

## **Bedside ultrasound offers safety and effectiveness during insertion of CVC. It also exhibits promptness and accuracy compared to post-intervention radiological imaging” Song et al (2018).**

### Abstract

**RATIONALE:** Central venous catheter (CVC) placement is commonly performed in intensive care unit. And CVC placement is associated with risks including CVC malposition, pneumothorax. Many of the previously reported cases are about catheter misplacement detected by bedside ultrasound, chest x-ray (CXR) and computed tomography. In this case, malposition was detected by bedside ultrasound incidentally particularly with no clinical manifestation.

**PATIENT CONCERNS:** An 88-year-old male with severe diabetic peripheral neuropathy secondary to type 2 diabetes mellitus was admitted for further treatment.

**DIAGNOSES:** We cannulated a single-lumen CVC via the right subclavian vein, and the tip ended up in the internal jugular vein on the same side. With bedside ultrasound, we discovered the malposition though it was mistaken by aspiration of venous blood. Later, CXR revealed malposition of the tip once again.

**INTERVENTIONS:** Since the patient was asymptomatic and the catheter was functioning normally, the catheter was used for the following 20 days without complications. Ultimately, we carefully performed the catheter removal.

**OUTCOMES:** After the inserted catheter was removed, we attempted a new CVC through the left internal jugular vein. After the procedure, bedside ultrasound and CXR confirmed the correct position of CVC. Following successful replacement of the central catheter, no further complications were observed.

**LESSONS:** Bedside ultrasound offers safety and effectiveness during insertion of CVC. It also exhibits promptness and accuracy compared to post-intervention radiological imaging.

Reference:

Song, F., Huang, D., Chen, Y., Xiao, Z., Su, K., Wen, J., Guo, W., Wang, Z., Wu, Y., Wang, S. and Qin, T. (2018) Bedside ultrasound diagnosis of a malpositioned central venous catheter: A case report. *Medicine (Baltimore)*. 97(15), p.e0501.

doi: [10.1097/MD.00000000000010501](https://doi.org/10.1097/MD.00000000000010501).