

An urgent axillopopliteal bypass to treat a bleeding infected anastomotic groin pseudoaneurysm

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INTRODUCTION

A 59-year-old-male transferred from a local hospital with a bleeding sinus at his left groin, controlled with external bandaging. He underwent at another hospital a femorofemoral bypass due to left leg claudication, five years ago, an aortobifemoral bypass 3 years ago, a graft extension of the left limb to profunda, 1 year ago, for thrombotic complications. Postoperatively, a left groin infection was treated with debridement leading to a draining sinus. Eventually, a massive bleeding occurred through this sinus, six months later. The patient transferred to our hospital and expeditiously to the operating theater after a computed tomography angiography (fig 1). The sinus was excised and a ruptured pseudoaneurysm

was found. Segments of the existing thrombosed grafts were removed and the orifices of the deep profunda femoris artery were sutured from within, as they were the source of bleeding. The wound was packed with iodinated gauzes and isolated with adhesive drape. The skin was sterilized again, and the patient underwent an axillary-popliteal bypass. Cultures isolated *Acinetobacter baumannii*. He received Daptomycin 500mg o.d. (replaced eventually with Vancomycin 1gr b.i.d due to raising creatine phosphokinase levels) and minocycline 100mg b.i.d. He had an uneventful recovery, discharged on 33rd postoperative day under ciprofloxacin 500mg b.i.d., minocycline 100mg b.i.d., *rivaroxaban 20mg o.d.* and acetylsalicylic acid 100 mg o.d. He remains asymptomatic, with palpable pedal pulses, 1 year later (fig 2).

The axillopopliteal bypass is usually reserved as a last resort, when previous revascularization options for atherosclerotic disease have failed. Previous graft infection and onco-vascular surgical resections with scarring and/or post-radiation arteritis are other current indications. Nowadays, there is an absence of publications as most series were published more than 25 years ago. Patency and limb salvage vary at about 60-80% at 1 year and patency rates at about 40% at 3 to 5 years. Due to high co-morbidity, mortality is reported to be up to 30-50 % at 1 year. Currently, the use of ringed instead of

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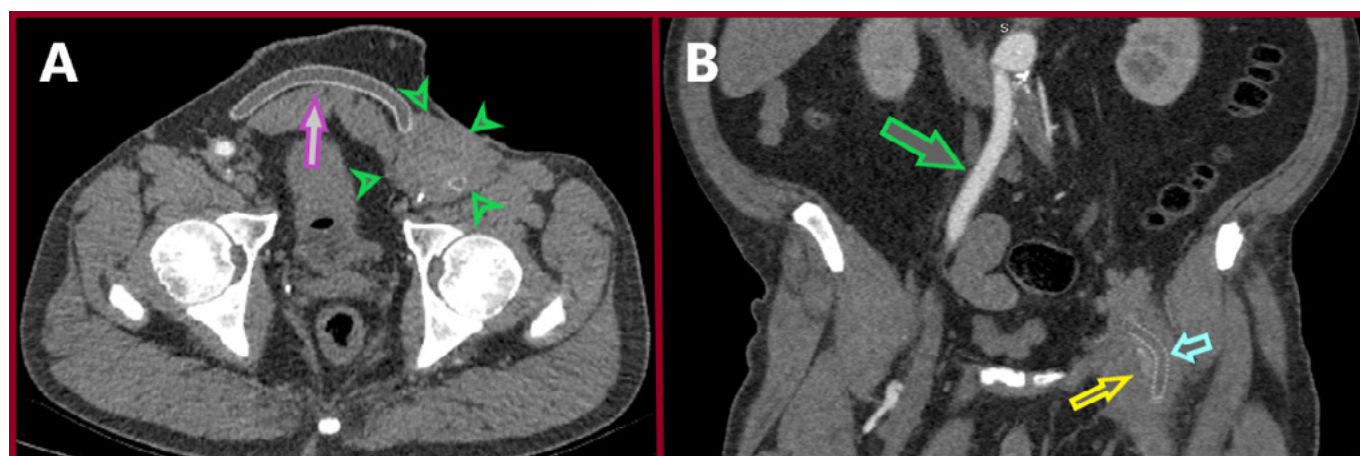


Figure 1: A computed tomography angiography revealed an aortofemoral left limb and femorofemoral bypass thrombosis and a patent right limb of an aortobifemoral bypass. A blood pooling was apparent in the left groin, arising from the orifices of the profunda femoral artery. Signs of Leriche syndrome are apparent in the aortoiliac system (A: green arrowheads: anastomotic pseudoaneurysm with a bleeding sinus, purple arrow: thrombosed femorofemoral bypass. B: green arrow: blood pooling due to anastomotic hemorrhage).

