Complex Multi-Specialty Management of an Iatrogenic Colospinal Fistula

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Introduction

Colospinal fistulas are a rare phenomena with the most common etiologies following large bowel surgery, ruptured appendicitis, diverticulitis and post-radiation erosion. There are few reported cases in the literature but are associated with extensive morbidity, mortality and reoperations. We present a case following iatrogenic injury during abdominal surgery and describe the subsequent multi-specialty treatment required.

Case

Patient is a 67-year old male who in 2018 underwent a retroperitoneal lymph node dissection for recurrent prostate cancer status post prostatectomy and radiation in 2003 and sustained an aortic and sigmoid colonic injury at an outside institution which were repaired primarily. Ten days later, the patient subsequently developed a life-threatening hemorrhage which was found to be from a left iliac to sigmoid colonic fistula requiring emergent left common iliac ligation with a right to left fem-fem bypass and sigmoid resection with end colostomy. Two months later he developed persistent bleeding from the rectal stump and end colostomy related to an intraabdominal phlegmon presumably from persistent infection from the aortic bifurcation in proximity to the rectal stump.

Case

He was then transferred to our tertiary care hospital with ongoing bleeding and underwent a temporizing aorto-uni-iliac (AUI) Cook stent graft to his right internal iliac artery with coil embolization of his left common, internal and external iliac system to effectively isolate his left hemipelvis.

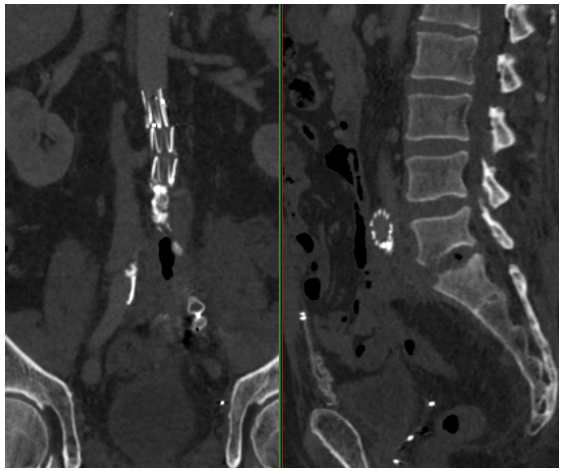


Figure: air-tracking around AUI graft (left); air and phlegmon around disc space tracking to rectal stump (right)

Case

He did well over the next several months but then started complaining of severe back pain and fevers and on CTA was noted to have gas around his left common iliac artery and rectum tracking to his spine. After extensive counselling he was taken to the OR by both colorectal and vascular surgery for an extra-anatomic bypass (right ax-fem) with AUI graft explant and was found to have a chronic blowout of the rectal stump eroding into the L5-S1 disc space. With the assistance of neurosurgery, the fistula to the disc space was debrided and the rectal stump was resected to the mid-rectum. The patient tolerated surgery and was subsequently discharged and is doing well now 2-years postoperatively tolerating a diet and ambulating without concern.

Discussion

Arterial and colonic injury during abdominal and pelvic dissection can lead to devastating consequences both acutely and chronically. The multi-faceted approach of tertiary care hospitals allows patients with complex conditions such as an aorto-spinal fistula to have improved care. Not only is a colospinal fistula rare and of diagnostic interest but requires multiple surgical specialties for diagnosis, treatment and follow up.