AB245. A prospective audit on postoperative sedation score related to gabapentin in patients undergoing elective total hip arthroplasty

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Background: There are over 10,000 total hip arthroplasties (THA) carried out in Ireland per year and the number is increasing. Multimodal analgesia is employed to reduce postoperative pain allowing early mobilization minimizing postoperative complications such as deep venous thrombosis leading to decreased length of the hospital stay.

Methods: The 3 months period prospective audit was conducted in our institution to evaluate the effect of Gabapentin as a part of multimodal analgesia on sedation in patients undergoing elective THA. The data collection included patients characteristics (age, sex, American Society of Anaesthesiologists (ASA) score, height, weight, body mass index) and also perioperative 24- and 48-hour management (Gabapentin, Paracetamol, Nonsteroidal inflammatory drugs = NSAID’s, Morphine equivalent, Pain and Sedation scores).

Results: There were 39 patients of mean age 73 years (SD: ±4 years), 49% males and 51% females of ASA grade 1, 2 and 3. None of them received intrathecal morphine (ITM), 85% patients were given Gabapentin as premedication in dose of 253.85 mg (SD: ±171 mg). In the first 24- and 48-hour postoperatively 97%/97% had Paracetamol and 87%/74% had NSAID’s respectively. The cumulative dose of morphine equivalent in 24 and 48 hours was 65.92 mg (SD: ±26 mg) and 33.04 mg (SD: ±21 mg) respectively. The cumulative dose of Gabapentin in 24 and 48 hours was 510.25 mg (SD: ±247 mg ) and 282.05 mg (SD: ±171 mg) respectively with average sedation scores of 0.05 and 0.00. The pain scores in 24 and 48 hours was 1.59 (SD: ±1.67) and 1.59 (SD: ±1.9) respectively.

Conclusions: Gabapentin as a part of multimodal analgesic technique in the dose used in our institution didn’t cause postoperative sedation in patients post THA.

Keywords: Gabapentin; sedation; elective; orthopaedic; surgery; anaesthesiology

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