PENG BLOCK IN ADDITION TO LIA COULD REPRESENT A VALUABLE POST-OPERATIVE ANALGESIA IN PATIENTS UNDERGOING HIP REPLACEMENT: A CASE REPORT

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BACKGROUND AND AIMS

PENG (PEricapsular Nerve Group) block is novel ultrasound-guided technique, which is suggested as an efficient choice for treating pain, in patients with hip fracture.

METHODS

A 75-year-old woman, ASA II, undergoing right hip replacement. In history COPD, hypertension and glaucoma. Written informed consent to the treatment was obtained. Prior routine monitoring, ultrasound-guided PENG block was performed using a low-frequency convex probe (3-5 MHz) and a 21-gauge, 100 mm, echogenic needle was inserted in the fascial plane between the psoas tendon and the pubic branches posteriorly. Then, 20 ml solution containing 75mg of isobaric levobupivacaine 0.375% and dexamethasone 4mg was injected. Subarachnoid block was performed by injecting 12 mg of 0.5% isobaric levobupivacaine at L3-L4 level. Before closing the surgical wound, a 20 ml solution containing 75 mg of levobupivacaine 0,375%, 30 mg of ketorolac tromethamine and 0.1 mg of adrenaline (LIA) was injected by the surgeon, in the fascial and subcutaneous tissues of the surgical wound. Additional analgesia: acetaminophen 1g every 8 h. Postoperative pain at rest (PR) and with movement (PM) were recorded at 8, 12 and 24 hours after surgery, using NRS scale for pain.

RESULTS

Postoperative PR was 2 and postoperative PM was 3 control during the first 24 hours after surgery. No rescue opioids or fans required.

CONCLUSIONS

We believe that the combination of this analgesic procedure and LIA could be considered a useful part of a multimodal analgesic treatment for post-operative pain after the hip replacement surgery, for the best opioid-sparing strategy and fast-track recovery.

PENG block ultrasound approach

PENG block ultrasound image. V, Femoral Vein; A, Femoral Artery; N, Femoral Nerve; FNB, Femoral Nerve Branches AON, accessory obturator nerve; AIIS, Antero-Inferior Iliac Spine; IPE, Iliopubic eminence;