1B.2

Investigation into the feasibility of the 24-h target for trauma in a district general hospital

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Background: Recent national guidelines have emphasised the need to operate on 95% of trauma cases within 24 h of admission. This investigation aimed to assess the feasibility of this target, to identify the impact the guidelines will have on a district general hospital and to propose methods of solving the issue. Dorset County Hospital has 500 beds and serves a population of 220,000 people. Currently there is a dedicated trauma list every afternoon bar Sunday and twice weekly extra evening trauma sessions. Trauma outside these times competes with other specialties on the CEPOD list.

Methods: Over a 6-month period a daily record of all trauma admissions was taken. Patients not requiring operative intervention were excluded from the study. The length of time before each patient underwent surgery was recorded along with reasons for any delay. Theatre availability was assessed. The amount of dedicated trauma theatre lists, the volume of work performed out of hours on CEPOD lists and the number of cancelled elective lists were documented.

Results: Provisional results show that a majority of patients are not operated on within 24 h of admission in our hospital. There are occasions when elective lists have to be cancelled which does impact on the 18-week target and consequently trust finances. Most fractured neck of femur patients are operated on within 48 h. As a smaller hospital there are periods of time when the volume of admissions is low, however there were no points when the theatre lists were left empty. In certain instances there were patients needing specialist treatment and needed to wait either for a particular surgeon or set of instruments. In these cases it was not possible to operate within the 24-h period.

Conclusions: This investigation shows that currently most trauma patients are not being operated on within 24 h. There are specific instances when this is not possible which accounts for the 5% margin. In order for the target to be met an increase in theatre availability and dedicated trauma lists is needed. The potential for unused trauma theatre sessions will increase however if more are made available. The instigation of a trauma nurse coordinator may be valuable to organise the trauma lists and prevent any unnecessary delays. On completion of this study we aim to produce a business plan to highlight the amount of additional theatre time needed and the cost implications of this.

Keywords: Twenty-four-hour trauma wait; Government target; Prospective study

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1B.3

Hope on a trauma unit: The views of staff and patients

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Introduction: As well as considering effectiveness of treatments, the research strategy for the Oxford Trauma Unit has also incorporated patient experiences, preferences and the process of care provision. To this end several studies have been undertaken using qualitative research and future study designs will use mixed methodologies. The study presented here developed from a prior study that identified the importance of hope within the process of recovery. The purpose of this abstract is to examine how hope was understood within trauma care from the perspectives of staff and patients.

Methods: The study drew on the principles of ethnography undertaking 21 h of observation, qualitative interviews with 10 patients and 10 multidisciplinary members of staff and two focus groups with staff. Data collection was undertaken between March 2007 and October 2007. Data were analysed by sentence and coded using QSR N6 as a means of managing the data.

Results: The findings identified that hope in trauma care was centred on the immediacy and unfolding nature of daily life. For patients, generalised hope focussed on tangible outcomes such as discharge and increasing functional ability; particularised hope was predominantly influenced by perceived progress through recovery. Staff used a process of realistic hopefulness to support emotional and physical recovery from injury alongside a practical goal directed approach to care. Both staff and patients found living with uncertainty a struggle; in addition staff were careful to avoid conveying false hope.

Discussion: The discussion presents a conceptual framework conveying the practical use of hope within a trauma unit; focussing on hope as normalising, hope as emotions and hope as activities and goals. Realistic hopefulness provided a way of integrating emotional and practical aspects of care but requires further research to assess its utility for patients.

Keywords: Experiences; Qualitative; Recovery; Hope

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1B.4

Cardiac arrest: A trauma algorithm

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Cardiac arrest following trauma carries a poor prognosis and particularly so in the context of blunt trauma [mortality > 90%]. Cardiac arrest following penetrating torso trauma carries a better prognosis if witnessed and managed by personnel competent at performing a resuscitative thoracotomy [mortality 65–85%]. Clear guidelines exist for the general management of cardiac arrest in the form of the UK and European Resuscitation Council Guidelines. The trauma patient is addressed under such guidelines, albeit briefly, as a “special circumstance” and to some extent in the discussion of reversible causes. On the other hand, the ATLS guidelines form the skeleton of most trauma management protocols in the UK and the world at large but stops short of proposing a resuscitation algorithm for cardiac arrest.

The authors propose that neither set of guidelines provide a clear efficient algorithm for the trauma patient in cardiac arrest. The primary objective of this paper is to propose an evidence based algorithm for the management of the trauma patient in the early phase of cardiac arrest.

While this paper acknowledges that this is a small subset of patients, it must be emphasized that the potential to improve prognosis exits if a rapidly reversible cause is identified and immediately addressed (e.g. airway obstruction, hypoxia or reversible ventilatory or cardiovascular compromise); hence the argument for “protocolisation” in this group. On the other hand, the presence of clear guidelines may prevent futile prolonged resuscitation efforts.

