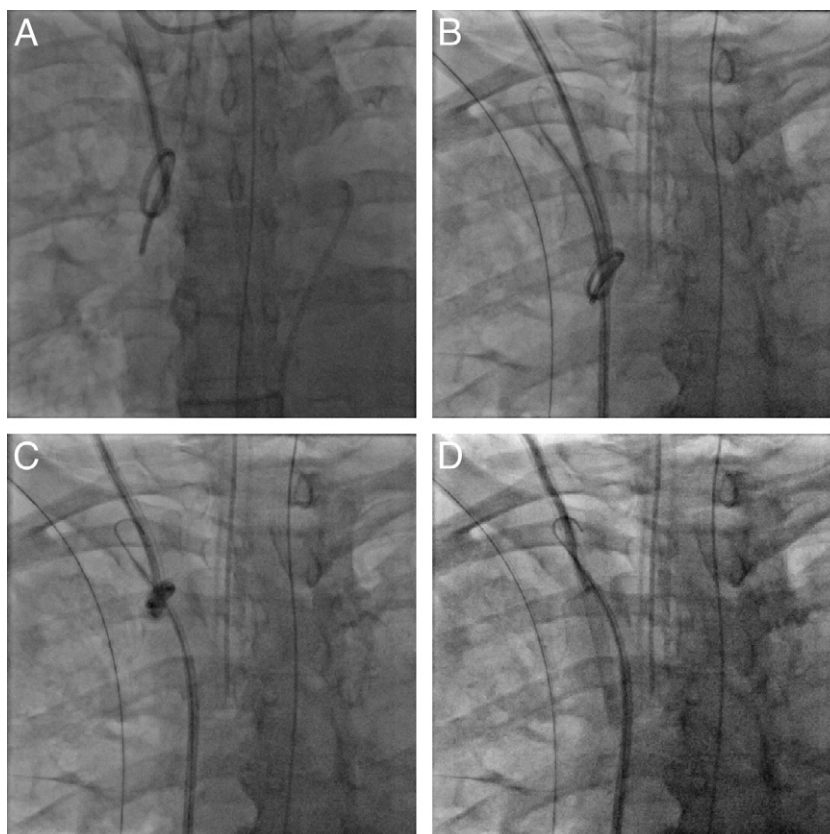


IMAGES IN CARDIOLOGY

Removal of a Knotted Swan-Ganz Catheter

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A 72-year-old woman presented with an out-of-hospital cardiac arrest and was successfully resuscitated. She remained in hemodynamic shock. A Swan-Ganz catheter was placed through the right internal jugular vein in the coronary care unit in order to clarify the etiology of shock. The catheter could not be advanced into the pulmonary artery nor could it be withdrawn from the body. Fluoroscopy revealed a true knot at the tip of the Swan-Ganz catheter (**A**, Online Video 1). Attempts to withdraw the catheter through the right internal jugular sheath caused the knot to tighten. An 8-F Mullins sheath was inserted into the right femoral vein and with the aid of a 0.35-inch J-wire, the Mullins sheath was inserted through the loop of the knotted catheter (**B**). With traction from the Mullins sheath, withdrawal of the catheter allowed the knot to be unraveled, allowing for its successful removal (**C and D**, Online Video 2).