AB114. 158. Pre-empting in-hospital cardiac arrest

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Background: Despite many advances in the field of in-hospital cardiorespiratory arrest (CRA) there remains a significant mortality and morbidity burden. Documentation is typically poor and the recognition and prompt appropriate management of deteriorating patients presents a constant challenge for many medical practitioners.

Methods: Data pertaining to patient demographic, (National) early warning system ((N)EWS), chains of communication, details of CRA events, outcome was collected using patient charts from a total of 70 coded CRAs requiring resuscitative intervention occurring in patients discharged between 01/01–31/12/ 2017*.

Results: Thirty-three (89%) patients presented with at least one new symptom in the 24 hours before CRA, the mean number of new symptoms being 3.2. Tachypnoea, arrhythmia, agitation being the most common. Median NEWS at any time point in the 24 hours prior to arrest was never >5. In 24 (65%) cases a referral was made to a doctor. Intensivists were involved rarely 4 (11%) and no review was carried out in 8 (22%) cases. Arterial blood gas measurements were performed infrequently 8 (22%). Utstein forms were completed in only 8 (19%) cases. Pulseless electrical activity (PEA) was the most common rhythm (49%). Sustained return of spontaneous circulation (ROSC) was attained in 24 (65%) cases: 13 (35%) of which were transferred to the ICU; 4/31% surviving to ICU discharge. Overall 30% survived to discharge (StD) from hospital.

Conclusions: Poor documentation of CRA events and uptake of the Utstein form. Inappropriate communication between nursing staff and treating/ on call physicians. ROSC and StD figures consistent with previous study. NEWS should not be exclusively relied upon to determine clinical deterioration.

Keywords: Cardiac arrest; deteriorating patient; warning signs

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