



## AB147. Does the use of peri-operative steroids reduced post-operative analgesic requirements in patients undergoing bilateral total knee arthroplasty?

David Keohane, Gerard Sheridan, James Harty

Department of Orthopaedics, Cork University Hospital, Cork University Hospital, Cork, Ireland

**Background:** Bilateral total knee replacement can increase the analgesic requirements of patients beyond the standard requirements of a patient post unilateral total knee replacement. The potential large amounts of analgesia required can lead to known side effects—such as sedation, toxicity, nausea, vomiting and constipation amongst others. The benefits of using corticosteroids in unilateral primary knee arthroplasty to reduce post-operative analgesic requirements is well established, however there is a paucity of knowledge about their usage and effectiveness in bilateral total knee arthroplasty.

**Methods:** This research was carried out as a single-surgeon,

retrospective chart review of all of the bilateral total knee replacements performed in a single orthopaedic hospital from November 2014 to May 2019. All of the patient charts were reviewed and key information was recorded.

**Results:** Thirty-two were deemed eligible for this study. Eighteen patients did not receive any peri-operative dexamethasone, whereas 14 patients received 8 mg of dexamethasone intravenously intra-operatively and 24 hours after their operation. Opioid-based analgesic usage was similar between the two groups when the different types of opioids were converted into standardized morphine equivalent units and compared. The day one post-operative range of movement in both knees was better in the “Steroids” group than the “No steroids” group [64 (L) and 66 (R) degrees versus 56 (L) and 57 (R) degrees respectively].

**Conclusions:** Overall, while this study demonstrated that use of dexamethasone did not decrease analgesic usage in patients receiving it, it likely benefited patients in achieving better early range of movement in their knees, and patient reported pain control.

**Keywords:** Analgesia; bilateral total knee arthroplasty; steroid usage

doi: 10.21037/map.2020.AB147

**Cite this abstract as:** Keohane D, Sheridan G, Harty J. Does the use of peri-operative steroids reduced post-operative analgesic requirements in patients undergoing bilateral total knee arthroplasty? *Mesentery Peritoneum* 2020;4:AB147.