Incomplete supraclavicular brachial plexus block in an opioid-dependent patient: A case report

Dear Editor,

Incomplete effect of a nerve block can occur due to anatomical factors, pharmacological agents, and lack of expertise.[1] We describe a 34-year-old man of 70 kg, 170 cm height, American Society of Anesthesiologists physical status of 1, scheduled for right forearm bone fracture surgery. During pre-anesthetic evaluation, the patient reported no comorbidity and all investigations were within normal limits. In the operating room, standard monitors were attached and intravenous fluid was started via 18 G cannula. A preprocedural ultrasound scan revealed normal anatomy of SCBP. Under all aseptic precautions, an ultrasound-guided SCBP block was performed by an experienced anesthesiologist using corner pocket technique. After giving 10 mL of 0.5% bupivacaine with 10 mL of lignocaine, local anesthetic (LA) spread was seen in doughnut shape and a catheter was placed. After 15 min, the patient exhibited incomplete sensory and motor effect in the territory of musculocutaneous nerve, radial nerve, median nerve, and ulnar nerve. An additional aliquot of 5 mL of 0.5% bupivacaine and 5 mL of 2% lignocaine did not increase the sensory and motor effect of SCBP. After waiting for an additional 30 min, the patient was operated under general anesthetic technique. Surgery lasted 2 h 30 min and the trachea was extubated. Postoperatively, the patient revealed that he was regularly consuming opium (2–4 g per day) for the last 10 years. For postoperative pain relief, intravenous (IV) paracetamol 1 g every 6 h, diclofenac 75 mg every 12 h, and 6 ml of 0.2% ropivacaine with 2 µg/ml fentanyl was administered via catheter every hour. Postoperative period was uneventful and the patient was advised for follow-up.

In conclusion, chronic opioid exposure in the present case possibly caused LA resistance, resulting in incomplete effect of SCBP block.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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