

Case Report

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Erector Spinae Plane Block for Open Splenectomy. A Case Report

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Abstract

Erector spinae plane block is an interfascial block recently described that could have lots of applications in chronic or in postoperative acute pain. We present a case of a 34 year old woman that had an open splenectomy made after the surgery she suffered from postoperative pain, as high as 9 points in the visual analogue scale though intravenous analgesics. An ultrasound guided ESP block was performed. After the block the visual analogue scale was four points. ESP block could be a good option for treating postoperative pain for subcostal laparotomies

Keywords: Regional anesthesia; Postoperative pain; Erector spinae plane block

Introduction

Regional anesthesia has become a great choice for rescuing some patients in which it is difficult to deal with postoperative pain. Interfascial nerve blocks are such as TAP block are useful providing analgesia for postoperative pain in low abdominal procedures. Erector spinae plane (ESP) block is a recently described interfascial block in which the local anaesthetic is placed over or below the plane of the erector spinae muscle, near where the spinal nerves come out from the spine before they start to divide. Some publications have shown its effectiveness in treating thoracic and abdominal postoperative pain.

Case Report

We describe a case of a 34 year old women diagnosed of an autoimmune hemolytic anemia, refractory to medical treatment. She had no other medical or surgical event before. She is programmed to perform a laparoscopic splenectomy. After preoxygenation and antibiotic prophylaxis, we perform a intravenous induction of general anesthesia with 2mcg / Kg fentanyl, 2'5mg/Kg propofol and 0'6mg/Kg de rocuronium. No problems appeared during facial mask ventilation and endotracheal intubation. The maintenance of anesthesia was made with propofol and remifentanil (total of 1875 mg and 3375 mcg respectively) to maintain blood pressure and heart rate neither over nor below the 20% of the basal values and Patient State Index between 25 and 50. We used bolus of rocuronium to maintain the neuromuscular block. During the surgery due to technical difficulties it is necessary to perform a left subcostal laparotomy. No other problems appeared during the procedure.



Figure 1: We can see the transverse process and the three muscle layers. Local anesthetic spreading above and below the ESP.

One hour before the surgery was finished the patient received morphine 7 mg, acetaminophen 1g and dexketoprofen 50 mg. For nausea and vomiting prophylaxis we used 4 mg dexamethasone and 4mg ondansetron. After awakening the patient complained of pain, with no reduction of Visual Analogue Scale after treatment with 3 mg morphine and 300 mcg fentanyl. In the Postanesthetic Care Unit we decided to perform an ultrasound guided erector spinae block. The patient was placed in right lateral decubitus and after we located trapezius, rhomboid major and erector

spinae muscles in the level of the 9 thoracic transverse process we injected 10 ml L-bupivacaine 0.5% and 10 ml lidocaine 2% just between the erector spinae muscle and the transverse process.

Results

VAS scale was reduced from 9 to 4 in 10 minutes after the block was done and lasted until the patient was discharged from the PACU 6 hours later.

Discussion

ESP block is a relatively easy ultrasound-guided technique. With one puncture the patient can get a good ipsilateral analgesia in the level desired and even 3 dematomes above and below if we inject 20 ml of local anesthetic. This block appears to be easier to perform than epidural or paravertebral blocks, and as the needle is inserted away from the pleura, big vessels or nerves it seems more difficult to make a clinically significant complication. A limitation of ESP block is that if you need bilateral analgesia you must perform 2 punctures. Therefore ESP block could be considered a good technique to provide analgesia in postoperative pain after subcostal laparotomy when other therapies have failed or could not be used.

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