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Obstetric epidural trolley cleanliness audit

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Introduction

A thorough aseptic technique is the bedrock of most clinical procedures, and is all the more important when the central neuraxial canal is involved. Poor aseptic technique has been implicated in a number of incidents after central neuraxial techniques with the potential for serious complications including epidural abscess and meningitis.1 Furthermore, there exists in a number of trusts, standard operating procedures to ensure the epidural trolley is cleaned and adequately wiped down with chlorhexidine in 70% alcohol and a paper towel with every use. This is in order to minimise cross-infection and to provide a clean working surface.2 However, this practice is variable. The project aims were to determine the prevalence of this practice and the degree of cleanliness of the epidural trolley.





Methods

An electronic survey was sent out to all 51 obstetric anaesthetists including consultants and trainees who work at a busy delivery suite in Birmingham. We explored a variety of themes including usage of trolleys during the epidural procedure, prevalence of wiping it down after each use and also thoughts on who should be regularly cleaning the epidural trolley.

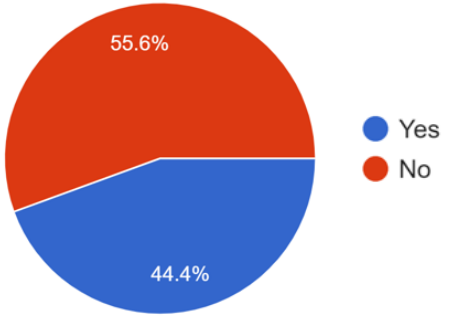


Results

36 responses were received which corresponds to a 71% response rate. 52.7% were registrars, 38.9% were consultants, 9.8% were SAS doctors and 4.6% were SHOs. The vast majority (86.1%) took the epidural trolley into the delivery suite room. Exactly two-thirds of respondents also used it for the procedure, while the remainder used a silver trolley already in the room. The majority (61.1%) did not wipe down the epidural trolley after use, and 55.6% had never cleaned the epidural trolley. No other healthcare personnel (e.g. ODP, cleaners) were identified in this audit to have ever cleaned the epidural trolley. Despite this, 80.6% felt that the epidural trolley should be cleaned daily, while the remainder was split evenly between cleaning it weekly and monthly. 38.9% felt this should be done by an anaesthetist, while 22.2% felt the cleaning staff should do it, 21.8% felt the ODP should clean it. and the remainder felt midwives should clean it. 17.1% felt the midwives should clean the epidural trolley after each use. Finally, nobody was aware of the existence of any protocol or guidelines with respect to epidural trolley cleanliness.



Have you ever cleaned the epidural trolley?





Discussion

Our results showed a clear disconnect between the lofty aseptic standards of the ideal epidural technique and the prevalence of the simple act of wiping the epidural trolley down after each use. The epidural trolley was rarely cleaned, and more so, it was often brought into the delivery suite room, mere centimetres away from a sterile field and the central neuraxial canal, and thus with potential for severe consequences. On enquiring, infection control nurses stated that the epidural trolley itself should not be taken into the room, especially in a pandemic; rather a separate silver trolley should be used for the procedure. They also suggested it should be cleaned down weekly. This project has elucidated the clear need for an educational intervention. This includes presenting to the department, reminding them by email and also a laminated notice on the epidural trolley advising against it being taken into the delivery suite room and that it should be wiped down after each use. A re-audit after this intervention will elucidate if our epidural trolley cleanliness practice has improved.

References

1. Royal College of Anaesthetists. 3rd National Audit Project (NAP3). National Audit of Major Complications of Central Neuraxial Block in the United Kingdom. London; RCA: 2009. p75 https://www.rcoa.ac.uk/nap3

2.Southern Health and Social Care Trust Epidural Guidelines, 2017. p23. URL: http://www.southernguidelines.hscni.net/?wpfb_dl=255