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Comment on "Intravenous Lidocaine Compared with Quadratus Lumborum Block on Postoperative Analgesia Following Laparoscopic Renal Surgery: Protocol for a Randomized Noninferiority Trial" [Response to Letter]

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Dear editor

We thank Dr. Zeng et al for their interest in our study,[1] in which we present a protocol for a randomized noninferiority trial to investigate i.v. lidocaine vs quadratus lumborum block (QLB) on postoperative pain control after laparoscopic renal surgery. The primary outcome is the cumulative sufentanil consumption within the first 24 h after surgery, assessed using a noninferiority test. Secondary outcomes include postoperative pain scores, rescue analgesia, postoperative nausea and vomiting, and recovery of quality after surgery.

First, Zeng et al mentioned the randomization and blinding process. If we intend to achieve the blinding of anesthesiologists and surgeons, patients in the QLB group should receive an infusion of normal saline placebo, and those in the i.v. lidocaine group should receive a sham block. However, we do not apply these placebo and sham interventions, primarily for facilitation of study implementation and avoidance of additional exposures/punctures. Notably, all patients and postoperative outcome assessors will be fully blinded to the group allocation. Thus, we believe that there is a low risk of bias in the assessment of postoperative pain outcomes.

Second, regarding the dosage of lidocaine, we will apply a loading dose of 1.5 mg/kg over 10 min during anesthesia induction, followed by an infusion of 1.5 mg/kg/h intraoperatively and in a post-anesthesia care unit. Recent studies supported the use of this dosage of i.v. lidocaine in surgical patients.[2–4] Nonetheless, we have acknowledged in the limitations that more studies are still required to determine the optimal lidocaine dosage in patients undergoing laparoscopic renal surgery. As this is a single-center trial with a limited sample size, we do not plan to perform any interim analysis, and of course the generalizability of our findings needs further studies.

Next, Zeng et al also suggested a comprehensive safety monitoring plan to ensure patient safety. This is a really relevant and crucial point. Actually, we do have an institutional data monitoring committee that will supervise study implementation and adverse events. For the administration of i.v. lidocaine, it is important to monitor the systemic toxicity reflected on the central nervous system (such as metallic taste, tinnitus, dizziness, irrational conversation, convulsions, coma, and respiratory depression) and cardiovascular system (hypotension, atrioventricular conduction block, ventricular arrhythmias, and heart failure).

Disclosure

The authors report no conflicts of interest in this communication.

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