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LETTER TO THE EDITOR

Modified Thoracalumbar Interfascial Plane Block in Inguinal Hernia Repairment

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Dear Editor,

Thoracolumbar Interfascial Plane (TLIP) block is a novel technique that may provide effective analgesia for lumbar and low back pain.[1] It was first described as a classical approach by Hand et al.[2] in 2015. In this method, a local anesthetic solution is injected into the interfascial area between the Multifidus and Longissimus muscles at the level of the third lumbar vertebrae. Ahiskalioglu et al.[3] described a novel modified approach for the ultrasound guided TLIP block, the Modified Thoracolumbar Interfascial Plane (mTLIP) block in 2017. mTLIP is one of the new block which is applied to fascia between longissimus and intercostalis muscles and is believed to target the dorsal root of the thoracolumbar nerves.[4] Both longissimus and intercostalis muscles originated from the transverse process of the vertebrae in the lumbar region. Ma et al.[5] have thought that a large dose of local anesthesia may enter the spinal canal through the changed anatomical structure and cause extensive epidural anesthesia. The modified approach may be a safe and alternative way for these patients because of epidural injection. Local anesthesia is injected at the fascial plane between the iliocostalis muscle and the longissimus muscle. Compared with conventional TLIP block, the modified TLIP block may have a decreased risk of extensive epidural anesthesia and infection.[6]

We performed mTLIP block at the level of the second lumbar vertebrae for 4 patients operated for inguinal hernia repairment. Written informed consent was obtained from all patients or their representatives when data were collected. Patients were aged between 48 to 68 years, and two of them had no other comorbidities. One of the patients had hypothyroidism and the other one had hypertension. Patients were operated under spinal anesthesia with pure bupivacaine without any complications. mTLIP block was performed within postoperative 15 minutes. 1mg/kg %0.25 bupivacaine was injected into the fascia between the longissimus and intercostalis muscles under ultrasonography. Three patients did not need any analgesia during hospitalization (12,14 and 15 hours). In the 15th hour, 1gr paracetamol was administered intravenously for one patient. Patients' Visual Analog Scale (VAS) scores were considerably low at the 2nd postoperative hour with a median of 2.5 because of the contribution of spinal anesthesia. At the 4th hour, there was little increment in VAS scores. There were not any changes in VAS scores in the 6th and 12th hours.

In conclusion, Classic and modified Thoracolumbar interfascial plane blocks are an effective method for postoperative analgesia in multimodal analgesia concept and Enhanced Recovery After Surgery (ERAS) applications. These blocks significantly reduce postoperative opioid consumption. Local anesthetics are distributed to the crista iliaca. It is a complex myofascial and aponeurotic structure that surrounds the body. Inguinal hernia is defined as herniation of the abdominal cavity content from inguinal canal. Inguinal canal contains ilioinguinal and genitofemoral nerves which are derived from first and second lumbar roots. According to our results, mTLIP block can be an effective analgesic method for inguinal hernia repair. But, this hypothesis lacks enough sample sizes and needs more research. Our letter is original because the application of mTLIP Block in Inguinal Hernia Repairment is very rare and may be the first in the literature.

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