

## THESIS ABSTRACT

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Title : COMPARISON OF POSTOPERATIVE ANALGESIC EFFICACY OF EPIDURAL ROPIVACAINE AND ROPIVACAINE WITH TRAMADOL IN ADULTS UNDERGOING ABDOMINAL SURGERIES UNDER GENERAL ANAESTHESIA.

Period of study : March 2016- August 2016

Institution : Government Kilpauk Medical College Hospital

**Background:** Epidural analgesia provides adequate pain relief for the patients undergoing abdominal surgeries thereby preventing the adverse effects of acute postoperative pain. Tramadol as an adjuvant to epidural local anaesthetic agents improves the analgesic efficacy.

**Methods:** A prospective, non –randomized, double arm, single-blind, controlled study was conducted to compare the postoperative analgesic efficacy of Epidural 0.2% Ropivacaine and 0.2% Ropivacaine with 1mg/kg of Tramadol in patients undergoing abdominal surgeries under general anaesthesia. 60 patients in the age group of 30 to 60 years who were divided into two groups as Group R and Group RT. In Group R, 30 patients received 10 ml of 0.2 % Ropivacaine epidurally. In Group RT, 30 patients received 10ml solution containing 0.2% Ropivacaine and 1mg/kg of Tramadol. Epidural drug administration was done at the time of incisional wound closure. The duration of analgesia, Ramsay sedation score, nausea and vomiting, pruritus, hemodynamic parameters like heart rate, blood pressure, peripheral capillary oxygen saturation and respiratory rate in the postoperative period were observed and analysed.

**Results:** The mean duration of analgesia was found to be significantly longer in Group RT (309.9 minutes) than patients who received epidural 0.2% Ropivacaine alone(220.57 minutes). Better Ramsay sedation scores were observed in Group RT and Group R. There were no significant difference in nausea, vomiting, pruritus and hemodynamic variables.

**Conclusion:** This study concludes that the addition of 1 mg/kg of Tramadol improves the postoperative analgesic efficacy of epidural 0.2% Ropivacaine by prolonging the duration of analgesia and providing good sedation with no significant hemodynamic alterations, nausea, vomiting and pruritus.

**Keywords:** *Epidural analgesia, Ropivacaine, Tramadol, Visual analogue pain scale, Ramsay sedation score*