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Aspiration of the guidewire of a central venous jugular catheter by the venous cannula of a veno-arterial extracorporeal membrane oxygenation

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A 64 year-old man was hospitalized in intensive care unit for cardiogenic shock requiring an urgent veno-arterial extracorporeal membrane oxygenation (ECMO). The insertion of the venous cannula was performed via the right femoral vein and the cannula was placed just at the entry of the right atrium. After this procedure, a central venous line placement was attempted through the right internal

venous jugular, according to the Seldinger technique. During this procedure, the guidewire was inserted into the hub of the needle and the needle was retracted from the skin without any difficulty. Thereafter, the dilating device was passed over the guidewire to enlarge the insertion site, and during the dilation, the guidewire was aspirated by the venous ECMO cannula into the ECMO tubing



Figure 1 Extracorporeal membrane oxygenation and guidewire.

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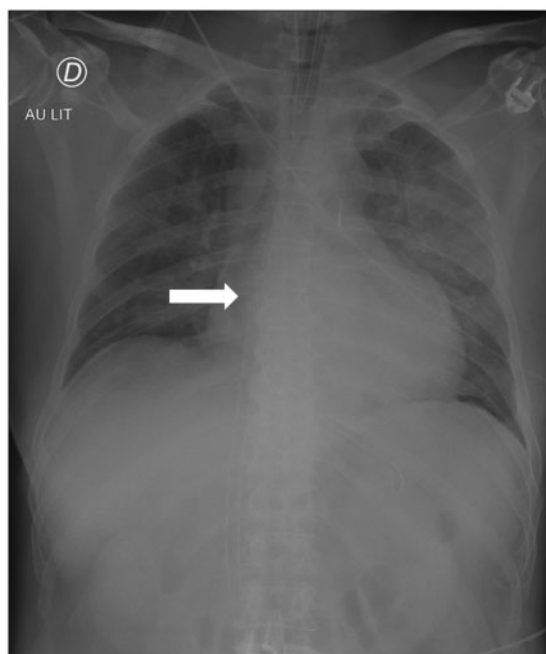


Figure 2 Chest X-ray.

(Figure 1, white arrows). Then, a chest X-ray was performed, and we estimated that the tip of the venous cannula was positioned in the middle of right atrium (Figure 2, white arrow) which may have favoured the guidewire suction. This complication emphasizes the need to be particularly vigilant when a central venous catheter is set up, especially in jugular position and when a dilation of the insertion site is achieved in patients who have an ECMO including a suction cannula positioned at the entry of the right atrium.

Consent: The author/s confirm that written consent for submission and publication of this case report including image(s) and associated text has been obtained from the patient in line with COPE guidance.

Conflict of interest: none declared.