

Removal of a pinched off central venous catheter

A 56-year-old man presented with metastatic colorectal carcinoma and was admitted for systemic chemotherapy. On 6 June 2006, a totally implantable central venous access system was implanted in the right subclavian vein using the Seldinger technique. After 3 years, no blood could be aspirated through the catheter. Chest radiography and computer tomography showed a fracture of the silicon catheter below the clavicle, with the distal portion of the catheter in a branch of the right pulmonary artery (RPA) (figure 1). On 28 April 2009, we tried to remove the fragment of catheter. An 8-French sheath was inserted into the right femoral vein. The guiding catheter could be introduced into the RPA from the femoral vein, over the guidewire. The correct position of the catheter was confirmed by chest radiography (figure 2). The distal catheter fragment was extracted percutaneously using a gooseneck snare (EN Snare) technique (online video 3) through the right femoral vein without any complications (online video 4). On another day, the proximal portion of the catheter and the port were removed.

We report a case of a rare complication related to central venous access ports, called pinch-off syndrome,¹ caused by chronic compression of the central venous catheter between the clavicle and the first rib, with consequent mechanical obstruction of the catheter and eventual complete transection. A more

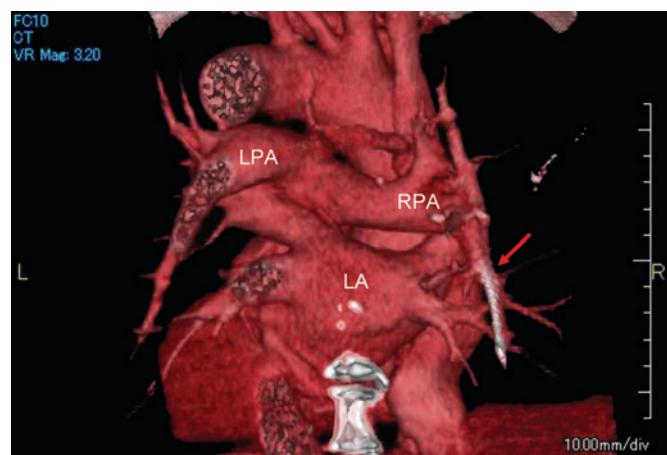


Figure 1 Computer tomograph showing a fragment of the catheter (red arrow) in the right lower pulmonary artery branch. LA, left atrium; LPA, left pulmonary artery; RPA, right pulmonary artery.

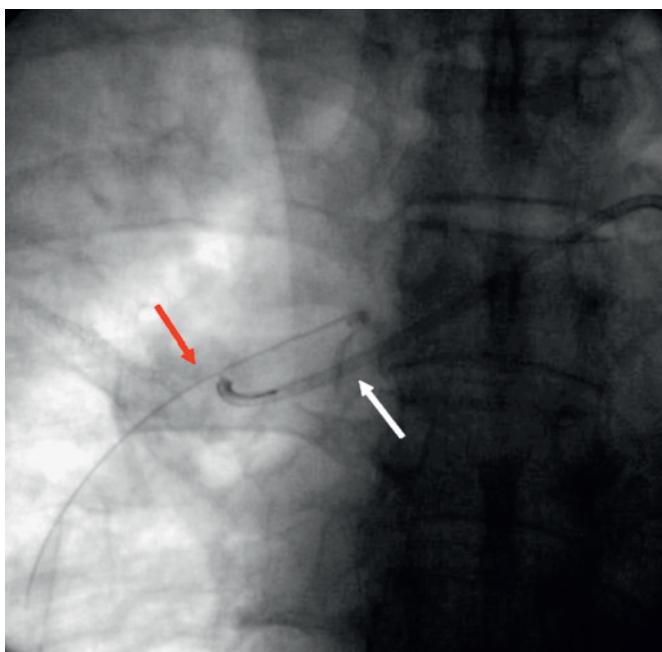


Figure 2 Extraction of the distal catheter fragment (red arrow) by the guiding catheter (white arrow).

lateral puncture site for the subclavian vein is advocated in order to avoid catheter transaction.

Kenya Kusunose, Tetsuzo Wakatsuki, Masataka Sata

Department of Cardiovascular Medicine, Institute of Health Biosciences, The University of Tokushima Graduate School, Tokushima, Japan

Correspondence to Dr Kenya Kusunose, Department of Cardiovascular Medicine, Institute of Health Biosciences, The University of Tokushima Graduate School 2-50-1 Kuramoto, Tokushima 770-8503, Japan; echo.cardio@gmail.com

Additional videos are published online only. To view these files please visit the journal online (<http://heartasia.bmjjournals.com>)

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

Heart Asia 2011;32. doi:10.1136/ha.2009.001321

REFERENCE

- Cheng CC, Tsai TN, Yang CC, et al. Percutaneous retrieval of dislodged totally implantable central venous access system in 92 cases: experience in a single hospital. *Eur J Radiol* 2009;69:346–50.