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Journal

Journal of vascular and interventional radiology: JVIR, 30(2)

ISSN

1535-7732

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Publication Date

2019-02-01

Data Availability

The data associated with this publication are within the manuscript.

Peer reviewed



Knot in the Right Place

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A 49-year-old female with pleuritic chest discomfort and dyspnea on exertion was found to have an unexpected intracardiac foreign object (Figs 1, 2). A ventriculoperitoneal shunt (VPS) had been placed 5 years earlier. Chest radiography immediately after placement was unremarkable. Once migrated into the venous system and pulmonary artery, it had formed a tight knot with adherent thrombus, as noted after retrieval (Fig 3). Transfemoral endovascular removal was

performed using a snare advanced through a 70-cm-long 14-Fr sheath. After its withdrawal, the pleuritic pain continued. A new VPS was inserted. VPSs have been known to kink and migrate into the pulmonary arteries. The most likely mechanism for entry into the venous system is unrecognized traversal of a neck vein during VPS placement. The soft catheter can be later "sucked" into the venous system with respiration.

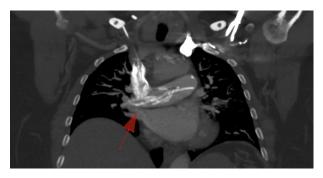


Figure 1. Computed tomographic angiography of the chest demonstrates the VPS coiled in the main pulmonary artery (arrow) and extending into the right and left pulmonary arteries.

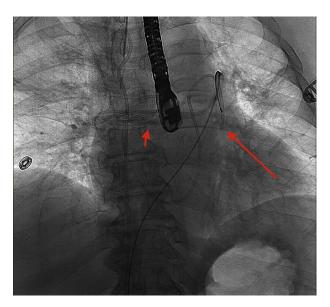


Figure 2. A spot radiograph during retrieval shows coiling of the VPS within the main pulmonary artery (arrow head) with the snared tip extending into central left and right pulmonary arteries and left lower lobe segmental branches (arrow).



Figure 3. The retrieved VPS shows the tight knot and adherent chronic thrombus.

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J Vasc Interv Radiol 2019; 30:249

https://doi.org/10.1016/j.jvir.2018.09.012