Commentary on “A 14-year Experience with Aortic Endograft Infection: Management and Results”

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Infected prosthesis in any vascular bed can be very challenging to treat. Treating surgeons will usually attempt to find any technique that can be of lower risk to the patient and does not require removal of the infected graft. Graft infection can be especially difficult to treat when the infection occurs in any part of the aorta. As our treatment paradigms continue to progress to minimally invasive wire and catheter-based approaches, we have become less interested in “big” operations that pose a high risk for our patients. In light of this fact, I applaud the authors for accumulating and analyzing their data associated with the care of patients with infected aortic endografts.

Lyons et al.¹ present the evaluation of a large series from the UK. They were able to identify and analyze 22 patients over a 14-year period who developed aortic graft infections in the setting of an endovascular device. All of these patients were treated with a variety of modalities that included less invasive management techniques for some and explant with vascular reconstruction in others. The less invasive management included endograft extension, as well as drainage of the sac and antibiotic irrigation in some patients. In addition, their series included patients treated for thoracic and aortic aneurysmal disease.

Their results are very impressive to me in terms of the need for being aggressive as an initial treatment for the infection. None of the nine infected thoracic endograft patients underwent an explant. At 24 months, eight of the nine patients had not survived. This high mortality rate occurred as some patients refused additional treatment for the infection or were deemed too high risk. But, several had an attempt at an endovascular solution with extensions, which did not lead to survival as they all had disease progression and bleeding.

The same impressive data are seen in the abdominal aorta. In fact, it is even more telling in that some of the patients did have an explant procedure and have survived. Of the 13 infected aortic endograft patients, ten were deemed appropriate risk for surgical removal of the device and reconstruction. One patient died in the peri-operative period and two other patients died during follow-up, but seven (70%) survived. This survival rate is a dramatic improvement compared with the thoracic patients who did not have an explant. Also, infected abdominal aortic patients who did not have an explant did not survive. Minimally invasive approaches, such as sac drainage, only led to temporary control of sepsis and patients suffered with disease progression and death.

I think the authors have done a great job in presenting some very important and interesting data. Many of us, including myself, strive to devise approaches to minimize our patients’ operative risks. However, I am not willing to accept such a high mortality rate for less invasive therapies. In light of this, I would definitely change my treatment paradigm the next time I treat a patient with an infected aortic endograft. As long as the patient does not have a prohibitive operative risk, I think that the outcome is clearly improved with a more aggressive approach. Explant and extra-anatomic reconstruction did much better in the current series.

REFERENCE