

Fig 1. The brachial plexus cords (arrows) are <u>superolateral</u> to the vascular structures.

Reply to Dr. Sala-Blanch

To the Editor:

We are pleased for the opportunity to respond to Dr. Sala-Blanch et al. We are also pleased with the continued discussion our article has prompted, and we thank Dr. Sala-Blanch et al. for adding so much value to the discussion of the brachial plexus anatomy. As stated in our article, and restated by Dr. Sala-Blanch, the brachial plexus is indeed a complex structure, which requires hard-earned study and investigation to have a complete understanding of its surgical and anesthetic function. We clearly stated in our article that the simple, practical approach we have taken toward brachial plexus block at the level of the cords is merely an easy-to-follow guide intended to make this block easier and, hopefully, more successful for anesthesiologists to perform.

Most commonly, the surface landmarks used in the infraclavicular approach to the brachial plexus are associated with the coracoid process, the bony structure into which the minor pectoral muscle inserts. In our attempt to better understand the intricacies of regional anesthesia anatomy, we, like many others, have conducted various explorations of the brachial plexus. One of the modes we have used is the use of cadaver dissections. In the image included here, the cords of the brachial plexus are, as Dr. Sala-Blanch indicates, superolateral to the vascular structures. Also apparent is that the brachial plexus cords are indeed separate and in close proximity to this structure (Fig 1).

We disagree with Dr. Sala-Blanch et al. on the infrequency of obtaining a medial cord response from a standard infraclavicular approach. We have found this re-

sponse easy to achieve and, in fact, necessary to perform. Because the only way to reliably guarantee block of the medial cutaneous nerves of the arm and forearm is to block the medial cord; this procedure is essential to assure a complete and successful block (Fig 2).

Additionally, we are disappointed that Dr. Sala-Blanch did not accurately review the text of our article, as evidenced by the incorrect statement that we took only the <u>lateral</u> cord into consideration when describing the formation of the <u>median nerve</u>. If this were the case, it would certainly be an error. In our article, we attribute the origin of the <u>medial head</u> of the <u>median nerve</u> correctly to the medial <u>cord</u>. We are hopeful that the misstatement by Dr. Sala-Blanch was just an oversight that adds further evidence of the complexities of the brachial plexus. Precisely because of these difficulties, we felt the need to present our simple, practical approach to this particular block.

Finally, as for all the anatomic variants described by Dr. Sala-Blanch et al., we are in full agreement. We are aware of these variants, as well as others, but they are not the subject of our communication. In fact, we are amazed that nobody has challenged us in regard to the commonly known Martin-Gruber anastomosis. As we stated in our article, we do not suppose that all circumstances will be approachable in the manner we described. Our article was not a synopsis of all the possibilities one may encounter when eliciting responses from peripheral nerves. Instead, we merely presented a system that we feel will continue to help anesthesiologists provide effective analgesia in a safe and timely manner.

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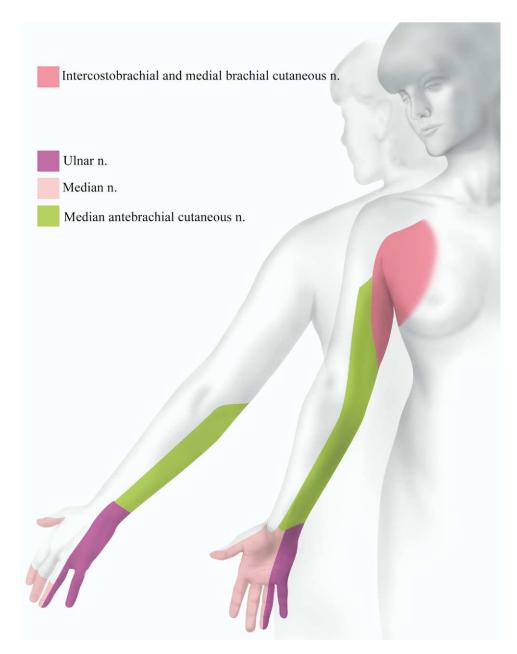


Fig 2. The sensory distribution of the medial cord. n., nerve.

References

1. Borene SC, Edwards JN, Boezaart AP. At the cords, the pinkie towards: Interpreting infraclavicular motor responses to neurostimulation. *Reg Anesth Pain Med* 2004;29:125-129.