Endovascular Aneurysm Repair of Secondary Aortoenteric Fistula: Early Result does not mean Late Result.

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Introduction

Secondary aorto-enteric fistula (AEF) remains one of the most challenging clinical scenarios. Endovascular treatment for this condition still has had controversial outcomes. We present a complicated case addressing unusual consequences of endovascular repair of AEF.

Case

A 73-year-old male had an infected para-anastomotic aneurysm with secondary AEF 1 year after open repair of AAA. Hemoculture grew *B. pseudomallei*. He underwent endovascular repair using an aortic tube graft. The patient remained asymptomatic for 2 years after repair.

He later developed *E. coli* septicemia. CTA revealed proximal disease progression of aneurysm which was treated by proximal aortic stent graft extension with parallel grafts for reno-visceral arteries [2 chimney grafts for RRA and SMA, and 1 periscope graft for LRA (Figure 1 and 2)].

However, he still had recurrent septicemia. It was proved to be stent graft infection on PET-CT (Figure 3) which mandated open conversion. Intraoperative finding showed AEF involving jejunum of which segment was resected and detached from the aneurysm (Figure 4).

However, he developed peritonitis in early postoperative period. CTA revealed occlusion of SMA stent but its configuration still be intact, also severe stenosis of celiac artery that was also shuttered by RRA chimney graft (Figure 5–6). Re-laparotomy was performed and revealed multiple sites of small bowel necrosis with perforations, requiring resection of affected parts. However, he suffered septic shock and passed away 5 months after the last operation.

Discussion

Late re-infection of stent graft is a serious complication of EVAR for AEF and it might require subsequent open operations, such as detachment of involving bowel segment or aortic sac debridement. Manipulation during the operation should be very cautious, it may jeopardize the previous repair as our case in which SMA stent thrombosis was suspiciously caused by retractor that could result in kinking of native SMA against the stiff end of SMA chimney graft.