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Is the erector spinae plane block useful in abdominal surgery?

¿Es útil el bloqueo del elevador de la espina en cirugía abdominal?

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Multimodal analgesia in the treatment of postoperative pain has gained popularity because of reduced opioid use and, consequently, less side effects (1,2). The erector spinae plane (ESP) block under ultrasound guidance has been recently proposed as part of postoperative pain management (3-12). In our experience, adding this technique in 18 patients scheduled for abdominal and gynecological surgery in a Level III center in Armenia, Quindío, has produced interesting results. Erector spinae plane block was performed as part of the regular anesthetic procedure in an interfascial plane under direct ultrasound visualization, using T7-T8 as the target; 10 cm3 of 1% lidocaine with no epinephrine plus 10 cm3 of 0.5% bupivacaine with epinephrine were injected in the deep fascial plane into the spinae erector muscle group in order to obtain craniocaudal spread. All patients were monitored in the first hour and then at 6 h, 12 h and 24 h.

Postoperative pain, need for opioids and side effects were assessed at every time point. Of the total number of procedures, 61% (11/18) were abdominal hysterectomies, while the remaining consisted of cholecystectomy, ovarian resection and eventration repair. Between 12 and 24 hours, absence of pain was observed in 7 patients which 9 reported mild, non-debilitating pain (Figure 1). On the other hand, only 5 patients required rescue analgesia at some point during the follow-up period (Figure 2). Rescue regimens were based on fentanyl, tramadol or morphine; median 24-consumption according to an equivalent oral morphine dose was 15 mg (range: 3-23 mg). Finally, out of 18 patients, only 3 had nausea and vomiting and 4 experienced only nausea. No technique-related complications were observed during the postoperative follow-up period. Ultrasound-guided ESP block provides control of acute postoperative pain as part of multimodal analgesia, especially

FIGURE 1. Postoperative pain behavior during a 24-hour period in patients receiving ESP block in abdominal surgery.

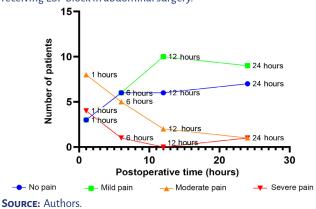
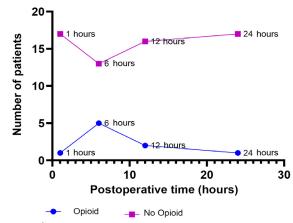


FIGURE 2. Opioid requirement in patients receiving ESP block in abdominal surgery.



Source: Authors.

between 12 and 24 hours after abdominal surgery. Further more robust research is warranted in this setting, including experimental studies and controlled clinical trials in particular, in order to confirm the effectiveness and safety of this technique.

Conflict of interest

The authors have no disclosures to make.

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