PARALLEL SESSION 1:
RA & LOWER LIMB BLOCKS
TIME: 13:00 - 15:15

13:30 - 13:45

Continuous PNB for Knee Surgery

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Abstract:

A recent systematic review and meta-analysis reported that a continuous adductor canal block (ACB) appears to be no different than a single-shot ACB for analgesia after total knee arthroplasty (TKA). Besides, the continuous ACB was associated with a higher rate of block-related complications, such as catheter migration. Therefore, the routine use of continuous ACB for postoperative analgesia after TKA was not recommended. We have been challenging this issue: the risk of catheter migration from the adductor canal. Perineural catheters placed parallel to the nerve course are reported to have lower migration risks than those placed perpendicular to it. We thought the same would be applied to the catheter-based continuous ACB. We conducted a randomized controlled trial comparing postoperative migration rates of ACB catheters placed parallel and perpendicular to the saphenous nerve in the sub-sartorial space in patients undergoing TKA. The primary outcome was the migration rate of the ACB catheter on postoperative day 2. Catheter migration was defined as being unable to confirm saline administration through the catheter around the saphenous nerve at the mid-thigh level under ultrasound assessment. We found that the catheter migration was significantly less in the parallel group than in the perpendicular group (14.7% vs. 72.7%). Also, the parallel placement technique provided better analgesia and faciliated knee flexion range of motion after surgery compared to the perpendicular placement approach. In this lecture, I will review the anatomical foundation and knowledge regarding an ACB and demonstrate our parallel placement approach for the ACB catheter.