Response to "Pericapsular nerve group block and lateral femoral cutaneous nerve block versus fascia iliaca block for multimodal analgesia after total hip replacement surgery: A retrospective analysis"

Dear Editor,

We read the article authored by Girombelli *et al*.,[1] which was recently published in your esteemed journal. The authors have done a commendable job in carrying out the research, but we came across some points of concern while going through the article and would like to highlight them.

In this retrospective study, the authors have compared the efficacy of a combined block [peri-capsular nerve group (PENG) block and lateral femoral cutaneous nerve (LFCN)] with fascia iliaca compartment block (FICB) among patients undergoing total hip arthroplasty (THA). Our major concern is the lack of clearly defined clinically significant differences in pain scores following the block.[2,3] The small sample study was also underpowered to justify the results obtained.[3] Girombelli *et al*.[1] hypothesized that combined block will cause lesser motor weakness. However, they did not use any validated motor power measurement tool to compare the density of the motor block.[3,4] FICB block with 0.5% local anesthetic would inevitably lead to motor blockade due to consistent involvement of the femoral nerve. The incidence of motor block following PENG block is not a major concern in previously published literature, especially with an LA volume of 20 ml or less as used in the current study.[5] So, comparing this hypothesis with motor-sparing blocks is a futile exercise. It is a bit surprising that the authors have compared combined block for THR with an already established technique like FICB and found no motor blockade or delay in ambulation with both techniques. Faster recovery and shorter ambulation time are recognized advantages of an anterior approach to THA, which was used in all cases in their study. However, the usefulness of LFCN remains questionable since the incision is made on the front of the groin region. Additionally, the authors have used 30 ml of 0.5% ropivacaine in the combined block group and 20 ml in FICB, which may have led to the results obtained. Ideally, they should have used an equal volume of drugs for better comparability.

After analyzing Table 2, we found that the *P*-value is not significant for the time and group interaction.[1] Readers would be curious to know how the authors opined that there was a significant difference in pain intensity between the groups at different time intervals. The median pain score at each point is the same, so how are they reported to be significant? Last, we would like the authors to address a few unanswered questions. Considering the retrospective nature of the study, we are curious as to why they used a combined block. A randomized controlled trial with proper power should have been carried out to obtain robust results that have external validity.

The obturator nerve innervates the anterior hip joint and is an important pain generator. Suprainguinal fascia illiaca (SIFI) block is more effective than classical infrainguinal FICB as it blocks obturator nerve more consistently. Also, the femoral

nerve would be blocked more proximally with SIFI, but proximal articular fibers would be spared with infrainguinal block. We believe the results would have been different if SIFI block was used to compare with PENG block.

To conclude, we would like to appreciate the efforts put in by Girombelli *et al*., and we would interpret the results with caution.[1]

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Conflicts of interest
There are no conflicts of interest.

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