



REVISTA BRASILEIRA DE ANESTESIOLOGIA

Official Publication of the Brazilian Society of Anesthesiology
www.sba.com.br



LETTER TO THE EDITOR

Reply: Pneumothorax after Brachial Plexus Block Guided by Ultrasonography - Case Report

We thank Dr. Karls Otto for his comments and interest in our work. We would like to clarify the questions raised.

The puncture level was just below C6, according to the level of the classical approach described by Winnie. However, when we used the ultrasonography, the linear transducer was perpendicular to the direction of the interscalene groove, and puncture was performed in plane for needle visualization, using the posterior approach; that is, from lateral to medial, passing first through the middle scalene until reaching the groove, when a click from the neurovascular sheath was felt, confirmed by the dispersion observed between the upper and middle plexus trunks when the anesthetic was injected. Symptoms of pain and dyspnea appeared only 90 minutes after the puncture.

The anesthesiologist performed axillary puncture according to a double puncture routine used when fractures are located in the forearm, in emergency surgery. This was the reason why there was no description on the existence or not of partial blockage.

The X-ray in Figures 1 and 2 is the same. Figure 1 shows the magnified image showing a pneumothorax in the upper third, of about 4 cm; however, the picture quality in the publication did not allow evaluating this detail. The white arrows are not shown in the publication.

Postoperative pain was treated using intercostal block with ropivacaine 0.5% at the time of drainage, and intravenous analgesics (dipyrone and tenoxicam) during the patient's stay.

Although anesthesia using ultrasonography has already been proven effective for improving the quality of blockade, reducing the amount of anesthetic required, number of failures, and partial anesthesia, we must bear in mind that knowledge of each region's anatomy and ultrasound technique and the visualization of the needle tip is of paramount importance in achieving these blockades, in order to reduce complications resulting from this technique.

Beatriz Lemos da Silva Mandim
*Coresponsible for CET/SBA, School of Medicine,
Universidade Federal de Uberlândia (UFU)*

References

1. Mandim BLS, Alves RR, Almeida R, et al. - Pneumotórax pós-bloqueio de plexo braquial guiado por ultrassonografia: relato de caso. Rev Bras Anesthesiol. 2012;62:5:741-747.
2. Chin KJ, Perlás A, Chan VWS, Brull R - Needle visualization in ultrasound-guided regional anesthesia: challenges and solutions. Reg Anesth Pain Med. 2008;33(6):532-544.
3. Orebaugh SL, Bigeleisen P - Ultrasound imaging in brachial plexus blockade. Seminars in Anesthesia, Perioperative Medicine and Pain. 2007;26:180-188.