

## Original Research Article

# Evaluation of postoperative pain relief with intra-peritoneal bupivacaine instillation in laparoscopic cholecystectomy- a randomized control study

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### ABSTRACT

**Background:** Laparoscopic cholecystectomy is the surgical procedure of choice for symptomatic cholelithiasis due to the improved postoperative course, but patients undergoing laparoscopic cholecystectomy during the first 24 hours postoperatively complaints of pain. This study was designed to study the efficacy of intraperitoneal bupivacaine in reducing the initial postoperative pain and also to evaluate the postoperative shoulder tip pain, nausea and vomiting.

**Methods:** Patients undergoing laparoscopic cholecystectomy were randomized into two groups the, study group received intraperitoneal bupivacaine 100mg at the end of the procedure and the control group received intraperitoneal saline. Post operatively patients were assessed for pulse rate, blood pressure, VAS, VRS, shoulder pain and nausea and vomiting at 0, 2, 6 and 24 hours.

**Results:** Among the 50 patients studied, our study proved that there is no statistical significant reduction in pain with intraperitoneal bupivacaine. The VAS at 0, 2, 6 and 24 hours calculated with non-significant p-value of 0.85, 0.29, 0.72 and 0.64 respectively and the VRS had p-value of 0.16, 0.08, 0.59 and 0.46 respectively and the doses of rescue analgesia consumed had p value of 0.67, 0.61 and 0.70 which were not significant statistically.

**Conclusions:** Instillation of 100mg bupivacaine did not significantly reduce the need for tramadol compared with saline.

**Keywords:** Laparoscopic cholecystectomy, Local anesthetics, Post-operative pain relief