Septic Pulmonary Embolism in a Patient with Defibrillator Lead Endocarditis

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A 38-year-old man with an implantable cardioverter-defibrillator (ICD) presented with fevers, chills, pleuritic chest pain, neck pain,

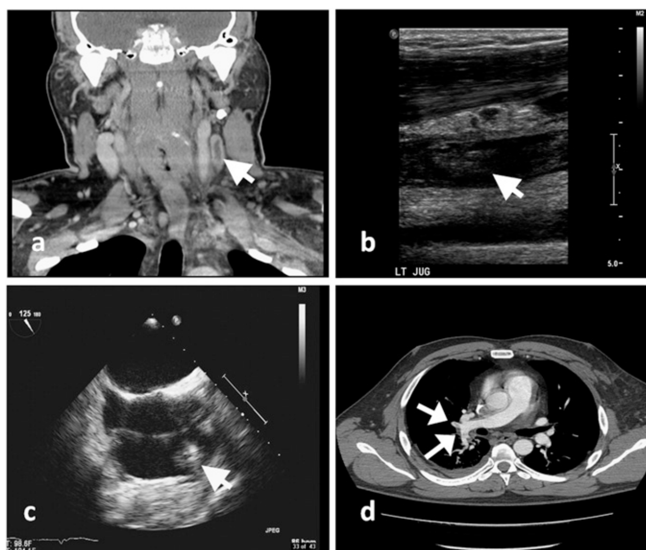

Figure 1.

and a boil on his jaw. Computerized tomography (CT) scan of chest showed inflammatory changes along the pacemaker leads and thrombus in the left innominate and jugular veins (Figure 1a). Ultrasound of the left arm and neck veins showed venous thrombosis (Figure 1b). Transesophageal echocardiography showed a vegetation attached to the right atrial lead (Figure 1c). The ICD was explanted percutaneously. Four days later the patient developed fever with pleuritic chest pain. Follow-up CT angiography showed interval development of multiple pulmonary emboli (Figure 1d). The patient was treated with nafcillin, coumadin, and a life vest defibrillator until ICD re-implantation.

The incidence of cardiac device endocarditis is 1–7% of those who receive a cardiac device, and 27% of cardiac device endocarditis is associated with septic pulmonary embolism. Both cardiac device endocarditis and septic pulmonary embolism have high morbidity and mortality (1). The risk factors for cardiac device endocarditis are recent device manipulation, diabetes mellitus, corticosteroid medication, anticoagulation, cancers, chronic renal failure, and bacteremia (2). Septic pulmonary embolism is a rare disorder associated with cardiac device implants, intravascular catheters, intravenous drug use, suppurative process in head and neck, thrombophlebitis, and immunocompromised state (3).

Author disclosures are available with the text of this article at www.atsjournals.org.

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