

AB161. SOH23ABS_007. A clinical audit examining perioperative thermoregulation and the monitoring of patients attending for elective day surgery under general anaesthesia

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Background: Administration of a general anaesthetic requires continuous monitoring of vital parameters. Body temperature is among one of the classic vital signs, yet, it is consistently under monitored perioperatively. Temperature perturbations are important indicators of disease. Inadvertent peri-operative hypothermia is a common occurrence of general and regional anaesthesia and has a significant impact on patient outcomes. The aim of this study was to evaluate the impact of introducing a heated bag of intravenous (IV) fluids for patients attending elective day surgery combined with increased staff awareness on temperature monitoring.

Methods: This prospective audit was conducted from August to September 2022 in the surgical day ward (SDW) in St James's Hospital (SJH). A convenience sample of consecutive patients was chosen over a two-week period before and after our intervention, interrupted by a week to allow for staff education. Using guidelines on perioperative monitoring set out by the National Institute of Health and Care Excellence (NICE) and the Association of Anaesthetists of Great Britain and Ireland (AAGBI), our standards of perioperative temperature monitoring were evaluated. Staff in the day surgical ward (medical and nursing) were educated on the monitoring deficiencies and the importance of introducing and maintaining the use of heated IV fluids to optimise patient care.

Results: A total of 29 patients were examined. The average age of patients attending was 54.5 years, standard deviation (SD) 16.45. Temperatures were recorded at 30-minute intervals; in the SDW, pre-induction, intra-operatively and in recovery. The mean temperature pre-induction

was 36.7 °C, SD =0.22. The average case duration was <30 minutes and the average temperature in recovery was 36.4 °C, SD =0.39. One hundred percent of patients received paracetamol and 12.5% of cases used a Bair-Hugger. In phase-1 of this study, 0 case used warmed IV fluids.

Conclusions: Perioperative monitoring of vital parameters is crucial for the safety of patients who are undergoing a general anaesthetic. Temperature is a vital sign which is grossly under monitored perioperatively despite association of numerous adverse events. It is our hypothesis that the introduction of intraoperative warmed IV fluids combined with increased staff awareness of the important of perioperative temperature monitoring will aid optimisation of patient care in elective day surgical patients.

Keywords: Adverse outcomes; anaesthesia; intravenous fluids; perioperative; thermoregulation

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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