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17 (O-C7) De-escalating Techniques to Reduce Tension in the Emergency Department Among Staff

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Objectives: We hypothesized that some techniques utilized by emergency department (ED) staff would be less effective than other techniques at reducing tension.

Background: Due to the unique nature of the work environment in the ED, healthcare providers and staff in the ED often adapt unique strategies to respond to periods of increased tension that can regularly occur at work. This study aimed to identify the most effective techniques used by ED staff to rapidly de-escalate tension. Tension among staff may impair performance and team cohesion; therefore, it is important to understand which techniques will effectively decrease this tension and which will not.

Methods: An online survey was administered to staff from seven separate EDs. Of 634 potential participants, 163 responses were received, representing physicians, nurses, PAs, NPs, and clinical support staff. Participants indicated whether they had experienced a period of increased tension in the ED and chose which techniques they used to de-escalate this tension. For each technique selected, participants rated perceived effectiveness at de-escalating tension on a personal level and among their healthcare team, ranging from completely effective (5) to not at all effective (1). ANOVA was used to analyze for significant differences between technique effectiveness.

Results: Of 163 participants, 152 participants (93.3%) reported experiencing a period of increased tension while working in the ED, and these responses were further analyzed for techniques used in response to tension. “Withdrawing or becoming silent” in response to tension was shown to be significantly less effective than the other techniques at reducing tension on both a personal and team level ($P < 0.001$). There were no significant differences in the perceived effectiveness of other techniques used. Humor was the most commonly reported technique (84.2% reported) while motivational speech was the least commonly reported (13.82%).

Conclusion: Withdrawing oneself from the situation was shown to be least effective at de-escalating tension. Therefore, a proactive approach to resolving tension in the ED was

shown to be more efficacious, regardless of which proactive technique was used. This data, along with the relative levels of technique effectiveness, can inform an approach to resolving tension that can be utilized by medical staff in emergency departments across the country.

18 (O-B1) A Retrospective Cohort Study to Determine the Injury Prevalence of Cervical Spine Injuries in Elderly Patients Undergoing Full Trauma CT

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Objectives: The aim of the study was to determine the prevalence of cervical spine injuries and injury patterns in elderly patients (>65 years) with low energy injuries who underwent a pan trauma computed tomography (CT).

Background: Cervical spine injuries sustained from low energy injuries or falls are often relatively occult due to the absence of significant cervical spine symptoms or pre-existing arthritis. There is some debate as to the whether the pan CT should be undertaken in all elderly fallers. Recent evidence has shown that cervical spine fragility fractures are uncommon in the elderly fallers due to a higher bone density in this region.¹ In contrast osteoarthritis of the cervical spine is common and has been shown to be a risk fracture for cervical spine fractures.²

Methods: The Emergency Department at North Manchester General Hospital automatically undertakes a pan CT in elderly patients with one or more of the following: haemodynamic instability; evidence of chest wall tenderness; evidence of respiratory compromise; multi-level spinal pain; cervical spine tenderness plus evidence of torso injury or high impact injury. The CT reports and clinical notes were reviewed of all elderly patients (over 65 years of age) who had a full trauma CT (head, neck, chest, abdomen and pelvis) over a 12-month period (September 2020–September 2021). The number of patients with cervical spine fractures and their age were recorded. The type and location of cervical spine injuries was also recorded.

Results: Sixty-six elderly patients underwent a full trauma series over the 12-month period. High-impact injuries and haemodynamic instability account for a small number of patients because the ED at North Manchester General Hospital is a non-trauma centre. The mean age of the cohort was 83.2 years; 26% (of the patients (17) in the cohort were aged 90 years or over. 39% (26) of the patients were identified to have a least one injury detected on CT; 86% (57) were due to ground level falls. Three patients out of 66 were noted to have cervical spine fractures (4.5%). One patient was an isolated C2 fracture, one patient had a C2 fracture with an associated T4 fracture, and the third patient had a C5 fracture with an