



## Response to letter to the editor by Dr. Huang et al.

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To the Editor:

We read with interest the letter by Zhi-Bin Huang et al. [1]. In response to their comments, we wish to submit the following clarifications. First, in our study, the mean duration of surgery in the lidocaine group was  $117.14 \pm 8.25$  min, and in the NS group, it was  $118.57 \pm 3.63$  min. The mean duration of sensory blockade defined as time to two-segment regression of sensory block was  $112.50 \pm 5.80$  min in the lidocaine group as compared to  $78.21 \pm 9.12$  min in the NS group. On arrival in the PACU the median [IQR] pain scores were 2 [2] and 2 [2–3] in lidocaine and NS groups, respectively, and by 4 h were significantly higher in the NS group, 5.5 [5–6], as compared to 3 [3–3] in the lignocaine group. In our study, the postoperative pain scores within 1–4 h postoperatively increased gradually in both groups from a low pain score at the end of surgery with the regression of spinal anaesthesia. However, at 4 h, the pain scores were significantly lower in the lignocaine group. The duration of motor block has no relation with the resting pain scores.

Second, as a non-steroidal anti-inflammatory drug, diclofenac was given as needed for postoperative rescue analgesia in this study. According to the ERAS Society consensus statement, paracetamol can reduce acute postoperative pain, has a favourable side-effect profile, and is a core component of multimodal analgesia in all exemplar hip and knee ERAS pathways [2]. We administered paracetamol to all patients on arrival in the PACU and henceforth every 6 h. The consensus statement recommends the routine use

of NSAIDS for patients “without contraindications” and suggests that individual patient risk should be assessed including any potential for bleeding, peptic ulcer disease, cardiovascular morbidity, aspirin-sensitive asthma, and renal and hepatic function, and due to their side-effect profile, judicious use and appropriate patient selection is required for routine use of NSAIDS [2]. Several older patients undergoing total knee replacement may have these contraindications. We wished to assess the effect of lignocaine as a component of multimodal analgesia and hence omitted the routine administration of NSAIDs but did not deprive patients of NSAIDs if their pain scores exceeded 3. We found that only 6 patients in the lignocaine group required a single dose of diclofenac in the first 24 h. We agree that different results on the influences of intraoperative intravenous lidocaine on duration of spinal anaesthesia and postoperative pain control would have been obtained, if the design of this study had included the regular use of both paracetamol and diclofenac perioperatively and further studies can be carried out with this study design.

Third, in the control group, the pain scores at 4 h, 8 h and 12 h postoperatively were significantly higher, necessitating the administration of 2 or 3 doses of diclofenac in all patients and second-line rescue analgesia with tramadol in most (12/14) patients. This suggests that the intraoperative lignocaine infusion contributed significantly to reducing postoperative pain.

Finally, regarding expression of data in Table 3 of our study, the pain scores are expressed as median [IQR]. This has unfortunately been omitted in the footnotes of Table 3.

This reply refers to the comment available online at <https://doi.org/10.1007/s00540-025-03468-z>.

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**Data availability** Data is available from the corresponding author upon request.

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replacement surgery: enhanced recovery after surgery (ERAS<sup>®</sup>) society recommendations. *Acta Orthop*. 2020;91(1):3–19.

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