Erosion of the Duodenum by an Aortic Graft, Leading to Recurrent Sepsis

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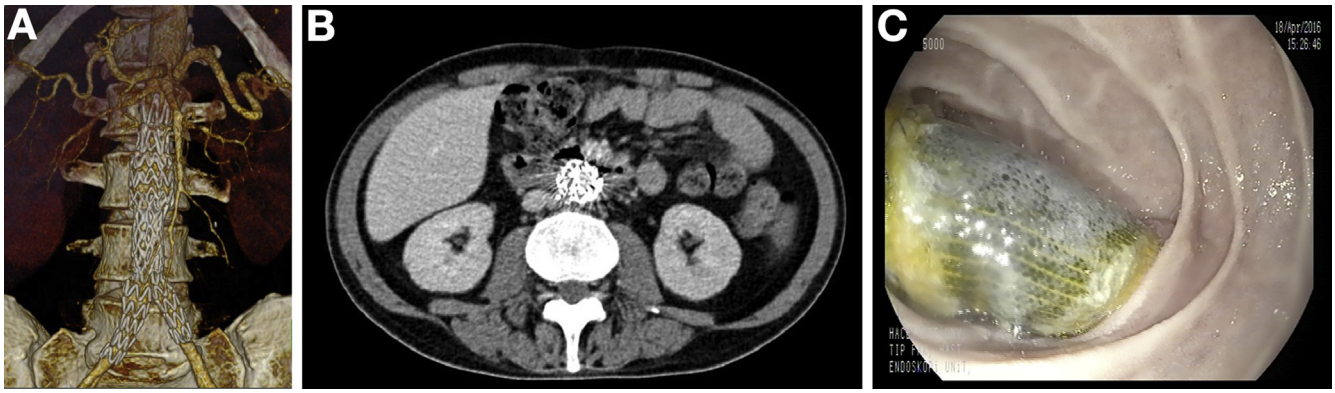

A 56-year-old man with long-standing Behçet's disease presented with recurrent sepsis attacks resulting from an aortoenteric stent placed 2 years previously. The patient initially was evaluated for abdominal pain with a computed tomography (CT) scan that showed a 5 × 3-cm aortic aneurysm. A laparotomy was performed and a Dacron graft was placed after the removal of the aneurysmatic aortic segment. One year after surgery, the patient was hospitalized for osteomyelitis and an abscess in the fascial planes surrounding the femur. Blood and tissue cultures were positive for *Escherichia coli* and he received antibiotic therapy for 2 months. Six months after discharge, he was hospitalized again for sepsis and his blood cultures were positive for *E coli*. An abdominal CT scan showed effaced fat planes between the aorta and duodenum, with multiple reactive abdominal lymph nodes. An aortoenteric fistula (AEF) was suspected and an endovascular stent was placed inside the Dacron graft (Figure *A*). However, he was hospitalized with 2 more septic episodes in 2015. CT findings were equivocal and again only showed effaced fat planes between the aorta and the duodenum (Figure *B*). An upper endoscopy was performed to check for the presence of a fistula. The graft clearly was visible in the lumen, traversing the back wall of the third segment of the duodenum in a superior–inferior direction (Figure *C*). The patient received antibiotic therapy, followed by resection of the third and fourth duodenal segments, and a duodenojejunal anastomosis was performed. He was discharged after 2 weeks.

In this case, an aortic graft eroded the duodenum and the patient presented with recurrent sepsis. There has been one other case in the literature in which a complete duodenal wall erosion by an aortic stent was described.[1] AEFs are rare phenomena that usually occur after surgery, or after endovascular stent placement for an aortic aneurysm.[2] Patients often present with catastrophic gastrointestinal bleeding. Rarely, patients are diagnosed after recurrent sepsis attacks mandate a thorough investigation for infectious foci.[1] Although the pathophysiology of AEFs after aneurysm removal has not been elucidated completely, inflammation caused by the hard nature of the Dacron stents and/or pulsations eroding the enteric wall are theorized to be responsible for their formation. To date, there is no consensus on the diagnostic algorithm to be used for patients who present with recurrent sepsis, rather than with the overt bleeding that is the usual presentation for patients with AEFs.[2]

References

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Conflicts of interest
The authors disclose no conflicts.

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