A Case of Aorto-Bi-Iliac Artery Bypass Graft Presented with Life Threatening Lower Gastrointestinal Hemorrhage Due to Arterio-Enteric Fistula

Sultan R. Alharbi
Radiology Department, King Saud University, Riyadh, Saudi Arabia

Arterio enteric fistula (AEF) defined as abnormal connections between an artery and the adjacent segment of the bowel. It can occur either in the setting of a primary process involving the aorta and the gastrointestinal tract or, more commonly, secondary to previous aortic reconstructive surgery. Secondary Aorto-enteric fistula (AEF) is a severe complication after aortic surgery.

A 57-year-old male underwent Aorto-bilateral common iliac artery graft with re-implantation of the bilateral renal arteries for juxta-renal AAA before 6 years. He presented with abdominal pain and lower gastrointestinal hemorrhage for 1 day. Urgent endoscopy done and no source of bleeding could be identified. CT angiography was performed and showed an arterio-enteric fistula without active bleeding. Few hours later, patient developed severe lower gastrointestinal hemorrhage and become hemodynamically unstable. He was resuscitated with IV fluid and blood transfusion. Patient sent to interventional radiology suite for intervention.

CT Angiogram: Axial, sagittal and 3 D reformatted images show the arterio-enteric fistula between the right common iliac part of the graft and ileal loop.

Right CFA accessed and angiogram performed. Arterio-enteric fistula without active extravasation was seen. A 10 mm balloon mounted covered stent is placed. Post stenting angiogram shows exclusion of the fistula.

2 years follow up CT axial, sagittal and coronal reformatted images show patent covered stent. No fistula or extravasation.

Patient was discharged home with life-long antibiotic. He had clinical and imaging follow up at 6,12,18 and 24 months. Patient remained clinically stable and free from bleeding and sepsis.

AEF is rare, although it represents a significant clinical entity associated with high morbidity and mortality. This mandates rapid diagnosis and life saving intervention. Definite treatment is surgical with graft explantation extra-anatomical arterial bypass and bowel resection. Endovascular stent graft repair is an emerging alternative therapeutic option for the management of AEF achieving rapid control of bleeding with minimal insult, and eliminating the complications associated with open surgical repair.