Late Spontaneous Aorto-Enteric Fistula After Endovascular Repair of Abdominal Aortic Aneurysm

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Background: Aorto-enteric fistula formation after endovascular repair without previous abdominal surgery is exceedingly rare. It can occur at any time postoperatively.

Methods: This is one case report about spontaneous aorto-enteric fistula 6 years after an elective endovascular abdominal aortic aneurysm repair (EVAR).

Results: We report a case of 82-year-old man who was admitted because of anemia and mixed gastrointestinal bleeding (hematemesis and melena). Six years prior, he undergone an uneventful endovascular repair of an infrarenal abdominal aortic aneurysm. A CT scan performed two months before showed that the stent was in the right position, without evidence of infection. However, we noted a progressive enlargement of the aneurysm sac with no clear evidence of endoleak. In the emergency room, a repeat CT scan showed the presence of massive amount of periprosthetic air bubbles within the aneurysm sac, which raised suspicion for an aorto-enteric fistula. An extra-anatomic axillobifemoral bypass, endograft explantation, aneurysm sac debridement, and enteric repair were be done urgently. Intraoperative cultures from the endograft grew *Streptococcus agalactiae*, *Aggregatibacter segnis*, *Escherichia coli*, and *Bacteroides fragilis*.

Conclusion: The cause of this event is unsettled, as the patient had no evidence of a pre-existing inflammatory process, graft migration, or endoleak. The enlargement of the aneurysm sac with sustained pressure to the enteric wall may have played a contributing role in this rare complication.

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