**Título:** CONTINUOUS ERECTOR SPINAE BLOCK FOR RIB FRACTURE - A CASE-REPORT

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**(TEM FOTO)**

**Resumo :**

Rib fractures are common in multitrauma patients and require effective analgesia to prevent respiratory complications. (1) The erector spinae plane (ESP) block has been described as a regional anaesthetic technique for acute and chronic thoracic pain (2,3). We report a case of successful ultrasound-guided continuous ESP block for pain relief from rib fractures.

A 71 years old male, ASA II, fell from a height of 2 meters sustaining multiple unilateral right sided rib fractures in the T5–T9 area, with no other injuries. The patient complained of severe pain in the right hemithorax and was unable to move from his bed or to take a deep breath or cough. He reported numerical rating scale (NRS) pain scores of 7/10 at rest, and 10/10 on the slightest movement, despite optimized systemic analgesia. After informed consent and ASA standard monitoring, a right sided ultrasound guided ESP block was carried out, with the patient in left lateral decubitus. A high frequency linear ultrasound transducer was placed in a parasagittal plane to identify the fascial plane between the erector spinae and the transverse process at the level of the seventh thoracic vertebra. After a hydro dissection carried out with saline solution, a perineural catheter, 85mm 20G needle (Silverstim, REF 5198.853, Vygon®) was introduced at T7 with an in-plane approach. The local anaesthetic (20mL of 0.375% Ropivacaine) was administered through the perineural catheter in the fascial plane between erector spinae muscle and the transverse process. Within twenty minutes of performance of the regional technique, the NRS was 2/10 at rest and 4/10 with coughing. A patient controlled regional analgesia (PCRA) with a continuous infusion of 5 ml/h 0.2% Ropivacaine plus intermittent bolus of 10mL every 2h was the analgesic strategy chosen. The patient's NRS at rest in the first thirty-two hours was 2/10, with no need of rescue opioid. Unfortunately, few hours later, the catheter was accidentally externalized. After revaluation, it was decided not to replace by a new catheter: at that time, the pain was already under control with optimized systemic analgesia.

Chest wall injuries are associated with significant morbidity and mortality (1). Early intervention with adequate pain relief is mandatory, and regional anaesthetic techniques are a crucial component in analgesia. The ESP block may be a major advance in the management of chest wall pain and an alternative to paravertebral, intercostal or epidural block, as it is a technique easy to perform, with a good analgesic efficacy and low risk of complications (2-3).

Future Directions: Multitrauma patients with rib fractures could be referred to the acute pain unity once they have been assessed and stabilized by the trauma surgery service.

(1) Br J Anaesth. 2017;118(3):474–475.

(2) Reg Anesth Pain Med. 2016;41(5):621–627

(3) KJA: 2019, vol.72. n.3, June.