Hark The Herald Bleed

Nathan Grigg, DO, Bryant Javier DO, Amanda Sullivan, DO, Manaquibb Khan, MD, Daniel Heck, DO, Renuka Singh, MD, Jimmy Giang, DO
Parkview Medical Center internal Medicine Residency

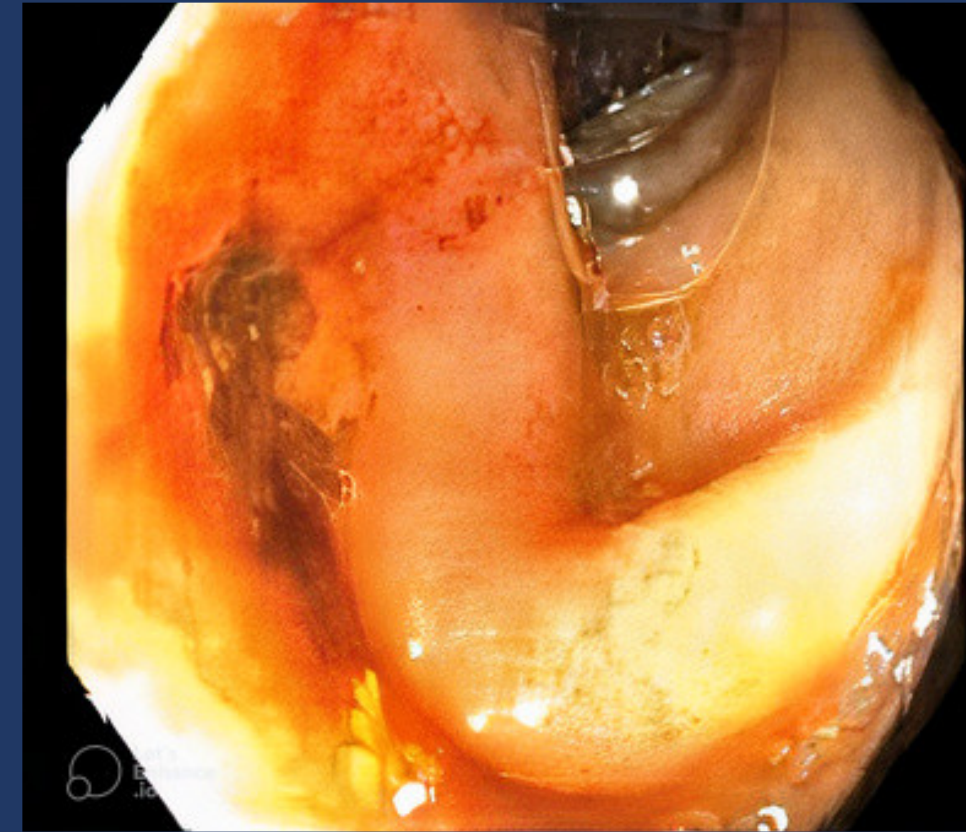
Background

An Aortoenteric fistula (AEF) is a rare, life-threatening condition with a reported incidence of 0.007 per million (with 250 cases reported in the literature). These fistulae present with what has been coined a "Herald Bleed," indicating that a benign presentation of Gastrointestinal hemorrhage will likely be followed by catastrophic bleeding. Secondary AEF, more common than primary or denovo fistulae, is the development of a fistula after abdominal aortic aneurysm (AAA) repair. As expected, most fistulae are found in the duodenum due to the anatomical proximity of prior AAA procedures. On occasion, endoscopic confirmation of an AEF is requested, presenting an added risk to a condition with a mortality rate above 45% in the first month.

