

Tips on 'TIPS Block'

Dear Editor,

We commend the authors for the study on triple injection peri-sartorius (TIPS) block for postoperative analgesia.^[1] However, we would like to seek clarification regarding a few issues.

The authors have employed a combination of three injections of local anaesthetic (LA): two sub-sartorius at the distal femoral triangle and distal adductor canal and one supra-sartorius to block intermediate femoral cutaneous nerve (IFCN) separately. These sub-sartorius injections are almost similar to the dual subsartorial block (DSB)^[2] performed at the distal femoral triangle and proximal adductor canal [Figure 1]. We question the requirement of a separate supra-sartorius LA deposition targeting the IFCN. The IFCN contributes to forming the medial half of the peripatellar plexus, which, along with the subsartorial plexus, covers all the innervations of the procedure-specific pain generators, including dermatomes for total knee arthroplasty. This nerve is covered with the proximal spread of LA following the first injection of DSB at the distal femoral triangle [Figure 1a].^[3] Therefore, specifically targeting the IFCN seems redundant. Moreover, it seems arbitrary to deliver a verdict on the sparing of a particular nerve (IFCN) by overall pain scores and opioid requirements unless it is validated through proper postoperative pain mapping, which the study did not include, leaving room for ambiguity.

The second injection of DSB is performed at the proximal adductor canal, which involves the popliteal plexus through distal LA spread [Figure 1b]. Injecting 20 mL of 0.25% bupivacaine into the distal adductor canal can, as described by the authors, result in an undesirable motor block affecting the tibial and common peroneal nerves, hindering early mobilisation. Hence, we suggest advocating for a proximal adductor canal injection with a volume not exceeding 20 mL and a concentration not higher than 0.2% (ropivacaine) to cover the popliteal plexus adequately.

In addition, the rationale for introducing a new name solely by incorporating one additional cutaneous nerve (IFCN) into the originally described DSB needs to be clarified. The authors claimed that the 'TIPS block' provided superior dynamic VAS scores compared to the femoral nerve block.^[1] However, without evaluating the precise role of IFCN, the former technique cannot

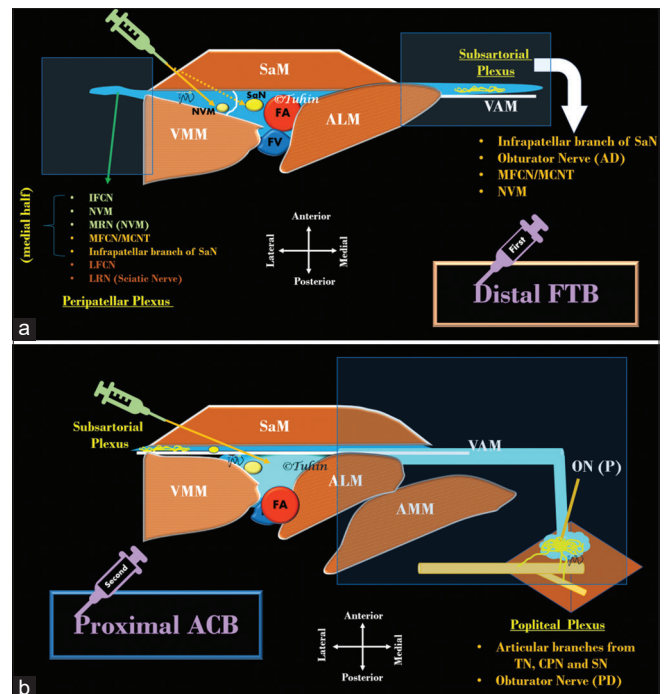


Figure 1: Schematic showing injection site and involved nerves and plexuses following dual sub-sartorial block (DSB). (a) Distal Femoral Triangle block (b) Proximal Adductor Canal block. SaM = sartorius muscle, VMM = vastus medialis muscle, ALM = adductor longus muscle, VAM = vasoadductor membrane, IFCN = intermediate femoral cutaneous nerve, NVM = nerve to vastus medialis, MRN = medial retinacular nerve, MFCN = medial femoral cutaneous nerve, MCNT = medial cutaneous nerve of thigh, LFCN = lateral femoral cutaneous nerve, LRN = lateral retinacular nerve, SaN = saphenous nerve, AD = anterior division; AMM = adductor magnus muscle, TN = tibial nerve, CPN = common peroneal nerve, SN = sciatic nerve, ON = obturator nerve, P/PD = posterior division

be distinguished from DSB. DSB represents a precise, motor-sparing, opioid-sparing, incision-congruent, and clinically proven evidence-based technique tailored to provide procedure-specific regional analgesia as an essential component of multimodal analgesia for total knee arthroplasty patients.^[4] It encompasses the blockade of multiple nerves and plexuses.

We encourage the authors to compare the TIPS block with DSB and focus their evaluation on the specific cutaneous region that proves or disproves their hypothesis.

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Conflicts of interest

There are no conflicts of interest.

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