

Journey of a quadratus lumborum plane catheter: Is it important to know?

Sir,

We report 2 cases of patients who underwent a) left pyelolithotomy and b) right radical nephrectomy. After a standard general anesthesia they received a left and a right TMQLB respectively, for perioperative analgesia. After preoperative evaluation and obtaining fitness for surgery, a standard general anesthesia with a right transmuscular quadratus lumborum block (TMQLB) for perioperative analgesia was planned. An informed consent was obtained from the patient for the same. The quadratus lumborum plane (QLP) was identified with a curvilinear ultrasound (US) probe (8–5 MHz, Sonosite Inc), as described by Børglum *et al.*^[1] An 18-G Tuohy's needle was inserted in QLP and 20 ml of 0.2% ropivacaine was injected. The needle tip was placed at the mid part of the anterior quadratus lumborum fascia (AQLF), as visualized on the US. The distance from the skin to AQLF or the anterior thoracolumbar fascia (ATLF) was 4.5 cm on left and 4.9 cm on right. On injecting 25 ml of 0.25% bupivacaine, there was an elliptical swelling that projected anteriorly towards the peritoneum and posteriorly towards the junction of the psoas major and quadratus lumborum muscle. There was no breach of the AQLF/ATLF and there was a predictable downward movement of psoas major muscle. Thereafter, a 20-G catheter was placed in the ATLF at 5-7 cm in both. A bolus of 5 ml of local anesthetic (LA) was injected and the spread observed again under US.

Intraoperatively we requested the surgeon to demonstrate the catheter in the QLP. As shown in Figure 1a, we could see the catheter coiled in the anterior thoracolumbar space and did not breach the quadratus lumborum fascia. As depicted in Figure 1b the catheter had perforated the ATLF.

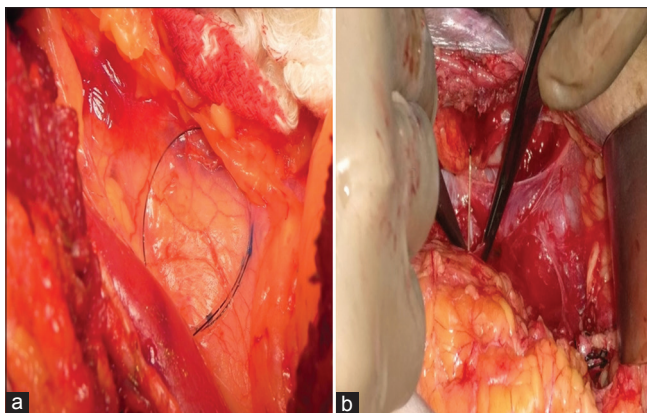


Figure 1: (a) The catheter can be seen coiled in the anterior thoracolumbar fascia. (b) The catheter penetrated the fascia

We feel that LA spread and the catheter placement in QLP is not always predictable. We could observe coiling and perforation of the catheter in the ATLF. The drug and the catheter takes the path of least resistance. The drug spread depends on the direction of catheter, the final position of the tip of the catheter, and the dynamics within the QLP. The dermatomes covered by the block depends on the course taken by catheter and the final spread of LA.^[2-4]

Consent was taken from the patient for obtaining images for publication in medical journal without disclosing the name for academic purpose.

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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