PROSPECTIVE STUDY OF THE EFFICACY OF COMBINATION OF THORACIC PARAVERTEBRAL BLOCK AND IV PCA TO IV PATIENT CONTROLLED ANALGESIA ALONE FOR POST-OPERATIVE PAIN MANAGEMENT IN NEPHRECTOMY PATIENTS

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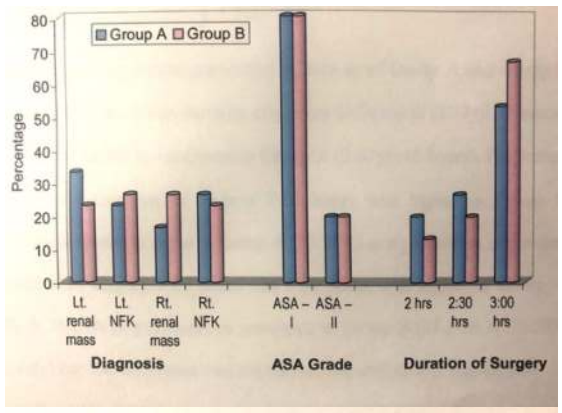
***Background**: Post-operative analgesia following renal surgery is essential to allow effective coughing, early extubation and to reduce the incidence of post-operative respiratory complications. The objective of this study was to compare thoracic paravertebral block (TPVB) and IV PVC (iv fentanyl) with IV PCA alone for post-operative analgesia in patients undergoing open nephrectomy and to compare intraoperative and post-operative hemodynamic changes and any possible incidence of side effects in both groups.*

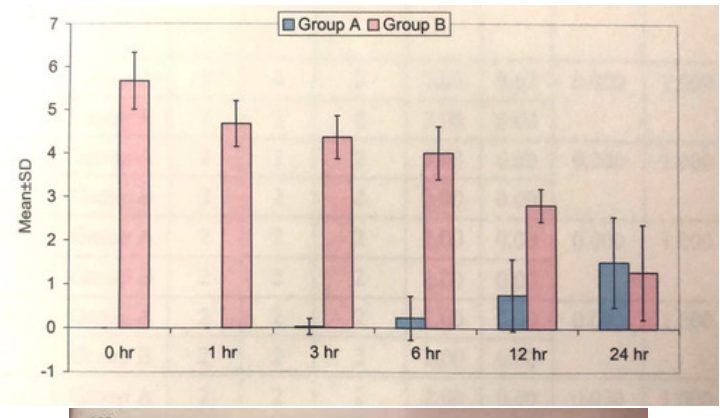
Material and Method: In this prospective randomized controlled observer blinded study, 30 patients were taken up in each group belonging to ASA 1-2, age 18-60 years within 25% of ideal weight and height and posted for elective nephrectomy. Patients were divided into two groups:

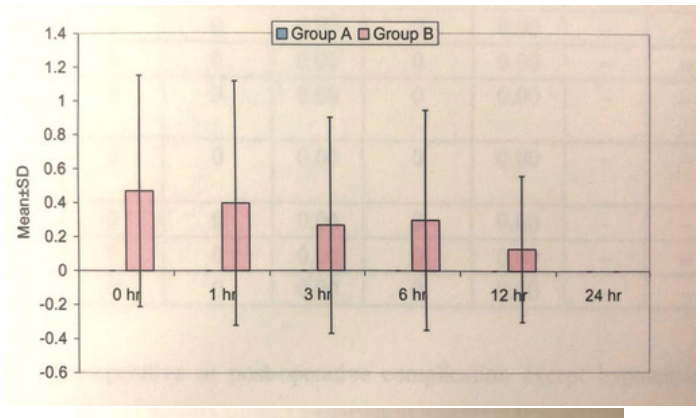
GROUP A: Patients received post-operative Single Thoracic Paravertebral Block (20 ml 0.25% Bupivacaine)+GA+PCA with iv fentanyl (2 mcg/ml) with basal infusion at the rate of 20 mcg/ml, Demand dose was 12 mcg with a lockout interval of 20 minutes.

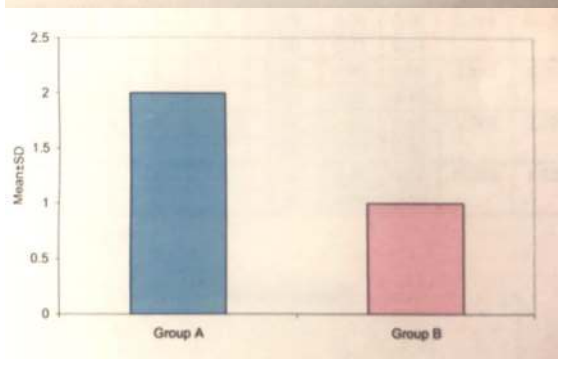
GROUP B: Patients received GA+PCA with iv fentanyl (2 mcg/ml) with basal infusion at the rate of 20 mcg/ml, Demand dose was 12 mcg with a lockout interval of 20 minutes.
In addition, rescue analgesia with inj. Tramadol 50-100 mg IV was given on VAS score > 3.
In post-operative period, we assess the duration of analgesia, VAS, NRS, RSS, time of first requirement of rescue analgesic, total consumption of fentanyl, total consumption of antiemetic and any complication in post-operative period.

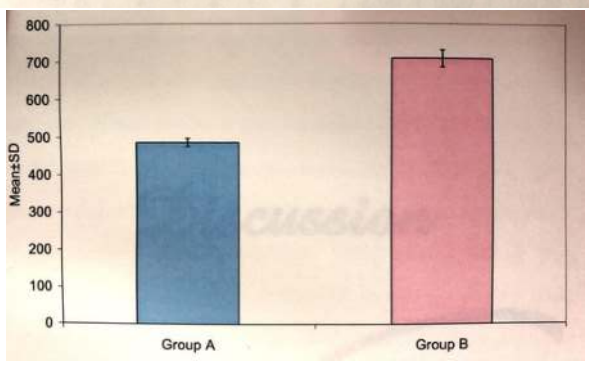
Results: Both the groups were comparable and there was no statistically significant difference between the groups, with respect to demographic characteristics of age, gender, height, weight ASA grading, blood loss during surgery, type, side or duration of the surgery.

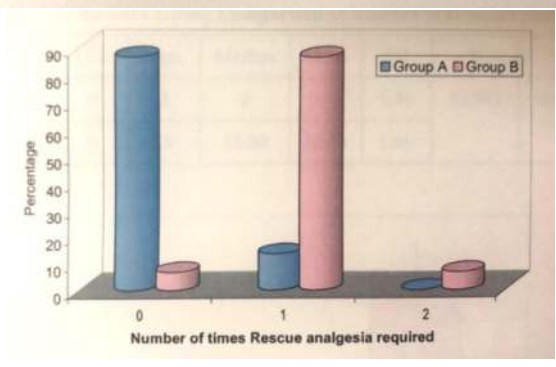












Conclusion: Thoracic paravertebral block using bupivacaine was an effective regional technique with low fentanyl consumption, prolong post-operative analgesia, better hemodynamic stability, good pre-emptive effect, high pts satisfaction and minimal incidence of side effects in post-operative pain management.