

A Rare Cause of Delayed Life-Threatening Hemorrhage in a Patient with Pancreas Transplant SAINT LOUIS **UNIVERSITY**

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BACKGROUND

- Complications of vascular anastomosis usually occur early after pancreas transplant (PTx) with substantial risk of graft loss and mortality.
- Hemorrhage may result from arterial anastomosis failure, but more commonly from superior mesenteric or splenic vessel ligation.
- We present a challenging case of GI hemorrhage from a pseudoaneurysm (PA) in the implanted vascular Y graft 7 years after PTx

CASE DESCRIPTION

- 45-year-old male 7 years post PTx presented with painless rectal bleeding.
- EGD + colonoscopy: blood throughout duodenum and colon, unable to localize source.
- Push enteroscopy: blood extending into proximal jejunum, unable to localize source.
- CTA: active extravasation into small bowel loop near PTx.
- Mesenteric angiography with IR revealed active extravasation into the jejunum from a PA which had developed off the SMA Y graft anastomosis, eroding into the adjacent duodenal stump. Successful coil embolization performed.
- 2 days later \rightarrow rectal bleeding and required massive transfusion. Unable to localize bleeding source on tagged RBC scan and CTA.
- Emergent mesenteric angiography: contrast leakage into the anstomotic stump beyond the previously placed coil (Fig 1 A).
- A covered stent was placed into the right external iliac artery arresting the bleeding into the SMA anastomotic stump (Fig 1B). Bleeding and shock resolved. He will follow up with transplant surgery.



- PA, AV fistulae, arterial dissection, and stenosis represent rare vascular complications of PTx
- PA, if early, may be the result of surgical technique, infection, severe pancreatitis, or allograft biopsy.
- Arterial anastomotic PA can be asymptomatic or present with symptoms signaling impending rupture such as abdominal pain, pulsatile mass, or endocrine failure.
- Endoscopic localization and management of bleeding from Y graft PA are challenging due to altered anatomy and brisk bleeding.
- Multidisciplinary management is essential: often involves IR guided endovascular hemostasis with possible surgical exploration.
- Stent placement preferred over embolization due to the ability to deploy with precision while maintaining organ perfusion.
- Although guidelines are lacking, it would be reasonable to consider periodic Doppler US to screen for post-operative PA for early detection and preventative endovascular treatment.