

## Catheter related septic inferior vena cava thrombosis

Sir,

Placement of central venous catheter (CVC) is an essential technique in the management of critically ill patients. Central venous access is needed to give drugs that cannot be given by mouth or via a peripheral venous access. We experienced a rare complication with CVC and report its images.

An 80-year-old man was hospitalized with cardiopulmonary arrest in July 2007. Despite our intensive care, his consciousness did not recover. Because ventilator could not be removed, tracheostomy was performed in August. But, he presented high fever. Methicillin-resistant *Staphylococcus aureus* was detected from tracheal tube and blood culture. Thus, vancomycin (VCM) was administered; the course was complicated by VCM-induced acute kidney injury (AKI). CVC was placed in the inferior vena cava (IVC) via the left femoral vein. In September, abdominal computed tomography (CT) done for investigation of fever source revealed air and thrombosis in IVC [Figure 1]. We diagnosed septic IVC thrombosis and CVC was removed. His general condition and renal function gradually recovered. Finally, gastrostomy was performed and he was transferred to another hospital in May 2008.

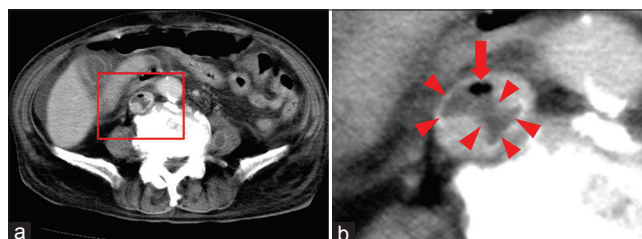
CVC, thrombosis, and sepsis are related to each other.<sup>[1]</sup> CT is useful for the diagnosis.<sup>[2]</sup> Nephrologists often care for AKI patients with CVC in the intensive care unit. AKI patients are immunocompromised and their prognosis is very poor.<sup>[3]</sup> Although rare, it is important to consider the possibility of catheter-related septic IVC thrombosis.

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**Figure 1: Abdominal computed tomography (CT) in September. (a) Abdominal CT slice at the level of catheter tip. (b) Enlarged view of Figure 1a square. Arrow shows air in inferior vena cava. Arrowheads show not enhanced area by contrast that is indicating thrombosis**

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DOI:

10.4103/0971-4065.116328

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