**PO08   Is the addiction of periarticular infiltration to adductor canal block a good analgesic complement for revision total knee replacement? A case-report**

Inês Portugal Rodrigues(1); Rui Ramos(1); Raquel Fernandes(1)

(1) Unidade Local de Saúde de Matosinhos, EPE / Hospital Pedro Hispano

**Background**: Revision total knee replacement (RTKR) is a challenging surgery, with severe postoperative pain increasing length of stay. Effective postoperative analgesia may enhance early rehabilitation (1). We report a case of a RTKR under spinal block plus intermittent adductor canal block (ACB), infiltration between the popliteal artery and capsule of the posterior knee (IPACK) and periarticular infiltration (PAI) of diluted local anesthetics with adjuvants surrounding all knee joint structures (2).
**Case Report**: A 63 years-old man (83kg, 163cm), ASA II, was proposed for a RTKR. After providing informed consent, we performed a spinal block with 12.5 mg of isobaric 0.5% bupivacaine, followed by an ultrasound guided IPACK, with 20 ml of 0.2% ropivacaine, and an intermittent ACB with 10ml of 0.2% ropivacaine by a catheter. The surgery went rather uneventfully. Paracetamol 1g was given. Before the end of the surgery, the surgeon applied PAI "cocktail” of 20ml of 0.75% ropivacaine, 150 mcg of epinephrine, 30 mg of ketorolac and 50mL of normal saline. For postoperative pain control, single-shot bolus of 20 ml of 0.2% ropivacaine were administered through the ACB catheter q8h, and rescue bolus of 20ml of 0.2% ropivacaine, paracetamol 1g and tramadol 100mg, according to local protocol. On the first postoperative day, the patient was able to perform physical knee rehabilitation without pain. There was no need for extra rescue opioids throughout the hospitalization. No motor block was observed during the treatment. The ACB catheter was withdrawn after 48h, and the patient was discharged home after 3 days without complications.
**Discussion**: In this single case, as reported (3), adding PAI to intermittent ACB and iPACKS for RTKR analgesia resulted in significant opioid-sparing pain control, allowing rehabilitation in the absence of motor block and reducing length-of-stay. Nevertheless, it was difficult to attribute these outcomes to PAI addiction, since PAI/IPACK combination may be questionable regarding their mechanism of action, and PAI being a blind technique requiring higher drug doses posing toxicity risks, which may limit its use (2).
**Learning points:** Adding PAI to ACB for RTKR analgesia might improve postoperative outcomes and length-of-stay; however, further investigation is needed.

**References:**
1. J Arthroplasty. 2022 Oct;37(10):1906-1921.e2
2. Reg Anesth Pain Med. 2020 Nov;45(11):872-879
3. J Anesth. 2022 Apr;36(2):276-286