

Malposition of femoral venous catheter into the hepatic vein

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A man in his 70s was admitted to our intensive care unit after neck surgery. An ultrasound-guided right femoral central venous catheter (CVC) was introduced, without difficulty. We didn't use a subclavicular catheter because the operator was concerned about venous stenosis and congestion. The position of the tip of the catheter from the puncture point was 50 cm. A chest X-ray showed an anomal bend of the CVC with the tip below the right diaphragm (*Figure 1A*). An echography showed the CVC placed (asterisk) in the inferior vena cava (IVC) (*Figure 1B*). The IVC showed short-axis view, but the

CVC didn't show short-axis view. This was indicated that the CVC was not straight up within the IVC. Radiographic and echographic findings suggested that the catheter entered the hepatic vein through the IVC. The view of the CVC within a hepatic vein was very poor and not recorded.

Catheter malposition is reported to occur in 4%. CVC into the hepatic vein is an exceptional complication.

In this case, the ICU team withdrew the catheter in place without complication (from 50 to 35 cm). We can suppose that the catheter passed smoothly through IVC to a hepatic vein.

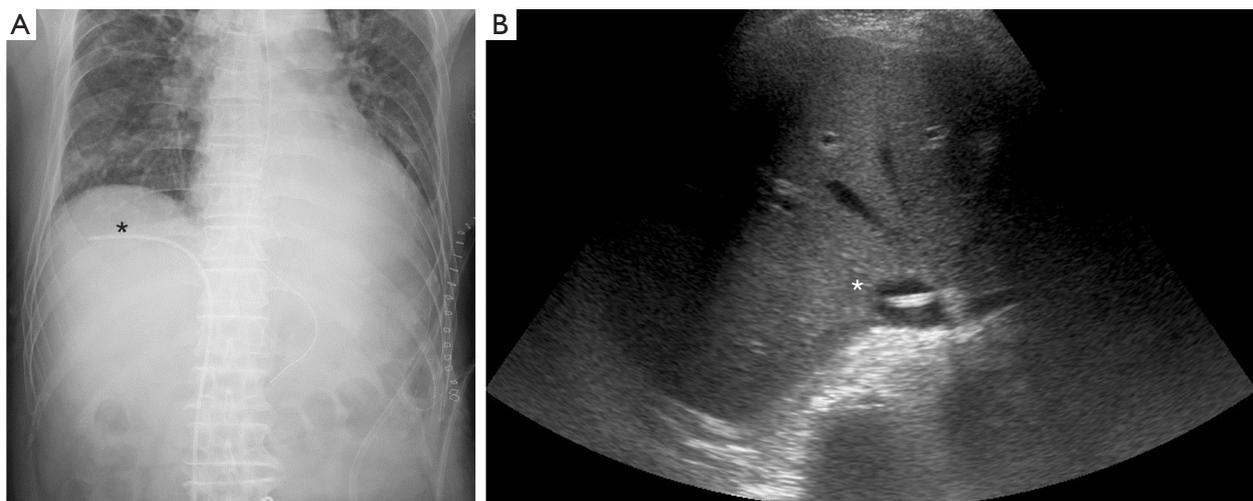


Figure 1 Imaging study of the case. (A) Anteroposterior X-ray showing the central catheter (*); (B) Echography showing IVC and the central catheter (*).

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The physicians who introduced CVC seemed not to know the appropriate depth of catheter.

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aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee(s) and with the Helsinki Declaration (as revised in 2013). Informed consent was obtained from relatives of the patient involved in the article.

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