



Correspondence

The Canturk combination: Erector spinae plane block and femoral nerve block for postoperative analgesia after coronary artery by-pass grafting surgery



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To the Editor;

Pain control after coronary artery by-pass grafting (CABG) surgery is mandatory. Sternotomy, tissue damage, and intraoperative retractor use results in incredible postoperative pain. Intraoperative use of short-acting opioids results in hyperalgesia. Traditional postoperative analgesia regimens are generally based on opioids after CABG surgery. Intraoperative and postoperative opioid-based anesthesia and analgesia prevent early recovery, suppress spontaneous breathing, and delay extubation time.

Forero et al. first described the erector spinae plane block (ESPB) [1] for the treatment of thoracic neuropathic pain. The clinical reports of ESPB use for postoperative analgesia following different surgical settings are increasing in the literature [2–5]. Herein we present the Canturk combination defined as ultrasound-guided bilateral ESPB at T4 level and femoral nerve block for postoperative analgesia after CABG surgery.

The patient was a 67 years old male scheduled for elective CABG. He had controlled hypertension. We used 50 µg/kg fentanyl and 0.15 mg/kg midazolam for the induction of the anesthesia. Muscle relaxation was achieved by 2 mg/kg rocuronium. Intraoperative analgesia was provided by remifentanyl infusion. The operation lasted for 163 min, and the patient was uneventfully disconnected from the pump. We stopped the remifentanyl infusion when the surgeons started suturing the skin. After sterile draping the wound, we applied ultrasound-guided ESPB at the T4 level with 20 ml of bupivacaine 0.25% and prilocaine 1% mixture on both sides at the lateral position. Then we performed ultrasound-guided femoral nerve block with 10 ml of bupivacaine 0.25% and prilocaine 1% mixture in prone position to provide analgesia for the saphenous vein graft region. With the completion of ESPB and femoral nerve block, all anesthetic and analgesic medications were stopped except inotropic medications. The patient was transferred to the intensive care unit (ICU). On arrival to ICU, the patient was

awake and able to respond to verbal stimuli. He was extubated at the 30th minute at the ICU. We describe the combination of femoral nerve block and ultrasound-guided bilateral ESPB at the T4 level as the Canturk combination. This combination provided satisfactory analgesia for 22 h after CABG surgery. The pain score of the patient was evaluated with the numeric rating scale (NRS, 0 = no pain, 10 = worst pain imaginable) every 2 h after extubation both at rest and with coughing. The NRS score was less than two at rest, and the NRS score was less than three with coughing for 22 h. Twenty four hours after extubation, the patient graded his NRS as five with coughing and three at rest. Paracetamol 1 g every 6 h, was prescribed to manage his pain. He was mobilized at postoperative 12th hour and discharged from ICU on the postoperative day two to the ward.

With the use of Canturk combination, we could manage the postoperative pain after CABG. Moreover, opioid-related side effects as nausea, itching, respiratory depression, and sedation were prevented by avoiding the use of opioids for postoperative analgesia. We could extubate, mobilize, and discharge our patient from the ICU in a shorter time interval than patients receiving opioid-based traditional postoperative analgesia regimens.

We suggest that the Canturk combination provides adequate postoperative analgesia after CABG surgery, decreases extubation time, and stay in ICU. ESPB catheters for prolonged analgesia can be considered in future studies, which can replace the opioid-based traditional postoperative analgesia regimens.

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Declaration of competing interest

None.

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