

# Shifting Paradigms in Vascular Access: A Deep Dive into the Supraclavicular Approach's Uncharted Waters

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## To the Editor,

We read with great interest the recent article by Jaiswal et al., detailing a prospective randomized comparison of supraclavicular (SC) and infraclavicular (IC) approaches for subclavian vein cannulation.<sup>1</sup> This study significantly enriches our understanding, offering critical insights and encouraging a broader discourse on vascular access techniques.

Noteworthy is the study's demonstration that the SC approach, guided by ultrasonography, markedly reduces both the total procedural time and the specific durations required for vein visualization and puncture compared with the IC method. This efficiency, coupled with a superior first-attempt success rate and enhanced ultrasound view scores, firmly underscores the SC approach's efficacy. Moreover, the observed reduction in both immediate and subsequent complications with the SC technique advocates for its safer application in elective surgical contexts.<sup>2</sup>

However, the article omits details on the exclusion of patients necessitating multiple cannulation attempts, a criterion considering such attempts as procedural failures. This omission raises questions about the potential impact of these exclusions on the study's findings and conclusions. Reporting the number of excluded patients is essential for understanding the true failure rate of each technique, which directly informs clinical decision-making and procedural guidelines.

One aspect that warrants closer examination is the experience of anesthesiologists with the SC approach. Given the prevalent preference for the IC method among anesthesiologists due to familiarity and comfort, it raises questions about the learning curve and adaptability required for the SC approach.<sup>3</sup> How many different anesthesiologists were involved in the procedures, and what was their prior experience with the SC technique?

Furthermore, the findings echo those reported by Souadka et al., indicating similar outcomes with the SC approach performed by surgeons, not only in mechanically ventilated patients but also in non-ventilated patients or when inserting a totally implantable venous access device (TIVAD).<sup>4</sup> This universality of application suggests a broader applicability of the SC approach than previously considered, even by other types of practitioners.

A special technical note of interest is the puncture site's proximity to the clavicle, as per the Yoffa technique,<sup>5</sup> which appears to increase the vein's diameter available for cannulation, thereby reducing the risk of arterial puncture. Moreover, this approach potentially minimizes discomfort postextubation and likely offers esthetic benefits, though it necessitates a learning curve for echography-guided punctures with clavicular obstruction.

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These findings compellingly advocate for a reevaluation of procedural preferences towards the SC approach for subclavian vein access, highlighting the importance of proficiency with ultrasound guidance in optimizing outcomes and minimizing complications.<sup>3</sup>

In conclusion, we extend our appreciation for the comprehensive and nuanced analysis provided by Jaiswal et al. We advocate for further research into the learning curve associated with the SC approach, as well as its long-term benefits, particularly regarding patient comfort and cosmetic outcomes. Such studies are essential to conclusively establish the SC approach's preferential status in specific clinical scenarios.

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