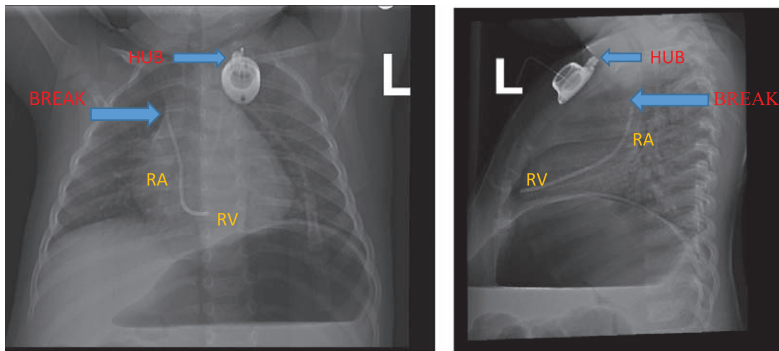


## Portal Catheter Fracture in a Pediatric Patient

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**I**MPLANTED vascular access devices enable patients to receive long-term therapy, including chemotherapy, parenteral nutrition, and blood transfusions. While portal catheters (PACs) rarely fracture (incidence, 0.4 to 1.8%), the most common location of fractures is at the space between the clavicle and the first rib. The catheter can also dislodge from the hub of the port.<sup>1,2</sup> The figure is a chest x-ray of a 2 yr old, whose PAC had been placed 7 months before. The figure shows that the PAC shadow is not

continuous, which is suspicious of a break in the catheter. A catheter fragment from the PAC located in the subclavian vein has broken off, passed the right atrium, and lodged into the right ventricle. It has dislodged from the hub of the port. This could have been prevented by ensuring a secure connection between the port and the hub when the PAC was placed. There are also preassembled systems that can be utilized, although they can still break or dislodge and embolize.

The PAC should not be used if an abnormality is seen on imaging. Complications that can occur include perforation of veins and myocardium, rupture of mitral or pulmonic valves, pulmonary embolism, arrhythmias, thrombosis, infection, and even death.<sup>3</sup> Consultation with an interventional radiologist should be made for confirmation of a break and subsequent percutaneous image-guided removal of the catheter fragment as well as surgical removal of the PAC device. Careful selection and implantation of the proper port system, with subsequent care by skilled staff when accessing the port system, will help prevent many of these complications.

### Competing Interests

The authors declare no competing interests.

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