Prehospital considerations

In this issue of *EMJ*, several important subjects relevant to prehospital care are considered. Firstly, Kate Cantwell and colleagues from Victoria, Australia review the literature relating to the temporal demands on the ambulance service. They argue that whilst there are temporal patterns on ambulance demand, these do not necessarily match hospital demand, so need to be considered separately.

Later in the issue, the (traditionally contentious) topic of prehospital tracheal intubation for trauma patients receives some attention. Christopher Evans and colleagues provide data from Ontario, from which they conclude that paramedic non-drug assisted tracheal intubation or attempted tracheal intubation for trauma was associated with a heightened risk of mortality. Interestingly, during the study period, the annual rates of prehospital tracheal intubation declined significantly.

In amongst all of the quantitative studies, there is also a qualitative study focussing upon the experiences of patients who had accessed the ambulance service for acute myocardial infarction or stroke. Fiona Togher and colleagues conducted 33 semi-structured interviews with patients and staff. These provide some interesting insights into the thoughts and feelings of some patients at their most vulnerable moments.

Interpreting vital signs

The interpretation of vital signs is considered to be an integral part of the initial clinical assessment of patients who present following injury. Data from Stevan Bruijns and his team might result in a reconsideration of what constitute ‘normal values’ in this situation. They compared heart rates and blood pressures of patients presenting with a non-haemorrhagic injury within the Trauma Audit and Research Network (TARN) with a healthy non-injury sample. Their findings in relation to the heart rates of injured patients make interesting reading.

Copeptin

The development and clinical use of various cardiac biomarkers continues apace. Amongst these is the peptide copeptin, which is released alongside the arginine-vasopressin hormone and which has been shown to be elevated within three hours of myocardial infarction. Admir Dedic and colleagues from the Erasmus Medical Centre in Rotterdam investigated whether measurement of venous copeptin levels might have a role to play in the early diagnosis of acute coronary syndrome.

Japanese perspective

If you are interested in learning about some of the challenges facing Emergency Departments in Japan, then you should read the article by Inokuchi and colleagues. Many of these, including funding issues and shortages in the numbers of available Emergency Medicine specialists, will sound familiar to practitioners in other parts of the world. However, there are additional difficulties relating to the introduction of certain modern electronic technologies (such as various computerised systems) which have largely been developed for an English speaking market.

Sniffing trauma patients

Patients commonly present to the emergency services with injuries whilst under the influence of alcohol. Many health care professionals will be familiar with the characteristic odour of alcoholic beverages emanating from their patients. However, it is not clear if these professionals are able to reliably determine if a patient is intoxicated by sniffing their breath, or whether they need to wait until blood results become available. Shweta Malhotra and colleagues put this to the test in a prospective study in a US Emergency Department. So if you want to discover if it is worth smelling your patients’ breath, read this paper.

Violence directed towards ED staff

Continuing the theme of challenging patients in the Emergency Department, Emma Knowles and colleagues explore the issue of violence directed by patients towards staff. Experienced readers will not be surprised to discover that the role of alcohol again features heavily. The attitude of staff towards violent incidents and their perceptions about the underlying causes makes for interesting reading.

Roller coaster ride

Finally, amongst the dramatic images on offer, an unusual case is presented which may make you think twice about going on those high speed roller coaster rides. Simon Anderson and colleagues describe how aortic dissection occurred in a previously well 43-year-old man who had so indulged. See the damage for yourself.

Competing interests

None.

Provenance and peer review

Commissioned; internally peer reviewed.