 367*) demonstrate that although women suffer cardiac arrest at less than half the rate men do and are older when they do so, after adjusting for confounders, there appear to be no gender differences in 30 day survival.



## Triage across time zones

As an international emergency medicine journal, it is important to highlight important undertakings in exotic locations. This issue is no exception, with two papers evaluating triage scales in unfamiliar environments including Afghanistan, Haiti and Japan. Different triage scores may perform differently across populations and locations, with few developed designed specifically for low income countries. An exploratory analysis, using case vignettes and nursing staff evaluation by Dalwei *et al* demonstrates that the South African Triage Score may be applicable in such environments (*see page 379*). Kuriyama and colleagues validate the Japan Acuity and Triage Scale, based on the Canadian Triage Scale, in another example of an accepted triage tool being applied successfully across time zones (*see page 384*).

## The marauding terrorist

Lastly, our Reader's Choice provides an important overview for any Emergency Physician as, sadly, the potential for marauding terrorist attacks becomes more widespread. Ravi Chauhan and colleagues review major incident management for those of us unfamiliar with such attacks together and include some of the lessons learnt from recent horrific events (*see page 389*).