Brian P. Kavanagh, M.B., F.R.C.P.C., Editor

Infraclavicular Neurovascular Anatomic Anomaly Seen *via* Ultrasound

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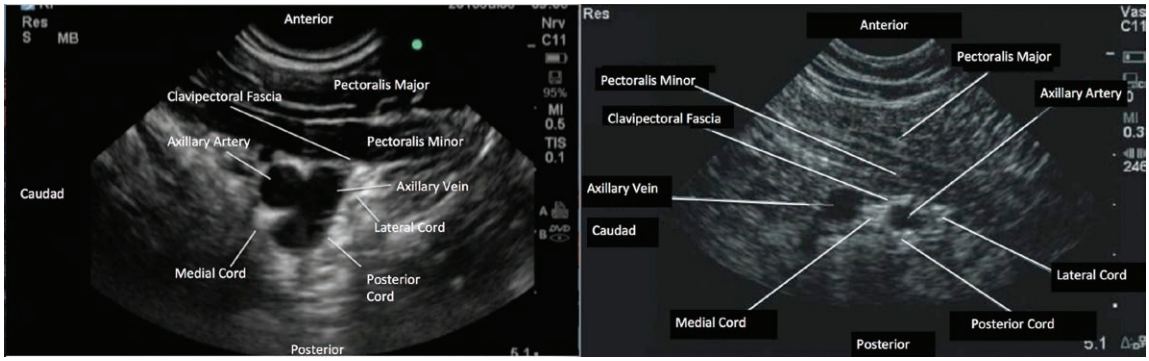

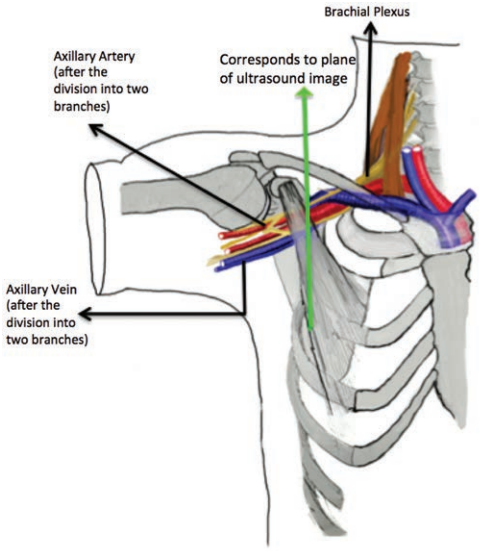

ULTRASOUND-GUIDED infraclavicular nerve blocks provide anesthesia and analgesia for procedures of the elbow, forearm, and hand.[1] The included image (*left*) is of an unusual anatomic variant discovered during scouting scan for an infraclavicular nerve block. (Normal anatomy is shown on the *right*.[2])

This image and the associated drawing show the benefits of a full scouting scan, because significant anatomic variants can otherwise be missed. In our patient, the axillary vein spirals 360°, moving posteriorly and cephalad to the artery and then turning and moving anteriorly and caudad, bringing it back to a normal anatomic path. In addition, both the axillary artery and vein split into two branches in their lateral courses.

The incidence of significant anatomic variations in both vasculature and nerve anatomy is relatively low (5 to 10%). Studies are underway to assess whether block failure may be associated with those variations. Full scans allow us to "accurately identify anomalies and understand their clinical implications."[3]

Given the findings, we identified an unimpeded path to the medial, lateral, and posterior cords by taking a more lateral approach. Had we not been able to identify a safe infraclavicular approach, an axillary nerve block combined with a musculocutaneous nerve block would also have provided anesthesia for surgery of the elbow to the hand. Scan of the entire infraclavicular area allowed us to avoid vascular puncture, identify key targets, and provide safe regional anesthesia for the operation.

Competing Interests

The authors declare no competing interests.

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Charles D. Collard, M.D., served as Handling Editor for this article.

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