

Anaesthetic trainee knowledge of emergency drug locations

Dr J Cumberworth¹ and Dr R Bayley¹

1: East Sussex Healthcare NHS Trust

Introduction

Familiarity with emergency drugs is a core part of the delivery of safe anaesthesia and anaesthetic training. In the 2016 document 'Storage of drugs in anaesthetic rooms', the RCoA advise that "it is common practice to prepare a selection of 'emergency drugs' that should be immediately available during the course of an anaesthetic". Furthermore, "certain rarely-used emergency drugs may be stored in a central location, serving the entire theatre suite, e.g. dantrolene and intralipid. Local SOPs should [...] ensure that the locations of these drugs are conspicuously signposted".¹ In our experience, commonly-used emergency drugs are routinely prepared by anaesthetists each day for all theatre lists. This project aimed to investigate and improve trainee familiarity with the locations of less commonly used emergency drugs such as dantrolene, intralipid and sugammadex. Maintaining up-to-date knowledge of this is particularly important in the context of frequent trainee rotation between different hospital sites, and potential alterations to theatre layout in the context of COVID-19.

Methods

A simple questionnaire was produced to ascertain whether respondents were familiar with the locations of adrenaline (1:10,000), dantrolene, sugammadex and intralipid within the theatre complex. The grade of clinician was also asked. After completing the questionnaire, respondents were provided with local information on drug locations. They later repeated the questionnaire, and responses were compared with the initial attempt. Results from all questionnaires were then tabulated and compared with descriptive statistics.

Results

Initial results were variable, with only two respondents recording four correct answers. The most common score was three correct answers, with the overall median between two and three. The median score amongst registrars was three out of four, with a lower median amongst core trainees (two to three) and foundation trainees (zero to one). All respondents scored four correct answers on their 2nd attempt, having read the educational material provided.

Conclusion

More senior clinicians demonstrated greater knowledge of emergency drug locations than the most junior trainees, but at all levels there was considerable variation. Regardless of the grade of clinician, an awareness of the locations of certain anaesthetic emergency drugs is essential. This project demonstrates that a simple, quick intervention can effectively improve this knowledge across a group of clinicians. We plan to compare results across different hospital sites. Repeating the project with consultants and allied healthcare professionals with whom we work closely, such as theatre staff and anaesthetic assistants, would be a valuable exercise.

References 1: RCoA and AAGBI. Storage of drugs in anaesthetic rooms [online]. 2016 (reviewed 2019). Available at <https://www.rcoa.ac.uk/sites/default/files/documents/2019-09/StorageDrugs2016.pdf>

| Grade | n | 1 ST result | 2 nd result |
|------------------|---|--------------------------|------------------------|
| FY1/2 | 2 | 0%, 25% | 100% |
| CT | 2 | 50%, 75% | 100% |
| ST3-5 | 5 | 25%, 50%, 75%, 75%, 100% | 100% |
| Specialty doctor | 1 | 100% | 100% |

Table 1: Results in 1st and 2nd questionnaire attempts, by grade of doctor