CLINICAL PRACTICE

Clinical Images

Mycotic Aortic Aneurysm in a Patient with Prior Abdominal Aortic Aneurysm Endograft Repair

Ian Coulter, BS¹ and Anunta Virapongse, MD²¹University of Colorado School of Medicine, Aurora, CO, USA; ²University of Colorado Hospital, Anschutz Medical Campus, Aurora, CO, USA.

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CLINICAL DESCRIPTION

A 76-year-old man presented with fever, vomiting, hypoxia, and confusion. His medical history included an abdominal aortic aneurysm (AAA) status-post repair with an endograft 2 years prior. Blood cultures grew *Bacteroides fragilis* and an abdominal CT demonstrated AAA aneurysmal sac inflammation (Fig. 1). Indium-111 WBC scintigraphy showed AAA radiotracer localization (Fig. 2) consistent with a mycotic aneurysm. While undergoing surgical endograft explant with aortic reconstruction, this patient's endograft was found in a "pool of pus." He was later discharged for outpatient ertapenem infusions.

Aortic graft infection is rare (incidence 0.3%),¹ but is associated with high morbidity and mortality.² Infection routes include bacteremic seeding and contiguous spread from a gastrointestinal source.³ In this patient, the hypothesized etiology was bacteremia from subclinical diverticulitis. Sepsis and enteric fistulae with gastrointestinal bleeding are worrisome complications.³ The most implicated organisms are *Staphylococcus* and *Salmonella* species.³ *Bacteroides fragilis* is a rare cause of mycotic aneurysm with only limited published case reports.⁴

Definitive treatment is complete surgical explant of the endograft and infected aorta followed by anatomical reconstruction¹ and approximately 6 weeks of antibiotics.⁵ Antibiotic management alone is not recommended and is associated with high mortality.² Even with treatment, 5-year mortality is estimated at 51%.²

Corresponding Author: Ian Coulter, BS; University of Colorado School of Medicine, Aurora, CO, USA (e-mail: itcoulter@msn.com).

Compliance with Ethical Standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

Figure 1 CT demonstrating an inflamed aneurysmal sac (white arrows) surrounding the endograft (black arrows).

Figure 2 Indium-111 WBC scintigraphy showing localization of tagged WBCs to the aneurysmal sac and endograft (black arrows). Areas of heavy aggregation of labeled leukocytes are visualized as bright yellow and orange in this image. White arrows surrounding the aneurysmal sac outline the area of probable infection. The lumbar vertebrae show white cell accumulation as a normal artifact which does not represent an inflammatory process.

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