Comparison of Modified Thoracolumbar Interfascial Plane and Erector Spinae Plane Blocks in Lumbar Disc Herniation Surgery

Methods

Background and Aims
Lumbar disc herniation is the most common degenerative disease of the lumbar spine. It is also the most common reason for lumbar spine surgery. Although disc herniation is more common in the fourth and fifth decades, it can be seen in all age groups. Lumbalgia is the most common initial symptom of this degenerative disease with a wide clinical presentation. It is known that failure to manage pain effectively in the postoperative period can cause chronic pain.

Methods

Visual analog scale (VAS) scores were noted in the first postoperative period, at the 15th minute, at the 4th hour and at the 12th hour in patients who were operated for lumbar disc herniation and underwent one of the modified thoracolumbar interfascial plane (m-TLIP) and erector spinae plane (ESP) blocks.

Results

There was no statistically significant difference in the VAS score of m-TLIP and lumbar ESP blocks in postoperative analgesia of lumbar disc herniation repair surgery.

Conclusions

The m-TLIP block was defined in 2017 as an alternative to TLIP block, and is a block that has been used in recent years to effectively provide postoperative analgesia in LDH surgery (1). Technically, it is performed by administering a local anesthetic solution to the fascia between the longissimus and iliocostalis muscles in the lumbar region. A block is performed by administering local anesthetic between the transverse process of the vertebra and the fascia of the erector spinae muscle. In order to provide postoperative analgesia of LDH surgery, ESP and m-TLIP blocks are alternative methods within the scope of multimodal analgesia.

Attachment

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Thoracic Paravertebral Block as Analgesic Method in a Patient with Multiple Rib Fractures

Methods

To relieve the patient, it was decided to perform a thoracic paravertebral block at two levels, in one of which a continuous drug infusion catheter was placed. A PCRA pump was used and the patient was immediately relieved. He was transferred to the PACU due to the severity of his injury and remained there for two days.

Results

Being respiratory stable and in good clinical condition, he was transferred to a simple ward and after 4 more days, without presenting any complications, it was decided to remove the catheter. The patient was then treated with mild analgesics such as paracetamol and tramadol and a week later he left the hospital, presenting a satisfactory and stable clinical condition and instructions for p.o analgesia.

Conclusions

To our knowledge this was the first time that a paravertebral block was used as an analgesic method for multiple rib injuries. In our patient the thoracic paravertebral block was probably the cause of the non-appearance of the expected respiratory complications (hypoxemia, atelectasis, respiratory failure, pneumonia, intubation, hospitalization in the ICU) and contributed to the rapid recovery of his severe injuries.