

Intraoperative infusion of lidocaine improves postoperative quality of recovery in patients undergoing laparoscopic cholecystectomy: A randomized, double blinded, placebo controlled trial

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Background: It has been shown that lidocaine inhibits nerve conduction and has anti-inflammatory properties. The objective of this study was to determine whether intra-operative lidocaine infusion improved the quality of post-operative recovery.

Methods: The study was a prospective, randomized, double-blind, placebo-controlled clinical trial. Sixty-six patients older than 20 years, ASA I and II proposed for laparoscopic cholecystectomy were randomized to receive immediately before the induction of anesthesia, lidocaine (bolus of 1.5 mg.kg⁻¹ of lidocaine followed by a continuous infusion of 1.5 mg.kg⁻¹.hr⁻¹ lidocaine until the end of the intervention) or the same volume of saline. The primary endpoint was the quality of the recovery to 24 hours after surgery (Score Q0R-9). Other data include opioid use, pain scores and possible side effects.

Results: 62 patients completed the study (32 in the lidocaine group and 30 in the placebo group). The two groups were comparable for demographic and surgical characteristics. Patients in the lidocaine group had a better overall quality of recovery scores compared to saline group (18 [14-18] versus 16 [10-18], respectively, p=0.015).

Conclusion: Intraoperative infusion of lidocaine reduces per and postoperative consumption of opioids and improves the quality of postoperative recovery after laparoscopic cholecystectomy.

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