Agri 2023;35(2):115–116
doi: 10.14744/agri.2022.37029

LETTER TO THE EDITOR

Suprainguinal fascia iliaca block for distal femur tumor surgery

Distal femur tümör cerrahisinde supra-inguinal fasya iliaka bloğu

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To the Editor,

Suprainguinal fascia iliaca block (SIFIB) has been described by Hebbard et al.[1] SIFIB has been used mainly for hip and knee surgery both in adults and pediatric patients.[2–4] Ultrasound-guided SIFIB is a novel approach which aims to block the femoral, lateral femoral cutaneous, and obturator nerves which could not have been achieved with the traditional fascia iliaca block.[5]

In this letter, we report a successful use of SIFIB to provide postoperative analgesia for a patient who had curettage and cementing of an interosseous hemangioma in the distal femur.

A 24-year-old ASA II male patient who had asthma was scheduled to undergo curettage and cementing of the defect for an interosseous hemangioma in his left femur. Due to the patient's asthma and estimated duration of surgery, we preferred to provide spinal anesthesia for surgery with SIFIB to extend the duration of analgesia.

Spinal anesthesia was achieved using 10 mg hyperbaric bupivacaine and 25 µg fentanyl intrathecally. After performing spinal anesthesia, following the antiseptic preparation, we performed a SIFI block using a large bandwidth high-frequency (4.2–13 MHz) Linear probe (Ge Logic P9, Gyeonggi-do, Republic of Korea) using A 22 G 50 mm needle (BBraun ultra-360, Melsungen, Germany), at the level of the anterior superior iliac spine, superficial to the iliac muscle (Fig. 1) with 30 mL of bupivacaine 0.25%.

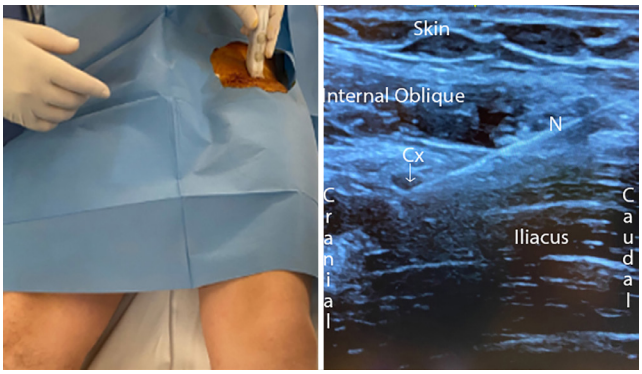

Figure 1. Orientation of the probe (left). Ultrasound image of the block (right).

Surgery lasted 90 min and was completed uneventfully. Physical examination performed 6 h after the surgery revealed that the patient was able to perform straight leg raise, however, the strength of the quadriceps was 4/5. The motor block had been resolved by the 12th postoperative hour. The patient was pain-free in the first 12 h; however, the first use of IV PCA started 6 h after the surgery. VAS scores for pain were 0, 0, 0, 0, 3 out of 10 in postoperative 1st, 3rd, 6th, 12th, and 24th h, respectively. The total morphine consumption was 8 mg in the whole postoperative 24 h. The patient had mild pruritus in his chest and extremities starting at postoperative 6 h, which resolved with the administration of 45.5 mg pheniramine maleate IV. The patient had bed rest for the first night after surgery. Physical rehabilitation started the next morning, and the patient was ambulatory from the beginning of the first postoperative day. In postoperative day one he did not have any pain and the IV-PCA was discontinued. The patient was discharged pain-free 2 days after the surgery.

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Submitted *(Başvuru)* 24.06.2021 **Revised** *(Revizyon)* 24.06.2021 **Accepted** *(Kabul)* 08.07.2021 **Available online** *(Online yayımlanma)* 07.04.2023

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In our case, we preferred the suprainguinal approach because it was shown that SIFIB results in more reliable spread to the lumbar plexus than an infrainguinal injection.[5] SIFIB provided a significant analgesic effect especially in the first 12 h, although it probably contributes to analgesia up to 24 h. SIFIB resulted in a motor block, which did not cause a problem in this case because the patient was non-ambulatory during the first 12 h. The effective analgesia achieved with SIFIB suggests that it can be a viable alternative for the surgeries of the distal femur. On the other hand, clinicians should be aware of the potential motor block it causes which could be a problem in the case if ambulation starts in the early postoperative hours.

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