ABSTRACT

TITLE: COMPARATIVE STUDY OF ORAL PREGABALIN VS GABAPENTIN FOR POST OPERATIVE ANALGESIA IN LOWER LIMB SURGERIES PERFORMED UNDER SPINAL ANAESTHESIA

Introduction: Postoperative pain management is important and in majority of post surgical cases pain is not treated adequately. This study compared the preemptive analgesic efficacy of pregabalin vs gabapentin for post operative pain management in patients undergoing lower limb surgery under spinal anesthesia.

Materials and Methods: In a randomized single blind study, 90 patients were divided into three groups. Group P received tab pregabalin 300 mg, Group G received tab gabapentin 900 mg and Group C received placebo tablet orally 1 hour prior to surgery. All patients underwent surgery under spinal anesthesia using 0.5% Bupivacaine and 25mcg of Fentanyl. Assessment of postoperative pain was made with visual Analogue Scale (VAS) score at 0, 1, 2, 3, 4, 6, 9, 12, and 24 hours post operatively. Assessment of sedation using Ramsay Sedation score was done at at 0, 1, 2, 3, 4, 6, 9, 12, and 24 hours post operatively. Injection tramadol 100 mg was given as rescue analgesic intramuscularly when VAS score was >4 in all the groups. Time to first rescue analgesic and total dose of rescue analgesics received in 24 hrs were noted in all groups. The occurrences of side effects were noted in all groups.
Results: The dose of tramadol as rescue analgesia consumption was less in pregabalin (170 mg) and gabapentin (176 mg) groups compared to control (286 mg) and was statistically significant ($P < 0.001$). VAS scores were lower in pregabalin and gabapentin groups compared to control in the 24 hrs post surgery and was statistically significant ($P < 0.001$). Time to first rescue analgesia was significantly longer for pregabalin (502.3 min) followed by gabapentin (382.6 min) and control (137.8 min) groups.

Conclusion: Pregabalin 300 mg single dose given 1 hour prior to surgery is superior to 900 mg gabapentin and placebo in attenuating post operative pain in patients undergoing lower limb surgery. Both drugs are better than placebo.

Key words: Analgesia, gabapentin, pain, preemptive, pregabalin