

Retrieving a large embolised atrial septal occluder — hooked... and landed

Usunięcie dużego zestawu zamykającego ubytek w przegrodzie międzyprzedsionkowej — zahaczony... i wyłowiony

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A 67-year-old male presented with a haemodynamically significant residual atrial septal communication. He had two previous operations to correct anomalous pulmonary venous drainage and patch closure of an associated septal defect, and he had undergone multiple flutter ablations. Transoesophageal echocardiography (TEE) showed a single residual defect, with adequate rims but an unusual insertion of the anterior border of the atrial septum, probably related to his previous surgery. A 34-mm Amplatzer (St. Jude Medical) sizing balloon was used to interrogate the residual defect. At "stop-flow" the balloon waist measured 25 mm on fluoroscopy and 27 mm on echocardiography. A 26-mm Amplatzer Septal Occluder (ASO) was implanted and released after satisfactory stability test on TEE and fluoroscopy. Trivial residual flow was noted between the mitral rim and the device. The following day, routine echocardiography showed that the device had dislodged and embolised to the left atrium. Because the patient was asymptomatic and haemodynamically stable, the decision was made to retrieve the device percutaneously. A 12 Fr long sheath was advanced to the left atrium, and through it a 20-mm endovascular snare and biopsy forceps were simultaneously introduced. The forceps were used to grab the mesh of the right-sided disc and force the device against the left atrial lateral wall. This maintained a stable device position allowing us to spend time capturing the hub of the device with the snare. Once secured, the device was drawn into the right atrium and towards the inferior vena cava; slight elongation of the device at this point allowed alignment of the device with the sheath tip, and the device could be easily retracted into the sheath. A 32-mm ASO was then positioned across the interatrial septum and released after confirmation of satisfactory position on fluoroscopy and TEE (Fig. 1). The patient made a good recovery and the device appeared stable on transthoracic echocardiography, with no residual leaks.

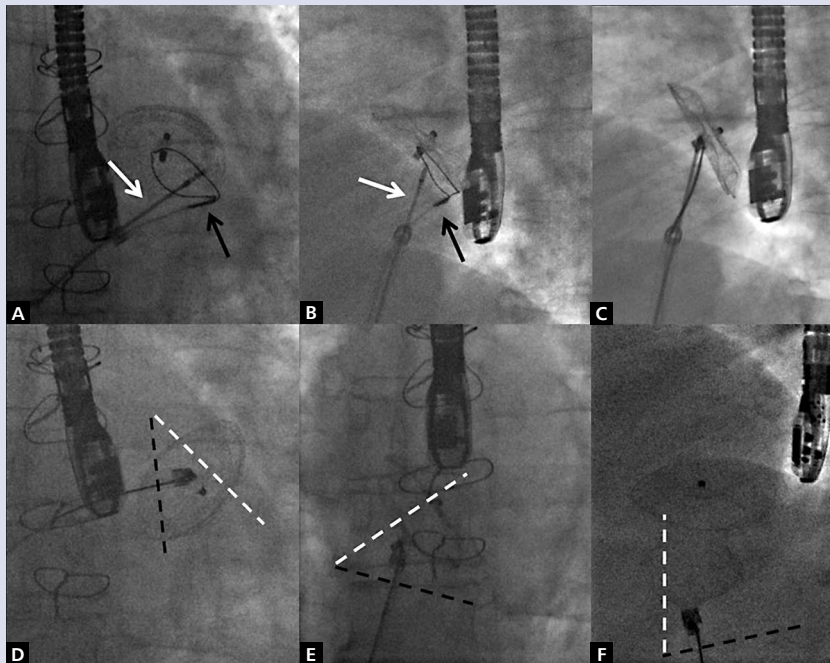


Figure 1. Large atrial septal defect device retrieval. Endovascular forceps (white arrow) stabilised the device allowing a snare (black arrow) to be manoeuvred over the screw hub (A, B, C). Panels D, E, F demonstrate the change in angulation achieved by pulling the device towards the inferior vena cava (IVC). Re-orientation and elongation in the IVC (F) enabled retraction of the delivery screw into the sheath and subsequent retrieval of the device

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