AB238. Dosing of anaesthetic drugs in obesity

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Background: Obesity has implications for the pharmacodynamics and pharmacokinetics of many commonly administered anaesthetic drugs. The Association of Anaesthetists of Great Britain and Ireland (AAGBI) and Society of Obesity and Bariatric Anaesthesia (SOBA) have issued a joint guideline on the care of obese patients which includes a recommendation that the dosing of a variety of drugs be based on body-weight scalars (such as lean body weight and adjusted body weight) rather than total body weight.

Methods: We collected data prospectively over a 6-week period on 20 morbidly obese patients (BMI ≥35). The doses of a selection of commonly administered anaesthetic drugs were compared to the recommended dose range based on the appropriate body-weight scalar.

Results: We found that the initial dose of propofol exceeded the expected dose in sixty-eight percent of cases. Non-depolarising muscle relaxants were also administered at a dose exceeding the recommended range in sixty-eight percent of cases. Reversal fell below the lowest expected dose in twelve and a half percent of cases.

Conclusions: In our institution, drug dosing in obese patients does not consistently follow the AAGBI/SOBA guideline. In order to facilitate anaesthetists using this guideline going forward, we have integrated a body-weight scalar calculator into our institution’s electronic pre-operative Assessment Clinic template.

Keywords: Anaesthesia; obesity; perioperative; pharmacology

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