

Comments to the Published Article

Comment on 'Postoperative analgesic efficacy of ultrasound-guided, low-volume C5-6 root block in combination with erector spinae plane block in complex shoulder surgeries'

Dear Editor,

We read the article by Kulkarni *et al.*,^[1] recently published in the Indian Journal of Anaesthesia, and we would like to highlight some of the concerns.

Our primary concern in the manuscript is regarding the objective and outcome of the study. Authors have hypothesised that a combination of a low dose of C₅-C₆ root block and an erector spinae plane block (ESPB) can minimise the adverse effects of an interscalene brachial plexus block and obtain good postoperative analgesia.^[1] However, as per the literature, ultrasound-guided interscalene block at C₅-C₆ nerve roots using as low as 0.9 ml of 0.5% ropivacaine can effectively achieve the desired analgesia for shoulder surgery.^[2] Regarding the phrenic nerve block, 20 ml of local anaesthesia (LA) can cause 100% phrenic nerve involvement, and 5 ml can cause up to 45%.^[2,3] So, giving 7 ml of 0.375% ropivacaine theoretically carries almost a 50% chance of phrenic nerve involvement. Thus, the authors using 7 ml of LA to block the C₅-C₆ roots and expecting a selective block (sparing

C₄ and above nerve roots) is a bit optimistic. A dye study could help prove this. A risk versus benefit ratio should be assessed before considering high-risk options like root block, especially when our goal is only postoperative analgesia instead of intraoperative anaesthesia. A safer option with equal analgesia efficacy in the form of a selective suprascapular nerve block (anterior or posterior approach) and ESPB can be opted for.^[4,5]

Our other concern in the manuscript is related to the small sample size, which was not defined for the outcome; thus, its results cannot be extrapolated to routine anaesthesia practice. So, the authors' concluding statement should be interpreted judiciously. Another concern in the index study is regarding timing and patient positioning during block placement.^[1] The methodology shows that the blocks were placed twice – the C₅-C₆ root block after induction of anaesthesia and ESPB at the end of surgery.^[1] We think both blocks could have been administered simultaneously after the induction of anaesthesia. This would have contributed towards intraoperative anaesthesia and perioperative analgesia along with decreased opioid consumption. They could have added adjuvants like dexamethasone or dexmedetomidine to prolong the analgesic action. The shoulder surgeries are usually performed in the lateral or supine position. In routine practice, orthopaedic surgeons generally avoid high-risk and multiple blocks. So, it is surprising to imagine how the surgeon could agree to a prone positioning (for ESPB) after completion of the surgery with shoulder support/bandage in place.

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Conflicts of interest

There are no conflicts of interest.

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