AngioVac is a vacuum-assisted thrombectomy device, which was approved in 2014 by FDA for removal of large thrombi and inappropriate material from body and its successful use for debulking large right-sided vegetations has been reported. We present a case of persistent bacteremia in a severely ill patient from infected thrombus, who underwent thrombus extraction with the use of AngioVac system.

Introduction

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Case Presentation

A 77-year-old male patient, with recent history of necrotizing fasciitis of the right foot, complicated with acute renal failure and required tunnel catheter in right internal jugular vein for temporary hemodialysis. He presented with fever and was found to be septic with methicillin-resistant Staphylococcus aureus bacteremia. The catheter was removed and the patient started on broad-spectrum antibiotics. Extensive workup including CT chest/abdomen, Echocardiogram (TTE) and MRI spine and lower extremity were negative for potential source of bacteremia. He continued to be septic with positive blood cultures despite appropriate antibiotics. TEE revealed a 1.0 x 1.3 cm echo dense filling defect in the SVC, suspected infected thrombus.

Medical Decision Making

Patient remained septic with persistent bacteremia despite appropriate antibiotics. He was evaluated by cardiothoracic surgery and was deemed high risk for surgical intervention. Patient underwent successful extraction of the thrombus using AngioVac. Resolution of bacteremia was noted on follow-up blood cultures and pathology report confirmed infected thrombus. Patient recovered well and discharged to rehab unit.

Discussion

AngioVac is a vacuum-based device, which was approved for removal of large thrombi and inappropriate material from body. There have been many case reports showing successful extraction of right-sided vegetations especially with infected thrombus associated with cardiac implantable devices using AngioVac device. Surgical extraction of septic emboli used to be the mainstay of therapy for persistent bacteremia, but it carries significant risks of mortality and morbidity especially in high-risk patients. AngioVac system has emerged as an alternative modality for source control in this patient population. Our patient had successful eradication of the source of infection and a good clinical outcome.

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References