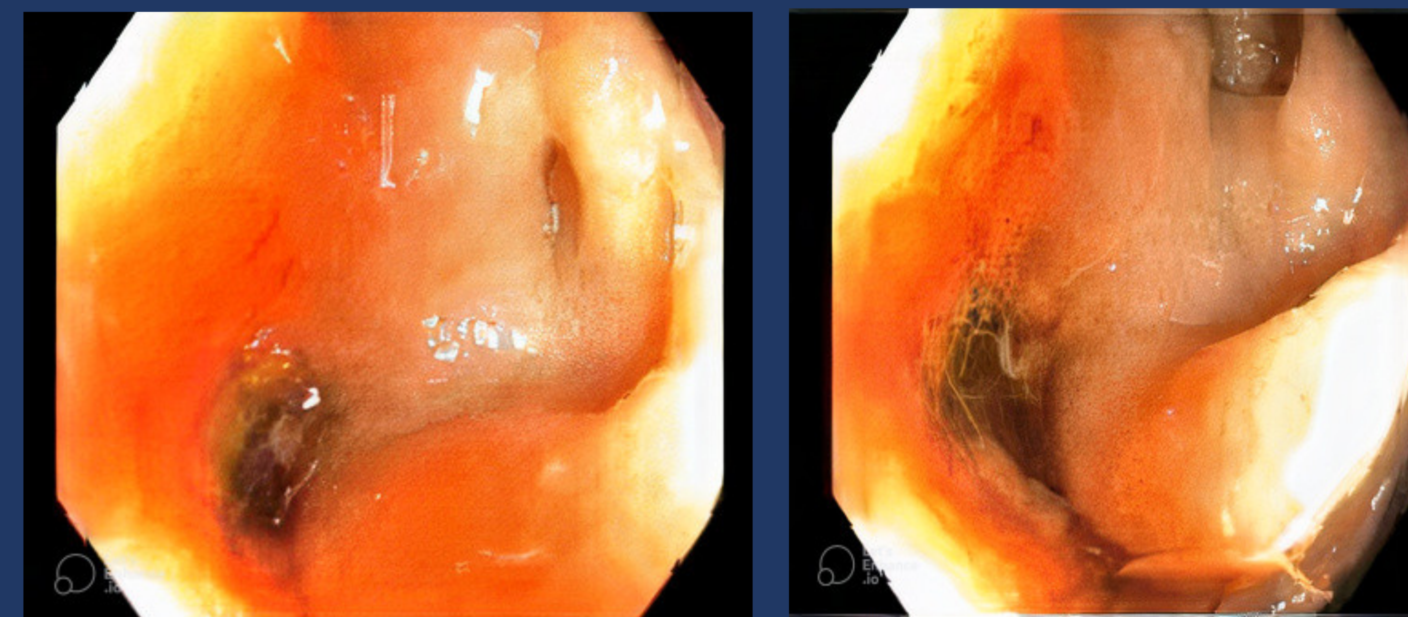
Discussion

AEF is an incredibly rare condition with a significant mortality rate. Our patient was able to undergo endoscopy and receive diagnostic confirmation. This provided her with the necessary information to decide on further treatment. Diagnosis of AEF remains difficult due to its rarity and we hope that greater awareness of this devastating disease will result in further guidelines concerning diagnosis, management, and improved outcomes.

PARKVIEW
HEALTH SYSTEM



Endoscopic images demonstrating the source of Gastrointestinal bleed and Aortic graft visualized in the Duodenum.



Hospital Course

A 70-year-old female with a pertinent past medical history of antiphospholipid syndrome, seven prior strokes, and known iron deficiency anemia with hematochezia presented to the emergency department with altered mental status. The patient required several units of blood, and GI was consulted for further evaluation and planned for endoscopy and colonoscopy. Unfortunately, the patient was unable to tolerate bowel preparation and, in the meantime, was found developed severe sepsis secondary to an infected aortoiliac bypass graft with a likely fistulous communication between the right limb of the bypass graft and inflamed loop of the small bowel as seen on Computed tomography. Vascular surgery was consulted and requested endoscopic confirmation of the AEF prior to surgical intervention. After much deliberation between vascular, the patient, and Gastroenterology, endoscopy was performed only with Vascular surgery present and prepped for emergent surgery if needed. The aortic graft was seen with stigmata of bleeding between the second and third part of the duodenum. The patient then had multiple discussions with her multidisciplinary team and family but ultimately decided not to pursue surgical repair due to mortality risk. She elected for comfort care, was discharged home, and passed within weeks.

References

Bhatti, Sundus MD1; Omer, Endashaw MD1 1664 A Herald Bleed: A Case Report of an Aortoenteric Fistula Causing an Acute Lower Gastrointestinal Bleed, The American Journal of Gastroenterology: October 2019 - Volume 114 - Issue - p S929 doi: 10.14309/01.ajg.0000596184.67586.21

Brahmbhatt, Parag MD; Phemister, Jennifer BS; Atia, Antwan MD; McKinney, Jason DO; Schmidt, Lawrence MD; Young, Mark MD Herald Bleeding: A Hidden Catastrophe, American Journal of Gastroenterology: October 2013 - Volume 108 - Issue - p S438

Goshtasby, P. (2005, November 15). *Recurrent Aortoenteric Fistula: Case Report and Review.* Recurrent Aortoenteric Fistula: Case Report and Review - ScienceDirect; www.sciencedirect.com. https://www.sciencedirect.com/science/article/abs/pii/S0890509606660435

Voorhoeve, R. (2007, January 8). *Primary Aortoenteric Fistula: Report of Eight New Cases and Review of the Literature - ScienceDirect.* Primary Aortoenteric Fistula: Report of Eight New Cases and Review of the Literature - ScienceDirect; www.sciencedirect.com. https://www.sciencedirect.com/science/article/abs/pii/S0890509606604354