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LETTER TO THE EDITOR

Ultrasound-guided erector spinae plane block for pain management in pancreatic cancer: A case report

Pankreas kanserinde ağrı tedavisi için ultrason eşliğinde erektor spina plan bloğu: Olgu sunumu

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To the Editor,

Management of end-stage cancer pain is challenging that may require interventional methods. Ultrasound-guided erector spinae plane (ESP) blocks has a wide variety of indications including chronic pain management which provides immediate pain relief in patients with chronic pain.[1–4] Reports about ESP blocks used for cancer pain is rare. In a previous case report, ESP block provided sufficient continuous pain relief for a patient with pulmonary malignancy.[5] We present a case of unilateral ESP block that provided sufficient acute pain relief in a patient with end stage pancreas malignancy.

Written informed consent has been obtained from the patient for this report. The patient was 68 year-old male who was admitted to our pain department with complaints of severe low thoracic pain. The pain started two days before which was evaluated by the patient as 7-8/10 on a numerical rating scale (NRS). The pain was unilateral (at right side) and was involving the dermatomes starting from T10 up to L1. He was on chemotherapy for six weeks and was not using any analgesic drugs. We planned to perform a unilateral single injection ESP block as a primary method for immediate acute pain relief. At the same time we started oral analgesic drugs. After obtaining written informed consent for the procedure and excluding a coagulation disorder, the patient was positioned in sitting at our pain intervention room. After preparation of the block site and the ultrasound probe in sterile manner, a high frequency linear probe (Mindray® Medical Electronics Co., Ltd. Shenzhen, China) was placed 2 cm lateral to the neuraxial midline on the T10 vertebra level. The intended vertebra level was determined by counting up the ribs starting from 12th rib. Using the in-plane technique, a 10 cm block needle was advanced cranial to caudal direction towards the T10 vertebra transverse process under ultrasound guidance (Fig. 1). When the tip of the needle reached to the transverse process and a bone contact was felt, 25 ml bupivacaine 0.25% was injected. Craniocaudal distribution was observed between the erector spinae muscle and the transverse process. NRS score reduced to 2/10, 5 minutes after local anesthetic injection and the ESP block provided 20 hours of analgesia. Thereafter, the patient received oral analgesics in the remaining course of pain man-

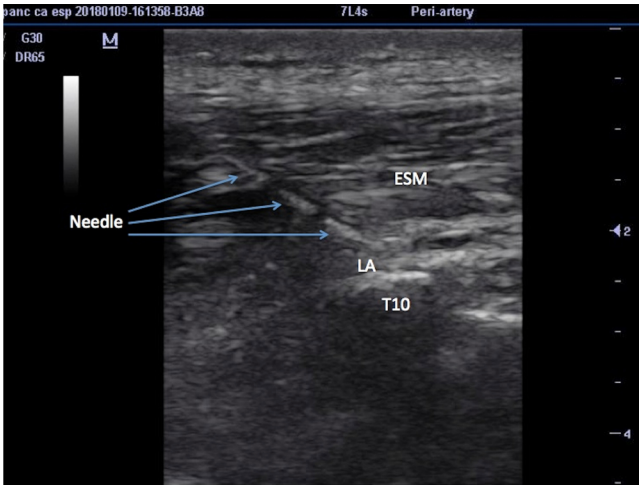

Figure 1. Ultrasound image of erector spinae plane block. ESM: Erector spinae muscles, LA: Local anesthetic distribution within the erector spinae fascia plane.

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agement without a need of interventional technique.

ESP block provided sufficient acute pain relief in our patient with end-stage pancreas malignancy suffering from severe unilateral low thoracic pain. ESP catheter placement may also provide continuous analgesia for the remaining course of pain management. The alternative interventional method for continuous analgesia may be neurolitic coeliac ganglion blockade in this patient. However, a good professionalism and experience is needed to perform these neuroleptic interventions using a C-arm device. ESP block is a promising method in cancer pain with ease of application under US guidance with a simple sonoanatomy. Further research is warranted to compare ESP block with other interventional techniques.

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