

**Effect of Pregabalin on Postoperative Pain, Postoperative Analgesic Consumption and Side Effect after Donor Nephrectomy:
A Randomized, Double-Blind Trial.**

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ABSTRACT

Background: The objective of this study was to investigate the analgesic effect from combination of pregabalin premedication and epidural morphine in adults undergoing laparoscopic donor nephrectomy.

Methods: Fifty patients aged 18-65 yr, of ASA physical status I-II, undergoing laparoscopic donor nephrectomy were recruited and randomized in this prospective, placebo-controlled, double-blind study to receive either 150 mg pregabalin plus 0.5 mg lorazepam (study group) or placebo plus 0.5 mg lorazepam (control group) 1 h before surgery. All patients had general anesthesia combined with lumbar epidural analgesia and morphine epidurally. Breakthrough pain was rescued by tramadol 50 mg. Pain the primary outcome variable, was measured using the visual rating scale pain score at rest (static) and on coughing or movement (dynamic). Secondary outcome variables included tramadol consumption, nausea/vomiting, sedation score, dizziness, itching, modified Bromage scale, and consumption of ondansetron were recorded at 0, 1, 4, 6, 12, 24 and 48 h postoperative. $P < 0.05$ was considered statistic significant.

Results: Of the 50 patients randomly assigned to 2 groups (25 in each). Data were obtained from 22 pregabalin patients and 25 placebo patients. Demographic data were similar. Compared with the placebo group, In pregabalin group pain scores (static) at 1, 4, 6, 12, 24, 48 h were lower ($P < 0.05$), modified Bromage scale at 0, 1h were lower ($P < 0.05$), nausea/vomiting were higher at 24 h ($P < 0.05$). Total tramadol and ondansetron consumption were not statistically different. The side effects such as sedation score, dizziness and itching were not statistically significant difference between groups.

Conclusion: Administration of pregabalin 150 mg with epidural morphine resulted in significantly improved postoperative pain management as defined by lower pain score, although total tramadol consumption was not statistically significant different. Nausea/vomiting was higher at 24 h, total ondansetron consumption, side effects such as sedation score, dizziness, itching and were not statistically significant different.

Keywords: *Living donor nephrectomy, laparoscopy, pregabalin, postoperative pain.*