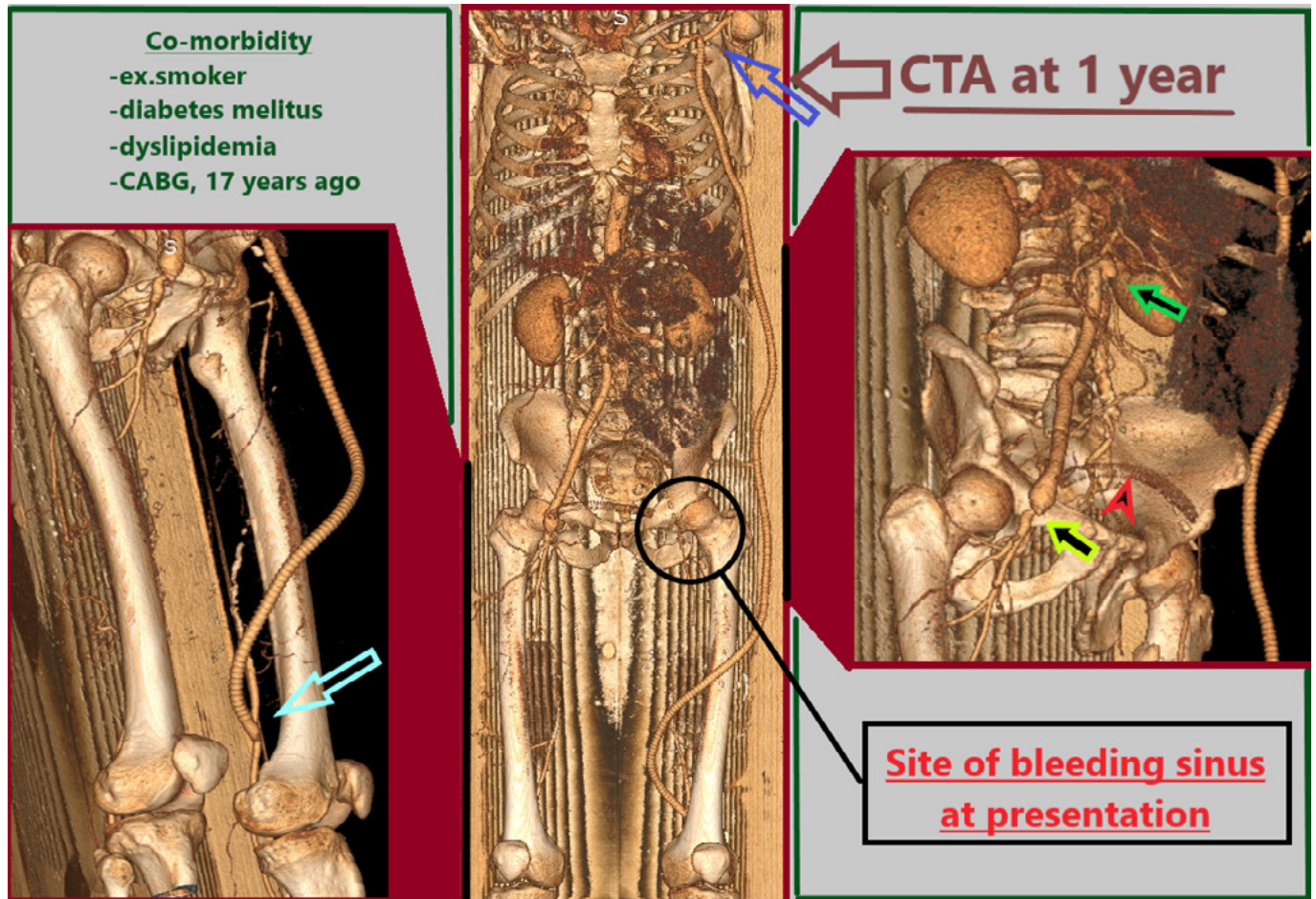


Figure 2: The route of the axillopopliteal graft. Two grafts 70cmx8mm Ringed PTFE (W.L. Gore & associates) were used, which were interconnected in an end-to-end fashion, after completion of the proximal and distal anastomoses (The graft had a lateral route but at the mid-thigh it crossed the anterior femoral area and connected end to side with the first part of the popliteal artery), (Blue arrow: proximal anastomosis, light blue arrow: distal anastomosis, green arrow: stump of the thrombosed left aortofemoral limb, light green arrow: patent right aortofemoral anastomosis, red arrowhead: thrombosed femorofemoral bypass).

unsupported PTFE grafts, 8mm in diameter (vs 6mm in older trials), and the modern antithrombotic treatment (anticoagulation plus antiplatelets based on the Voyager-Pad trial) may give better results.

REFERENCES

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