

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-

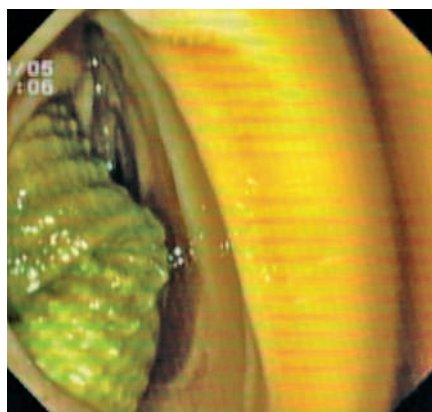


Figure 1 Endoscopic view showing the perforation of the Dacron vascular endoprosthesis into the horizontal portion of the duodenum.

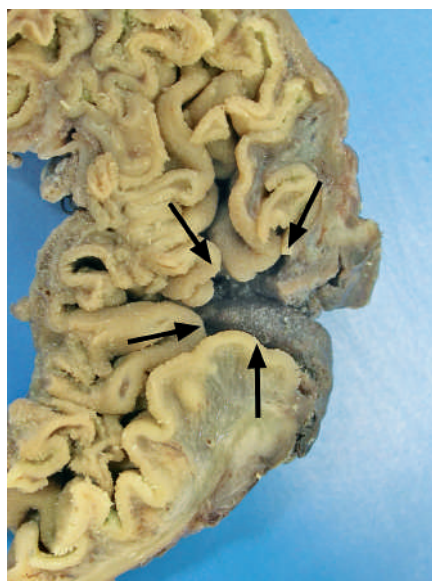


Figure 2 The resected portion of duodenum, showing the perforation (arrows).

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.

Endoscopy_UCTN_Code_CCL_1AB_2AZ_3AD
Endoscopy_UCTN_Code_CCL_1AB_2AF

H. Schwacha, W. V. Kern, D. Wagner
Department of Medicine, University
Hospital, Freiburg, Germany.

References

- 1 Armstrong PA, Back MR, Wilson JS et al. Improved outcomes in the recent management of secondary aortoenteric fistula. *J Vasc Surg* 2005; 42: 660–666
- 2 Saers SJ, Scheltinga MR. Primary aortoenteric fistula. *Br J Surg* 2005; 92: 143–152
- 3 Orton DF, LeVeen RF, Saigh JA et al. Aortic prosthetic graft infections: radiologic manifestations and implications for management. *Radiographics* 2000; 20: 977–993
- 4 Perks FJ, Gillespie I, Patel D. Multidetector computed tomography imaging of aortoenteric fistula. *J Comput Assist Tomogr* 2004; 28: 343–347
- 5 Ducasse E, Calisti A, Speziale F et al. Aortoiliac stent graft infection: current problems and management. *Ann Vasc Surg* 2004; 18: 521–526

Corresponding author

D. Wagner, M. D.
Center for Infectious Diseases and
Travel Medicine
Department of Medicine
University Hospital Freiburg
Hugstetter Straße 55
Freiburg 79106
Germany
Fax: +49-7612701820
E-mail: Dirk.Wagner@
uniklinik-freiburg.de