



The peripheral internal jugular (IJ), also called the “easy IJ,” is an alternative to peripheral venous access reserved for patients with difficult intravenous (IV) access” Zitek et al (2018).

Abstract: Busby, E., Hudson, H., McCourt, J.D., Baydoun, J. and Slattery, D.E. (2018) Ultrasound-guided Placement of Single-lumen Peripheral Intravenous Catheters in the Internal Jugular Vein. The Western Journal of Emergency Medicine. 19(5), p.808-812.

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involves placing a single-lumen catheter in the IJ vein under ultrasound (US) guidance. As this technique is relatively new, the details regarding the ease of the procedure, how exactly it should be performed, and the safety of the procedure are uncertain. Our primary objective was to determine the success rate for peripheral IJ placement. Secondarily, we evaluated the time needed to complete the procedure and assessed for complications.

METHODS: This was a prospective, single-center study of US-guided peripheral IJ placement using a 2.5-inch, 18-gauge catheter

on a convenience sample of patients with at least two unsuccessful attempts at peripheral IV placement by nursing staff. Peripheral IJ lines were placed by emergency medicine (EM) attending physicians and EM residents who had completed at least five IJ central lines. All physicians who placed lines for the study watched a 15-minute lecture about peripheral IJ technique. A research assistant monitored each line to assess for complications until the patient was discharged.

RESULTS: We successfully placed a peripheral IJ in 34 of 35 enrolled patients (97.1%). The median number of attempts required for successful cannulation was one (interquartile range (IQR): 1 to 2). The median time to successful line placement was 3 minutes and 6 seconds (IQR: 59 seconds to 4 minutes and 14 seconds). Two lines failed after placement, and one of the 34 successfully placed peripheral IJ lines (2.9%) had a complication - a local hematoma. There were, however, no arterial punctures or pneumothoraces. Although only eight of 34 lines were placed using sterile attire, there were no line infections.

CONCLUSION: Our research adds to the growing body of evidence supporting US-guided peripheral internal jugular access as a safe and convenient procedure alternative for patients who have difficult IV access.

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