Though original as a concept, our algorithm utilises existing evidence and trauma outcome data to promote a systematic team approach to this subset of patients in whom substantial variation in outcome exits. The proposed algorithm is arguably invasive; however, it applies to a narrow cohort of patients in whom evi-
dence strongly favours rapid aggressive intervention rather than false reassurance from potentially subtle and unreliable clinical signs. This paper aims to address a potential deficit and stimulate debate on the subject among the audience rather than duplicate the ALS or ATLS algorithms. Interested delegates will be invited to contribute to a subsequently published paper presenting the proposal to the medical community at large in a peer reviewed journal.

Keywords: Resuscitation; Cardiac arrest; Trauma; Thoracotomy

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1B.5

“Desert challenges”—An overview of field care for a desert endurance race

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The UAE Desert Challenge is one of the most arduous events in the FIA World cup Calendar. It attracts 130+ competitors from all over the globe to race in the desert of the “empty quarter”, some of the most inhospitable terrain on earth.

We describe the medical unit for the event and assembly of resources required, including land and airborne rescue units, and the transfer of battlefield technology to this setting.

We review the major injuries sustained by competitors and their management, with an overview of the unique barriers encountered.

We studied the difficulties faced in terms of environmental and clinical aspects and outline the lessons learned.

Keywords: Prehospital; Extreme environment; Resuscitation


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1B.7

Cow-related trauma: A 10-year review of injuries admitted to a single institution

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Introduction: Bovine-related injuries to farmers are common in rural communities. Many injuries are significant requiring hospital admission and surgery. We reviewed all cattle-related injuries admitted to a regional trauma centre over 10 years and detail the nature of the injuries.

Method: A retrospective review was undertaken, using hospital inpatient coding system (HIPE) to identify patients admitted following cow-related trauma for the last 10 years. From retrieved charts mechanism of injury was identified, demographics recorded and Injury Severity Score (ISS) and Trauma Injury Severity Score (TRISS) calculated based on the injuries sustained.

Results: 47 patients were identified, with a median age of 53 years. 8.5% of injuries occurred in children, and 25% in patients over 65 years old. 75% of those injured were male. Kicking was the most common mechanism of injury (47%), but charge/head-butt injuries and trampling injuries were associated with more serious injury scores. 72% of patients were admitted under Orthopaedics as their primary care team, 25% under General Surgeons, with one patient admitted medically. Mean ISS score was 6.9 (range 1–50). 41 operative interventions were performed on 30 patients during their admission. 6.3% of patients required admission to Intensive Care with a mean length of stay of 12.3 days (range 2–21 days). There was no mortality.

Conclusion: Cow-related trauma is a common and potentially serious mechanism of injury. Head-butt and trampling injuries should be considered akin to high velocity trauma.

Keywords: Cows; Polytrauma; Injury Severity Score

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1B.8

Does negative microscopy mean no infection in septic arthritis?

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Aims: To investigate how many joint aspirates with negative microscopy went on to develop positive culture results later.

Materials and methods: All patients undergoing an emergency joint washout on the orthopaedic trauma lists at Norfolk & Norwich University Hospital over 1 year (October 2007–October 2008) were analysed. The trauma theatre lists on the electronic database were manually reviewed for all the cases of septic arthritis undergoing washout on our trauma lists and all the patient details, such as date of birth and hospital number, were collected. The initial aspirates and resulting cultures of these patients were then looked up on the ICE Desktop system. This is an electronic central management system for hosting patient centred applications and gathers patient information from many different sources such as PAS (Pathology Administration System).

The patients who were aspirated, had negative initial microscopy and were sent home and the patients who were washed out on elective lists were not included in this analysis as we found it logistically very difficult to collect their data.

Results: 36 patients (M1:F1) had joint aspirates, average age of 37 (ranging from 2 to 94 years of age).

13 patients with negative initial microscopy for organisms went on to have a positive culture.

12 patients with negative initial microscopy for organisms went on to have a positive culture.

All 11 patients that had positive initial microscopy for organisms went on to have a positive culture.

4 patients had positive crystals and negative organisms on initial microscopy subsequently went on to have a positive culture.

Conclusion: We found that a negative microscopy does not exclude infection as 13 patients went on to have a positive culture.

The presence of crystals does not exclude infection with an initially negative microscopy for organisms.

Keywords: Septic; Infected; Joints


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1B.9

Comparison of trauma and elective income in a busy DGH—Has David overcome Goliath?

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Introduction: It is our opinion that elective work seems to take priority in the NHS and that trauma is seen to be of low profitability and priority. We aimed to investigate this in our trust.

Methods: A prospective study looking at admissions for trauma and elective work for a 1-week period 22 February 2008–28 February 2008 inclusive. This excluded spine surgery, which is performed distant from our elective orthopaedic theatres. All trauma admis-