**PO15   Pericapsular nerve group block in shoulder surgery - a case report**

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Background

As part of a multimodal pain management, regional anesthesia has its paper well established in shoulder surgery, with the interscalene brachial plexus block being one of the main preferences among anesthesiologists. However, in patients with reduction of pulmonary reserve, the interscalene approach raises concerns about the diaphragmatic hemiparesis that may occur, leading to potential respiratory postoperative complications. A pericapsular nerve group (PENG) approach has been described as a safe and effective option. 1,2

Case Report

A 68-year-old male patient was admitted in the emergency department due to a fall from own heigh. He had a proximal left humerus fracture with surgical correction criteria, with no other injuries to report. He was proposed for an open surgical reduction.

During the planning of the anesthetic approach, in the preoperative evaluation, the anesthetic team realized the patient suffered a severe restrictive ventilatory syndrome due to kyphoescoliosis, aggravated by a history of COPD owing to heavy smoking habits.

On arrival to the OR, he was conscient and orientated, with no signs of respiratory difficulty, with peripheric O2 saturation of 90- 92%.

The patient was proposed to a combined anesthesia technique. In order to avoid potential respiratory postoperative complications due to diaphragmatic hemiparesis associated with regional techniques, a shoulder PENG approach was planned. The blockade was performed before anesthetic induction, ultrasound guided, with 100 mg of ropivacaine 0,5%.

The surgery went uneventful. In the postoperative period, no pulmonary complications were reported and the patient had satisfactory analgesic control. He was discharged in the next day.

Discussion

Pain management strategies related to shoulder pain following surgery are crucial to early patient recovery. As regarding to postoperative respiratory complications due to diaphragmatic hemiparesis concerns, new strategies have been studied to perform regional anesthesia in shoulder surgery as safe as possible. PENG block may be safely and effectively applied as a part of a multimodal analgesic regimen for shoulder surgery by blocking the articular branches of the glenohumeral joint. Additional studies might be needed in order to better understand the technique and its benefits in comparison with other options.

References

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