



Ultrasound-guided central line placement has been shown to decrease the number of needle puncture attempts, complication, and failure rates. In order to obtain successful central access, it is important to have adequate cognitive knowledge, workflow understanding, and manual dexterity to safely execute this invasive procedure” Leibowitz et al (2019).

Abstract:

Ultrasound-guided central line placement has been shown to decrease the number of needle puncture attempts, complication, and failure rates. In order to obtain successful central access, it is important to have adequate cognitive knowledge, workflow understanding, and manual dexterity to safely execute this invasive procedure. The operator should also be familiar with the anatomical variations, equipment operations, and potential complications and their prevention. In this article, we present a detailed review of ultrasound-guided central venous access. It includes a description of anatomy, operative technique, equipment operation, and techniques for specific situations. We describe the use of ultrasound guidance to avoid and identify various complications associated with this procedure. We have also reviewed recent recommendations and guidelines for the use of ultrasound for central venous access and the current evidence pertaining to the recommendations for the expected level of training, methodology, and metrics for establishing competency.

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Reference:

Leibowitz, A., Oren-Grinberg, A. and Matyal, R. (2019) Ultrasound Guidance for Central Venous Access: Current Evidence and Clinical Recommendations. *Journal of Intensive Care Medicine*. August 6th. doi: 10.1177/0885066619868164. .

