

Retained adherent intravascular catheter: What to do?

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**Majority of work performed as a medical student*

Background:

Fracture, fragmentation, and/or embolization is not an uncommon complication of intravascular catheters. The method of choice for removal of these fragments is trans-catheter snare-assisted retrieval, however, this technique may not be successful if both ends of the catheter fragment are well-adherent to the vessel wall and/or cardiac chambers. A review of the literature reveals no uniform recommendation for such a condition.

Case Report:

A 5-year-old with hydrocephalus and a complex history of repeated cerebral ventricular shunts presented with a fractured ventriculo-vascular shunt catheter. The catheter fragment was adherent to the left subclavian vein at one end, and the right ventricle at the other end. At the time of cardiac catheterization for snare-assisted retrieval, the right ventricular end of the fragment was unable to be dislodged and the attempt was abandoned. Surgical removal was not performed by our choice. Long-term follow up on aspirin has been uncomplicated at 1 year.

Conclusions:

Our case report and review of the literature suggest that retained but well adherent intravascular and/or intracardiac catheter fragments may be left in-situ with potentially minimal risk of complication. We recommend aspirin therapy for thrombotic prophylaxis and regular follow up with echocardiography.

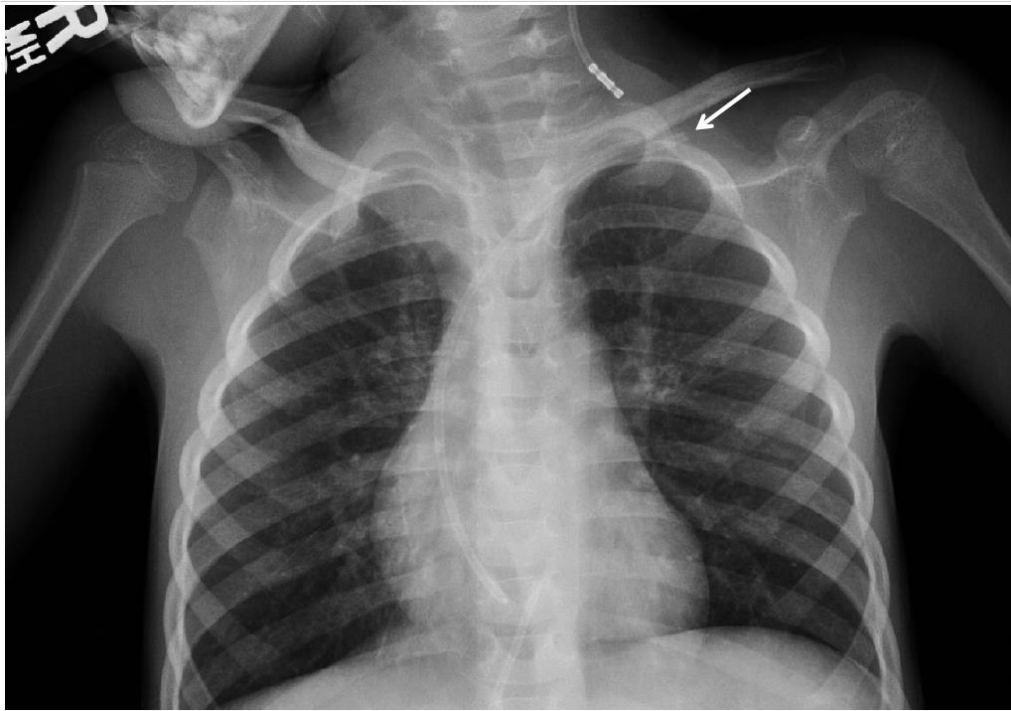


Figure 1

AP radiograph demonstrating the fractured VA shunt. Arrow indicates the cephalic end of the catheter fragment in the left subclavian vein region.