



# LETTERS

## Effect of Ultrasound-Guided Placement of Difficult-to-Place Peripheral Venous Catheters: A Prospective Study of a Training Program for Nurse Anesthetists

To the editor: I appreciated the recent article published in the *AANA Journal* entitled: “Effect of Ultrasound-Guided Placement of Difficult-to-Place Peripheral Venous Catheters: A Prospective Study of a Training Program for Nurse Anesthetists.” The study’s focus on nurse anesthetists is a great way to inspire readers to use this technology if they are not already. I have a considerable amount of experience utilizing ultrasound for IV insertion and hope to increase the reader’s enthusiasm for this skill by adding some insight to the above study. After inserting over 1,000 ultrasound guided IVs over my last 2 years as a critical care nurse, I

discovered some techniques that can help a practitioner achieve near 100% accuracy and decrease the time to cannulation to under 1 minute in almost any patient.

I, along with others,<sup>1</sup> believe that using a dynamic version of the short axis view gives the fastest and most accurate vessel cannulation for both novice and experienced practitioners. The key is keeping the needle tip in view at all times, from the skin surface all the way to the middle of the vessel. There is no need to watch for blood return; your eyes should remain on the screen. Relying on blood return often leads to misplaced catheters. This dynamic technique allows the practitioner to cannulate extremely small and tortuous vessels with ease. Veins that overlie arteries and nerves can safely be cannulated, and 14-gauge IV catheters can be easily inserted into patients previously deemed “difficult sticks” as well.

I have found using a tourniquet to

be detrimental to this skill, especially for novices. When learning, it is common to accidentally drive the needle through the posterior wall of the selected vessel. This posterior puncture allows infiltration of blood into the surrounding tissue, forcing the practitioner to abandon the attempt. With no tourniquet, the needle can easily be redirected into the lumen. The risk of posterior wall puncture outweighs the tourniquet’s minimal enlargement of deeper vessels. I hope this insight might aid the above study to inspire readers to make more use of ultrasound for difficult IV access.

## REFERENCES

1. Thomas S, Moore C. The vanishing target sign: confirmation of intraluminal needle position for ultrasound guided vascular access. *Acad Emerg Med*. 2013;20(10):17-18.

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## DISCLOSURES

The author has declared no financial relationship with any commercial interest related to this letter.