PECS I block in a patient without pectoralis major muscle – is it possible?

Cabral T¹, Silva R¹, Trindade H², Ferreira J L²

¹Hospital Divino Espírito Santo, Dept. of Anaesthesiology, Ponta Delgada, Portugal

²Hospital D. Estefânia, Centro Hospitalar Lisboa Central, Dept. of Anaesthesiology, Lisbon, Portugal

BACKGROUND

PECS I block was first described in 2011 by Blanco. The purpose of this block is to place local anesthetic into the interfascial plane between pectoralis major and minor muscles⁽¹⁾, providing anesthesia/postoperative analgesia for some thoracic procedures.

CASE REPORT

We present a case report where we performed PECS I block in a female patient, 7 years old, 22 Kg, ASA II, with Poland syndrome, a rare congenital anomaly⁽²⁾, who had an aplasia of the pectoralis major muscle and a slight hypoplasia of the hand, both on the left side. She had an anterior axillary fold that limited the extension of the left arm and was proposed to surgical correction by plastic surgery in an outpatient regimen.

We induced a general anesthesia with propofol 3 mg/Kg IV, a continuous infusion of remifentanyl 0,5-1 mcg/Kg/min and she was intubated with a classic laryngeal mask. We also gave dexamethasone 0,1 mg/Kg IV.

We performed the PECS I ultrasound-guided block using a linear probe and with the patient in the supine position it was administered 4 mL of levobupivacaine 0,25%. We didn't find the pectoralis major muscle but we injected the local anesthetic to spread along the fascia above pectoralis minor muscle.

Maintenance of the anesthesia was achieved with sevoflurane/O₂ and a continuous infusion of remifentanyl 0,1 mcg/Kg/min the majority of the time. There were no intercurrents and it was also administered paracetamol 15 mg/Kg and ketorolac 0,5 mg/Kg IV. In the recovery room the patient was well awakened and had only minor pain controlled with conventional opioid-free analgesia until discharge.

DISCUSSION

In this case, performing a combined anesthesia was difficult but effective, allowing to reduce the need of intraoperative opioid use. We didn't find in literature any report of PECS I block in a patient without pectoralis major muscle.

LEARNING POINTS

PECS I block can be challenging when the anatomy is not that "by the book", requiring additional skills to the anesthesiologist to perform this interfascial block and provide to the patient a good intra and postoperative analgesia.

REFERENCES

- (1) Blanco R., The "pecs block": a novel technique for providing analgesia after breast surgery. Anaesthesia 2011; 66(9):847-8.
- (2) Caldas, Flávio A. A., Isa, Hellen L. V. R., Trippia, Andréia C., Bísaro, Ana C. F. P. J., Martinez, Eliane R. C. & Tajara, Luciana M. (2004). Síndrome de Poland: relato de caso e revisão da literatura. Radiologia Brasileira, 37(5), 381-383.