A preliminary observational study was undertaken to evaluate the risk of failure of ultrasound-guided peripheral intravenous catheterization of a deep arm vein for a maximum of 7 days, after peripheral intravenous (PIV) cannulation failure." Meyer et al (2014).

Reference:


Method to overcome difficult peripheral venous access http://ctt.ec/qJf5g+ @ivteam #ivteam

Abstract:

PURPOSE: A preliminary observational study was undertaken to evaluate the risk of failure of ultrasound-guided peripheral intravenous catheterization of a deep arm vein for a maximum of 7 days, after peripheral intravenous (PIV) cannulation failure.

METHODS: This prospective study included patients referred to the intensive care unit for placement of a central line, a polyurethane cannula commercialized for arterial catheterization was used for peripheral venous cannulation. Catheter length and diameter were chosen based on preliminary ultrasound measurements of vein diameter and skin-vein
distance.

RESULTS: Catheterization was successful for all 29 patients. Mean vein diameter was 0.42 ± 0.39 cm; mean vein depth was 0.94 ± 0.52 cm. Mean catheter duration was 6 (median 7) days. Two occluded catheters were removed prematurely. No thrombophlebitis, catheter infection, or extravasation was observed.

CONCLUSION: Our results suggest that catheters inserted with the Seldinger method are adapted to prolonged peripheral deep-vein infusion. Ultrasound can play a role in catheter monitoring by identifying early thrombosis formation.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).