UV DIALYSIS

A Left Jugular Vein Catheter for Hemodialysis Malpositioned in Right Brachiocephalic Vein

IJKD 2012;6:98 www.ijkd.org



A 69-year-old woman with obstructive nephropathy required emergent hemodialysis. The initial placement of a catheter into the right jugular vein was not successful as it was not possible to establish adequate blood flow. The second catheter introduced into the right subclavian vein failed too. Therefore, there was a need to place a catheter in the left jugular vein. However, chest radiography showed the malpositioned catheter in the right brachiocephalic vein; the first central venous catheter was placed in the right subclavian vein with the tip in the upper vena cava (dashed arrow), and the second central venous catheter was placed via the left jugular vein with the tip in the right brachiocephalic vein (solid arrow). The patient was asymptomatic.

Malposition of central venous catheters has been reported to be between 1% and 33%⁻¹ Hemodialysis catheter malposition must be quickly identified because of subsequent life-threatening complications, such as vascular lacerations and perforations,² which can lead to cardiac tamponade.³ This report assists in detection of misplaced catheters for hemodialysis. The rare malposition of the central venous catheter tip in the right brachiocephalic vein could be due to the left jugular vein having a more transverse lie, thus making the catheter more prone to angulation. Our position is that, for placement of central venous catheters in the upper parts, control tomography of the chest is necessary, regardless of clinical symptoms.

Radojica V Stolic,^{1*} Dragica Z Stolic²

¹University of Pristina, Internal Clinic, Pristina/K Mitrovica Medical Faculty, Pristina, Serbia ²The Health Center Pristina, Gracanica, Serbia *E-mail: radojica.stolic@med.pr.ac.rs

REFERENCES

- 1. Jefferys A, Chow JS, Suranyi MG. Acute vascular access catheters for haemodialysis: Complications limiting technique survival. Nephrology (Carlton). 2003;8:16-20.
- 2. Stolic RV, Milojevic SP. Laceration of the iliac vein in a patient with a femoral catheter for hemodialysis. Int J Nephrol. 2011;2011:919858.
- 3. Lowell JA, Bothe A. Venous access, preoperative, operative and postoperative dilemmas. Surg Clin North Am. 1991;71:1231-46.

Photonephrology