

## AB139. 204. Surgeons' and anaesthetists' knowledge of direct oral anti-coagulants in trauma

Geoff Crozier Shaw, John Gibbons, Paddy Kenny, Olivia Flannery, Peter Keogh

Department of Trauma and Orthopaedics, Connolly Hospital, Blanchardstown, Dublin 15, Ireland

**Background:** Direct oral anti-coagulants (DOACs) have changed the management of patients with atrial fibrillation and venous thrombo-embolic disease. The directly anti-coagulated trauma patient presents a challenge to orthopaedic surgeon, which is a common cause of delay to theatre. We aimed to review the literature on perioperative management of DOAC and audit the knowledge of surgeons and anaesthetists using this up-to-date data.

**Methods:** PubMed central was searched for articles on perioperative DOAC management. Papers included were reviewed and guidelines for management noted. A questionnaire was distributed to surgeons and anaesthetists and data analysed.

**Results:** Fifty (n=50) responded to the survey. Respondents included consultant anaesthetists, consultant surgeons, surgical and anaesthetic registrars and senior house officers. Respondents typically encountered DOACs on a weekly basis, and knowledge of basic pharmacology and peri-operative safety was sufficient across all subgroups. Five respondents (n=5, 10%) were aware of the emergency reversal agents for direct thrombin inhibitors and the novel emergency reversal agent for factor Xa inhibitors (still undergoing phase three clinical trials).

**Conclusions:** DOACs present challenges to surgeons and anaesthetists in the management of trauma. Knowledge of DOAC pharmacology is sufficient. There is a notable gap in relation to knowledge on reversal agents; Idarucizumab is licenced for urgent reversal of direct thrombin inhibitors such as Dabigatran. Andanexet alfa is currently undergoing promising phase three clinical trials for reversal of factor Xa inhibitors such as Rivaroxaban and Apixaban. We aim to organise local education sessions with Haematology specialists and re-audit our respondents

**Keywords:** Anticoagulation; hip fractures; orthopaedics; trauma

doi: 10.21037/map.2019.AB139

**Cite this abstract as:** Shaw GC, Gibbons J, Kenny P, Flannery O, Keogh P. Surgeons' and anaesthetists' knowledge of direct oral anti-coagulants in trauma. *Mesentery Peritoneum* 2019;3:AB139.