



“The purpose is to assess a new lifesaving HD vascular access approach for patients with nonfunctioning access device in the ordinary sites. This entails insertion of a retrograde temporary HD catheter in the superficial femoral vein, directing the catheter distally, toward the foot.” Gouda (2014).

Reference:

Gouda, Z. (2014) Retrograde femoral vein catheter insertion. A new approach for challenging hemodialysis vascular access. The Journal of Vascular Access. July 10th. .

New approach for challenging hemodialysis vascular access <http://ctt.ec/9za3j+> @ivteam #ivteam

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Abstract:

**INTRODUCTION:** Venous catheters provide access for hemodialysis (HD) when patients do not have functioning access device. Obstruction of jugular, femoral or even external iliac vessels further depletes options. Subclavian approach is prohibited. Catheterization of inferior vena cava requires specialized equipment and skills.

**PURPOSE:** The purpose is to assess a new lifesaving HD vascular access approach for patients with nonfunctioning access device in the ordinary sites. This entails insertion of a retrograde

temporary HD catheter in the superficial femoral vein, directing the catheter distally, toward the foot.

**MATERIALS AND METHODS:** We included six end-stage renal disease (ESRD) patients retrospectively who are on regular renal replacement therapy and need urgent HD with nonfunctioning access device in the ordinary sites.

**RESULTS:** Successful insertion of six retrograde femoral vein catheters in the superficial femoral vein. The mean catheter days were  $2.5 \pm 0.5$  days with one patient having 26 catheter days. The mean blood pump speed was  $230.0 \pm 44.7$  mL/min. Urea reduction ratio and Kt/V at 3 hours HD session were 47% and 1.5, respectively, which increased with increasing session duration. The ultrafiltration volume was 2-3 L/session which increased up to 6 L/session in case of using slow low-efficiency dialysis. No major complications were observed during insertion or the postinsertion period except thigh pain in one patient and exit site infection in the case of long duration.

**CONCLUSIONS:** This is a newly applied lifesaving HD vascular access approach for selected ESRD patients with no available HD vascular access at the ordinary sites with accepted HD adequacy. It needs more evaluation and more studies.

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

Guide for intravenous chemotherapy and associated vascular access devices from Macmillan. CancerUK IV chemotherapy information.



