



Our new protocol for axillary peripherally inserted central venous catheters/tunneled axillary peripherally inserted central venous catheters use for a small-diameter basilic vein is safe and feasible” Saijo et al (2018).

Abstract:

**PURPOSE:** Peripherally inserted central venous catheters are some of the most useful devices for vascular access used globally. Peripherally inserted central venous catheters have a low rate of fatal mechanical complications when compared to non-tunnel central venous catheters. However, as peripherally inserted central venous catheter access requires a smaller vein, there is a high risk of thrombosis. The axillary vein (confluence of the basilic and brachial veins) can serve as an access for cannulation. Moreover, as this vein is larger than the basilic or brachial vein, it might be a superior option for preventing thrombosis. The risk of catheter-related bloodstream infection should be considered when the puncture site is at the axillary fossa. The aim of this study was to present our new protocol involving peripherally inserted central venous catheters (non-tunneled/tunneled) and a tunneling technique and assess its feasibility and safety for improving cannulation and preventing thrombosis and infection.

**METHODS:** The study included 20 patients. The axillary vein in the upper arm was used for peripherally inserted central venous catheters in patients with a small-diameter basilic vein (<3 mm). When the puncture site was in the axillary fossa, a subcutaneous tunnel of about 3

cm was constructed easily using a peripheral venous catheter.

**RESULTS:** The observed catheter duration was 645 days (median  $\pm$  standard deviation, 26  $\pm$  22.22 days). Catheterization was successful in all cases, however, two accidental dislodgements were identified. No fatal or serious complications were observed after catheterization.

**CONCLUSION:** Our new protocol for axillary peripherally inserted central venous catheters/tunneled axillary peripherally inserted central venous catheters use for a small-diameter basilic vein is safe and feasible.

#### Reference:

Saijo, F., Odaka, Y., Mutoh, M., Katayose, Y. and Tokumura, H. (2018) A novel technique of axillary vein puncture involving peripherally inserted central venous catheters for a small basilic vein. *The Journal of Vascular Access*. March 1st. .

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