

ultrasound guidance for insertion of the catheter.^[1] Various complications related to guidewire can happen during the insertion process e.g., kinking, loss, breakage, and knotting of guidewire. Some guidewire problems e.g., breakage or loss can lead to adverse consequences.^[2] Here, we describe a case where a guide wire was lost during insertion of a femoral central line and was not recognized until several hours later.

A 46-year-old woman was diagnosed with severe community acquired pneumonia, respiratory failure, septic shock, and acute renal failure. In the emergency room, a right subclavian vein central venous line was placed and after initial volume resuscitation, vasopressors were started. She was intubated, placed on mechanical ventilation and transferred to the medical intensive care unit. Over the next 24-h, a left peripherally inserted central venous catheter and a right femoral central venous line were placed to obtain adequate access for monitoring and treatment. A routine chest X-ray performed 18 h after the placement of the right femoral central venous line, detected a guidewire lodged partly in the heart [Figure 1 and Figure 2a, arrowhead]. With bedside ultrasonography, the guidewire could be traced in the inferior vena cava (IVC) up to the level of the renal veins [Figure 2b, sagittal plane view of IVC with guidewire (arrow); Figure 2c shows transverse section of IVC at the confluence of hepatic veins, with guidewire (arrow); Figure 2d shows transverse section of IVC at the level of renal veins showing guidewire (arrow)]. She was taken to the interventional radiology suite where under fluoroscopic guidance, the right femoral catheter was carefully removed. The proximal straight end of the guidewire was found inside the tip of the central venous catheter. It was grasped and removed uneventfully with a steady gentle pull.

Loss of the guidewire inside the vessel is a serious complication of central venous line placement. In this case report, the guidewire was lost during insertion and not recognized by an operator, judged competent in a residency training setting to perform the procedure independently, until many hours later. Similar complications have been reported in literature.^[3,4] Serious consequences include perforation of vascular and cardiac structures. Difficult management issues arise as it often involves transport of clinically unstable patients outside intensive care unit environment for removal of the guidewire. We believe that the complication happened due to failure to adhere to good practice, e.g., withdrawing the guidewire until the proximal end comes out of the catheter port and holding the guidewire while advancing the catheter beyond the skin entry site. A meticulous attention to

A lost guidewire

Sir,

Central venous cannulation is one of the most common procedures performed in any intensive care unit. The incidence of mechanical complications i.e., pneumothorax, arterial injury etc., are reduced with an experienced operator and routine use of

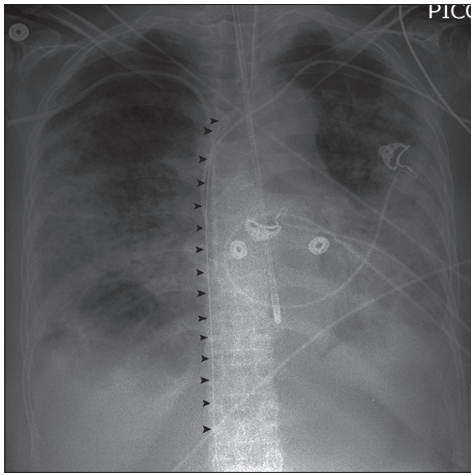


Figure 1: Chest X-ray showing misplaced guide wire

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Quick Response Code: 	Website: www.ijccm.org
DOI: 10.4103/0972-5229.136085	

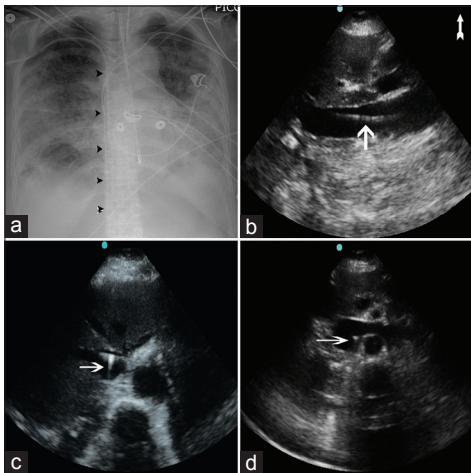


Figure 2: (a) Chest X-ray showing a guide wire lodged partly in the heart (arrowhead); (b) longitudinal view of inferior vena cava (IVC) with guide wire (arrow); (c) transverse section of IVC at the confluence of hepatic veins, with guidewire (arrow); (d) transverse section of IVC at the level of renal veins showing guide wire (arrow)

standard precautions can prevent this untoward and avoidable complication.

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