



Primary survey: highlights from this issue

doi:10.1136/emered-2023-213686

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Welcome to November 2023's primary survey, where I am going to take you through a whistle stop tour of this month's papers. Our tour will cover alcohol and major trauma, cardiac arrest management, cauda equina diagnosis and e-scooters.

Editor's choice: Biases in the collection of blood alcohol data for adult major trauma patients in Victoria, Australia

Lau *et al* talk about the importance of in-hospital alcohol testing and how could provide an opportunity to implement preventive strategies. However, there are some biases to this alcohol testing, especially in the emergency setting. This study aimed to identify any potential biases in the data from blood alcohol testing for adult major trauma patients presenting to a hospital in Victoria, Australia. This study included 14221 major trauma patients, of which 4563 (32.1%) had a blood test recorded. Having this test completed was significantly associated with age, socioeconomic disadvantage level, preferred language, having pre-existing mental health or substance use conditions, smoking status, presenting during times associated with heavy community alcohol consumption, injury cause and intent, and Glasgow Coma Scale scores ($p < 0.05$). Higher odds of testing were associated with pre-existing mental health (aOR=1.39, 95% CI 1.02 to 1.89) or substance use conditions (aOR=2.33, 95% CI to 1.47–3.70), and living in a more disadvantaged area (most disadvantaged quintile relative to least disadvantaged quintile: aOR=2.30, 95% CI 1.52 to 3.48). These results suggest significant biases in the collection of this data.

Original research: trends in survival from out-of-hospital cardiac arrest with a shockable rhythm and its association with bystander resuscitation: a retrospective study

This time we fly over to France, where Hong Tuan Ha, Jost *et al* conducted a



retrospective review on survival from out-of-hospital cardiac arrest (OHCA). They wanted to describe the trends in survival after a ventricular fibrillation/pulseless ventricular tachycardia OHCA, over a 13 year period. With the primary outcome of survival at hospital discharge with a good neurological outcome. They investigated four, 18 month periods between 2005 and 2018. 3476 patients met the inclusion criteria over these four periods. Over the study periods, survival at hospital discharge increased from 12% in 2005 to 25% in 2018 ($p < 0.001$) and return of spontaneous circulation at hospital admission increased from 43% to 58% ($p = 0.004$). This very honest review of the system, suggests some of the positive interventions lay rescuer CPR could have, suggesting it helped with survival.

Practice review: diagnosis of cauda equina syndrome in the emergency department

Cauda equina syndrome (CES) is a spinal emergency, which can be a challenging

diagnosis to make. Metclafe *et al* present a practice review of this challenging topic. They discuss the fact that no single examination finding, or combination of findings, is sufficient to exclude CES with a patient with suspicious for the diagnosis. Any patient with back and/or radicular lower limb pain that has recently developed urinary symptoms, saddle sensory changes, bowel dysfunction, sexual dysfunction, or severe or progressive bilateral lower limb neurological deficits, should undergo emergency MRI scanning to exclude the diagnosis of CES.

Research letter: multicentre prospective observational study to evaluate healthcare impacts of e-scooters on emergency departments

The Trainee Emergency Research Network (TERN) in the UK looked at the impact of e-scooter incidents in the UK, since rental schemes where trialled in 2020. Between the 13th September and 19th November 2021, twenty sites collected data over a 4-week period. ED patients presenting with an injury associated with an e-scooter accident were prospectively identified by ED clinicians 24/7. 250 patients were enrolled, with a median age of 26 years. The mean injury severity score (ISS) was 2.9 (range 0-36) with 8.8% of patients have an ISS > 9 . There were no deaths. The mean ED cost per patient was £205.80, with 8 patients costing the maximum threshold amount of £624.16. Further work is needed to explore the impact of e-scooters in the UK.

Podcast

Finally, each month Professor Rick Body (Deputy Editor) and I release a podcast of some of the highlights of each month's journal. So, keep your ears peeled. The podcast is available anywhere you might usually download your podcasts. Alternatively, you can find the podcast on <https://emj.bmj.com>.

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