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Retrograde Cannulation of a Persistent Superior Vena Cava

To the Editor: —Separate cases in which a pulmonary-artery catheter was passed inadvertently through a persistent left superior vena cava have been described recently by Falltrick¹ and by Crocker.² In both cases, placement of the catheter through abnormal vasculature was suspected when chest roentgenograms showed the catheter entering the heart from an anomalous position left of the sternum. This atypical appearance and the characteristic sharp bend the catheter assumes as it passes out of the coronary sinus have been suggested to be diagnostic of anterograde passage of a pulmonary-artery catheter through a persistent left superior vena cava.³

We recently were involved in the care of a patient in whom inadvertent retrograde catheterization of a persistent left superior vena cava occurred during an attempt to place a pulmonary-artery catheter. An anteroposterior chest roentgenogram (fig. 1) appeared to show the distal end of the catheter wedged in a left upper lung segment. Because of the atypical position of the catheter, further radiologic views and angiograms were obtained, which indicated that retrograde cannulation of a persistent left superior vena cava had occurred. Since our initial experience with this problem, we have had a second patient in whom a pulmonary-artery catheter appeared to be wedged in a left upper lung segment and in whom retrograde catheterization of a left superior vena cava was demonstrated. Therefore, we feel that retrograde passage of a pulmonary-artery catheter into a persistent left superior vena cava should be ruled out when, on a chest roentgenogram, the distal end of the catheter appears to be in a left upper lung segment.

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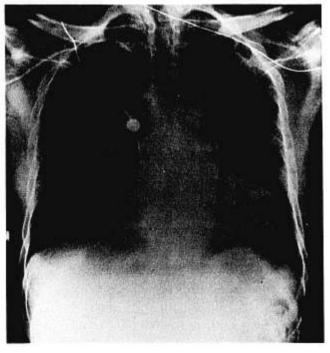


Fig. 1. An anteroposterior chest roentgenogram shows the malpositioned catheter in the persistent left superior vena cava. The catheter appears to be located in an upper-lobe division of the left pulmonary artery.

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A Hazard Alert—Reinforced Endotracheal Tubes

To the Editor: — For as long as I can remember, anesthesiologists have had trouble with reinforced endotracheal tubes. Some of these problems have been due to blisters forming on the inner wall of the tube during anesthesia and obstructing the airway. Munson, Stevens and Redfern¹ and Ohn and Wu² have clearly