Emergent Surgical Conversion during endovascular procedure for Leriche's disease

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A 45-year old- male patient visited to our hospital for complaining of aggravated both limb claudication. Preoperative CT angiogram showed mild stenosis at celiac artery, severe focal stenosis at superior mesenteric artery ostium, near total occlusion at both renal artery, severe atherosclerotic obstruction at distal abdominal aorta and total occlusion of right ilio-femoral arteries up to femoral artery bifurcation (Fig. 1). Endovascular procedures were done before massive retroperitoneal bleeding at right EIA: Seal bifurcated stent graft extension (12mmx80mm) and Seal Hercules vascular(14mmx100mm) at infra-renal aorta, Absolute pro stent(8x100mm) at left iliac artery, Viabahn stent grafts(10mmx100mm and 7mmx100mm) at right iliac artery(Fig.2). Surgical conversion was decided due to these problems: 1st problem was that left renal artery was occluded due to thromboembolism and fragile floating thrombosis at infra-renal aorta, 2nd problem was uncontrolled active bleeding at right iliac artery although Viabahn stent-grafts were deployed(Fig.3). To solve 1st problem, left renal artery was dilated by 4mm stenting and 16mm stent was deployed to put the floating thrombosis up against aortic wall by periscope manner(Fig.4). To solve 2nd problem, retroperitoneal bleeding was well controlled by Medtronic distal stent graft 13-13mm insertion(Fig.5). After these procedures, we could find 3rd problem: blood flow was very sluggish because of right iliac limb stent compressed by narrow iliac bifurcation area diameter. To solve 3rd problem, aorto-uni-iliac stent graft to left limb and left-to-right femorofemoral bypass were performed(Fig.6). There was no perioperative complications. Postoperative CT angiogram showed patent left renal artery stent, no interval change of the SMA stenosis, good blood flow in aorta to left femoral artery stent without luminal stenosis and patent femoral artery to femoral artery bypass graft with good distal right femoral arterial flow(Fig.7).