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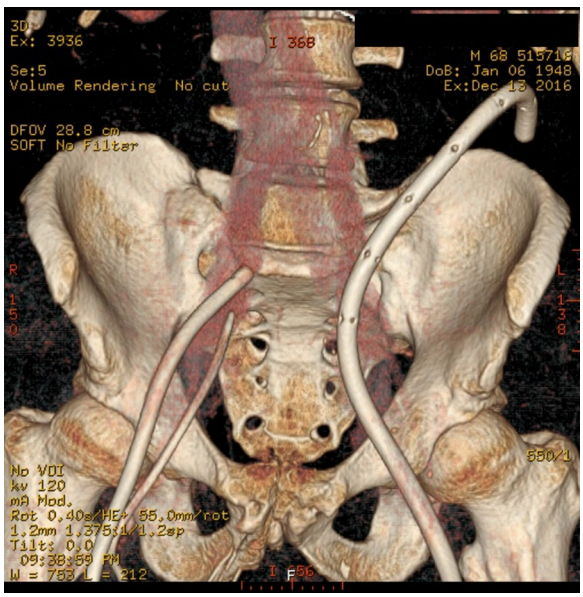
IMAGING IN INTENSIVE CARE MEDICINE

# Multistage ECMO cannulas: first holes get it all?

Philip Fortuna*, Nuno Germano, Cristina José and Ana Martins



Multistage cannulas are used worldwide for venous drainage in ECMO patients. Our ECMO team preformed eCPR in a 62-year-old patient with massive pulmonary embolism. ECMO was started and following administration of 500 mL of fluids it was possible to achieve a pump flow of 4 L/min with access pressures around −60 mmHg (25 Fr, 55 cm multistage cannula in the left femoral). Transthoracic echocardiogram and fluoroscopy at the bedside showed a misplacement of the venous cannula. The images of the CT angiography showed that the venous cannula went outside the vessel, to the retroperitoneum, in the transition of the femoral to the iliac vein with only the proximal holes within the vessel. The patient underwent endovascular embolectomy with adequate reperfusion but without circulatory recovery and the patient died after 32 h on ECMO. This case demonstrates that high-flow ECMO can be achieved with drainage from only the proximal holes of multistage cannulas.

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*Correspondence: philipfortuna@gmail.com
Unidade de Urgência Médica, Lisbon, Portugal

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