

Perforation of a Dacron vascular endoprosthesis into the duodenum

UCTN

A 65-year-old man with an aortobiliacal vascular endoprosthesis developed an infection of his vascular graft with *Staphylococcus aureus*. He required emergency surgery because of rupture of the distal insertion, and during this procedure the duodenum was opened accidentally. The postoperative course was complicated by perigraft infection, including spondylodiscitis that required long-term antibiotic therapy.

Eighteen months after surgery the patient experienced relapsing episodes of bacteremia and candidemia despite antimicrobial therapy. Multiple imaging studies and upper gastrointestinal endoscopy failed to provide any evidence of a duodenum-graft fistula, although the history, the course of the disease, and the fungal and bacterial species found in the blood (including the same lactobacillus that the patient used to drink in a milk drink on a daily basis) were very suggestive of the existence of such a fistula. Because of the history of complications during and after the previous operations, the option of surgical intervention was rejected and antimicrobial therapy was continued.

After another 4 months and in the face of persisting bacteremia and candidemia, repeat endoscopy was performed, which revealed a perforation of the Dacron vascular endoprosthesis into the horizontal portion of the duodenum (Figure 1). Three weeks later the patient received biaxillofemoral grafts and after another week the infected graft and the perforated part of the duodenum were removed (Figure 2). Antimicrobial chemotherapy was discontinued after another 3 weeks and the patient was well at his last follow-up appointment.

Bleeding is the most frequent presenting symptom of both primary and secondary aortoenteric fistulas [1,2]. In the absence of bleeding, however, current imaging methods do not always provide supporting evidence of a suspected intestinovas-

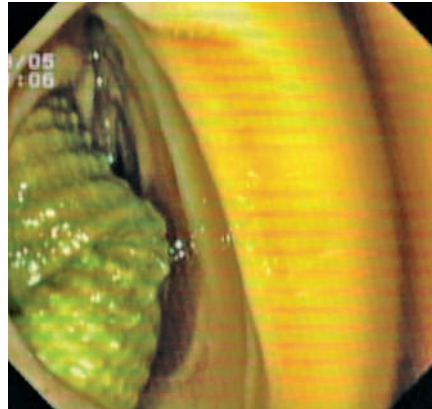


Figure 1 Endoscopic view showing the perforation of the Dacron vascular endoprosthesis into the horizontal portion of the duodenum.

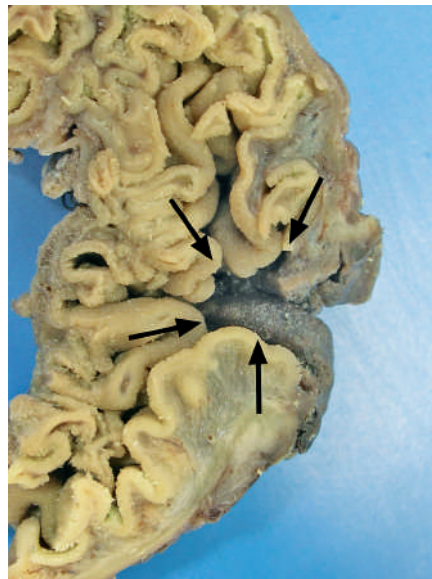


Figure 2 The resected portion of duodenum, showing the perforation (arrows).

cular fistula [3,4], and a decision to perform surgery should therefore not rely on such evidence. Aortoiliac stent graft infection is uncommon, but is often associated with aortoenteric fistulas [5]. Antibiotic and antifungal therapy has become potent enough to suppress serious bacteremia and candidemia and so enable patients to survive a perforation of a Dacron endoprosthesis into the duodenum.

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