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Background

The Quadratus Lumborum block (QLB) was initially described in 2007. Currently, this block is performed as a perioperative pain management procedure in abdominal surgery but the publications involving QLB are few and the most part are case reports or small trials involving abdominal surgery. Recently, Parras and Blanco reported its use as an alternative to femoral nerve block for postoperative analgesia after hip surgery. We performed the Quadratus Lumborum Block type II (QLB II) as an analgesic strategy for a femoral intramedullary nail placement.

Case Report

90 year-old woman, 62 kg, ASA 2, with hypertension, scheduled for femoral intramedullary nail placement due to a transtrocanteric fracture. We performed a QLB II with 30 ml 0.375% ropivacaine as part of multimodal analgesic strategy, prior to spinal anesthesia with 0,5% bupivacaine 10 mg plus sufentanyl 2µg. Intra-operative intravenous analgesia consisted of acetaminophen 1 g. Additionally, intravenous dexamethasone 4 mg was administered. The procedure took 45 minutes to complete and was uneventful. After resolution of the spinal block, the patient reported only mild incisional pain over the distal part of surgical incision and had sensitive block on dermatomes T7 to L3. The patient didn't demonstrate muscular weakness.

For the following 24 hours after the block, the patient had no pain at rest or with movement with acetaminophen 1 g and ketorolac 15 mg every 8 hours. The patient was satisfied with the pain management strategy.

Discussion

In this case, single-shot QLB II promoted a good analgesia in femoral intramedullary nail placement due to transtrocanteric fracture, without occurrence of lower extremity weakness which allowed early mobilization. If it's proven there is no muscular weakness with QLB, it may allow early mobilization with a lower risk of falls than with other blocks like femoral nerve block or lumbar plexus block.

The QLB II may be an appropriate alternative as analgesic strategy for femoral neck fracture surgery. Although this nerve block seems to be effective and easy to perform, future prospective studies are needed to clarify the role of QLB in surgical procedures involving the hip.

Ultrasonographic image obtained during a quadratus lumborum block. EO, external oblique; IO, internal oblique; LD, latissimus dorsi; PM, psoas muscle; QL, quadratus lumborum; TA, transversus abdominis.

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