

Kidney International (2010) 77, 836; doi:10.1038/ki.2009.542

Vegetation in the superior vena cava: a complication of tunneled dialysis catheters

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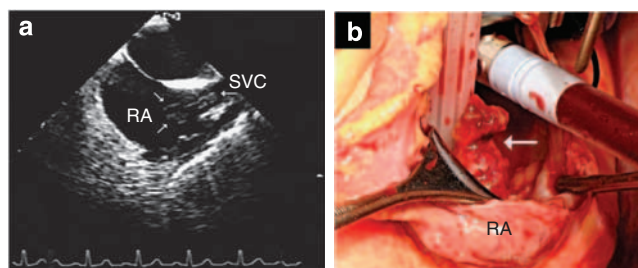


Figure 1 | Vegetation in the superior vena cava.

(a) Transesophageal echocardiography revealed an echogenic lesion in the superior vena cava (SVC) (2.4 × 2 cm) with a mobile ribbon-like structure extending into the right atrium (2.5 cm in length). (b) A vegetation (arrow) attached to the superior vena cava was explored after opening the right atrium (RA) and superior vena cava.

A 47-year-old woman with end-stage renal disease due to diabetic nephropathy had been receiving hemodialysis (HD) through a right internal jugular tunneled double lumen catheter for 3 months. She was admitted with spiking fevers with blood cultures showing oxacillin-resistant *Staphylococcus aureus*. The catheter was removed and the patient was put on vancomycin therapy. However, fever persisted and a transesophageal (TEE) but not transthoracic echocardiography (TTE) revealed an echogenic, mobile, ribbon-like lesion in the

superior vena cava (2.4 × 2 cm) extending into the right atrium (Figure 1a). The patient underwent surgical removal of the vegetation (Figure 1b). The patient was discharged uneventfully after a complete course of antibiotic therapy.

Catheter-related infections are common in HD patients and are associated with significant morbidity and mortality. TTE is sometimes not sensitive enough to detect vegetations, and a TEE is indicated, especially in patients with persistent fever or positive blood cultures, despite catheter removal.