FAST HUGs in the ICU

Introduction

Continuous efforts are being made in order to improve the quality of patient care in ICU departments. Medical errors are relatively common and variation in practice exists between clinicians, even when best-practice guidelines are available.

Protocols have been devised with the aim of enhancing efficiency, safety and quality of care in ICU units. Nevertheless, the usefulness of these protocols can be somewhat limited in complex cases and an alternative approach to improving patient care is via the use of checklists. It has been suggested that the use of checklists in ICU may be effective in improving patient care and safety. The FAST HUG mnemonic (Feeding, Analgesia, Sedation, Thrombo-prophylaxis, Head-of-bed angle, Ulcer prophylaxis and Glucose control) was proposed to highlight key aspects of care that should be considered at least daily for all ICU patients. Regularly reviewing these elements enhances safety and patient care in ICU units; however, compliance of medical professionals with these principles is currently unknown.

Objective

The objective of this pilot study was to evaluate the compliance of ICU staff in Waikato Hospital, New Zealand with the FAST HUG principles. The purpose of this study was to act as a preliminary investigation that can be continued indefinitely to monitor long-term performance in the ICU.

Method

An audit was carried out to evaluate compliance with the FAST HUG principles in the ICU department. A literature search was carried out prior to commencing this project in order to understand work that had previously been done by other groups. After reviewing existing literature, an audit proforma was designed to allow the FAST HUG elements to be monitored quickly and easily in the ICU. No patient identifiable data was collected in the audit, thus ethical approval for the study was not sought. The primary goal of this project was to monitor performance within the unit, and not to monitor the progress of individual patients. In total 60 patients were included in this pilot study. In future, it may be necessary to increase or decrease the number of patients who are included in the audit depending on time constraints.
Results

Compliance with each of the FAST HUG principles was around 90% or above, with the exception of head-of-bed elevation where only 37.7% of patients had their HOB elevated to the optimum level (30-45°). It was encouraging, however, that the head-of-bed was raised to some degree for 98.4% of all patients. There is potentially room for improvement, as 62.3% of patients did not have their HOB in the optimum range (30-45°). Documentation of pain and sedation was excellent on the whole, and mean SAS score was kept within the ‘ideal’ range. The majority (91.7%) of patients were being fed in the ICU and on average patients were receiving close to the recommended nutritional intake (mean intake 88.2% of the target). VTE prophylaxis was routinely given, and followed the ICU protocol in 93.0% of the cases. Ulcer prophylaxis was slightly less well implemented, with overall compliance at 88.1%. In general, glucose levels were well controlled and only 1 hyper/hypo was recorded.

There were several limitations to the study that could allow for improvements in the future. Firstly, it is difficult to accurately calculate the nutritional intake of orally feeding patients. Secondly, documentation of patients’ weight is not routinely done, and therefore patient weights are based on the assumption that beds were ‘zeroed’ before admissions (which is not always the case).

Summary

Overall this was a thoroughly enjoyable and highly educational elective. Aside from the FAST HUG audit, I assisted with helicopter transfers of critically unwell patients, responded to crash calls with the resuscitation team and shadowed anaesthetists and members of the ICU team on the ward and in theatre. This elective has given me a fantastic opportunity to learn about anaesthesia in ICU, and it has stimulated my interest in this specialty as a potential future career path. I would like to take this opportunity to thank the AAGBI for their support as this elective could not have taken place without it.