

Innovative use of covered stents in acute lower limb ischaemia due to aorto iliac occlusions - two case reports

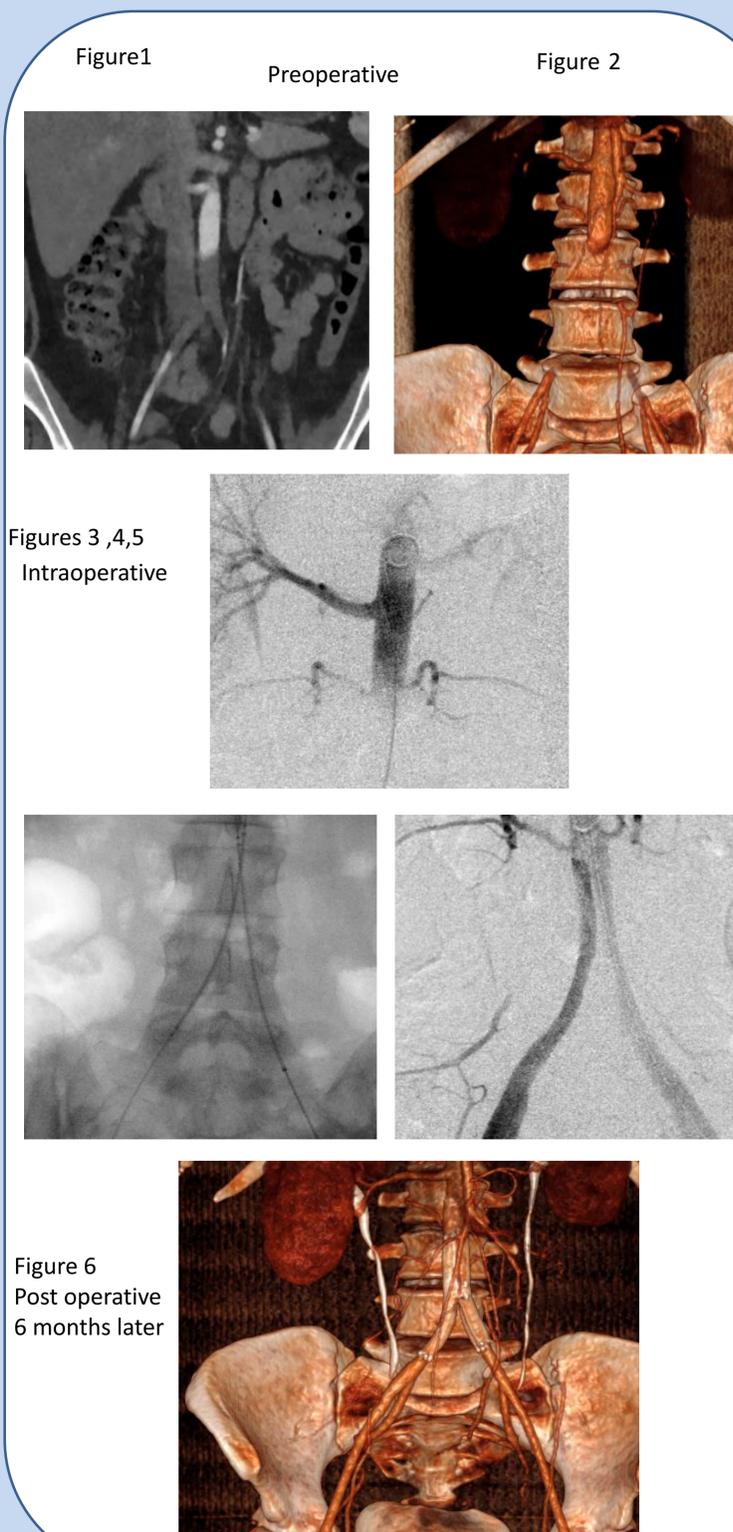
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Introduction

Acute lower limb ischaemia (ALI) has traditionally been treated by open surgery. We present 2 cases of ALI which were successfully treated in our unit with a hybrid approach using a combination of open and endovascular techniques.

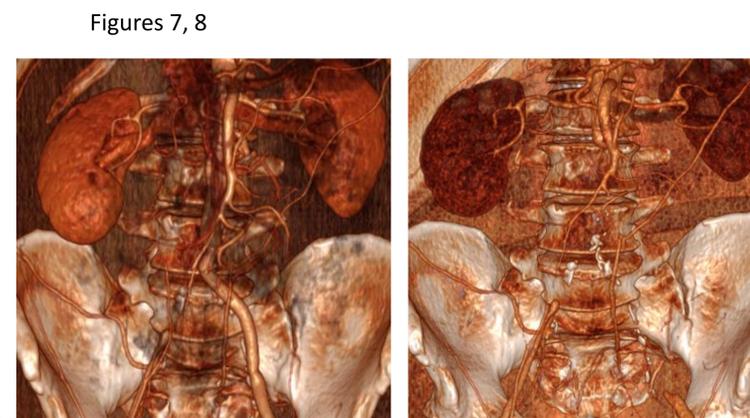
Case 1

A 31 year old woman presented with bilateral ALI. Background of multiple DVTs, miscarriages and coronary stents. CT angiogram (CTA) showed acute occlusion of the distal infrarenal aorta (fig 1,2) and both common iliac arteries confirmed by diagnostic angiogram in the operating room (fig 3). Attempts at balloon embolectomy & suction thrombectomy were unsuccessful. Her aorta measuring 16 mm in diameter was too narrow to accommodate standard EVAR devices. Two ViaBahn stents were deployed as kissing stents (fig 4,5) into the occluded aorto iliac segments to restore inflow, followed by femoral arterial patch repairs and lower leg fasciotomies. She made a good recovery, discharged home on warfarin (fig 6). Diagnosis: Anti phospholipid syndrome.



Case 2

A 65 year old man underwent successful aorto bi iliac bypass with biosynthetic graft for a mycotic AAA. 6 months after discharge, he occluded the right limb of the graft causing claudication treated conservatively (fig 7). He presented 10 months later with ALI of the left lower limb. CTA showed complete occlusion of the infrarenal aorta at L2/L3 with bilateral iliac occlusion (fig 8). He was taken to the OR and left femoral vessels were exposed. IR guided suction thrombectomy was performed to clear the graft of thrombus. Revascularisation of the left leg was completed with lining of the body and left limb of the graft with a Medtronic EVAR limb and femoral embolectomy (fig 9,10,11). This resolved the acute ischaemia, but he went on to develop disabling claudication. He had explantation of biosynthetic graft and aorto bi iliac bypass using femoral veins few months later.



Conclusion

ALI can be successfully treated cases by endovascular methods. Our 2 cases prove that covered stents may be used as definitive or bridging treatment for ALI in selected cases.

Reference

1. Mark A Creager MD et al, N Engl J Med 2012; 366:2198-2206