2001 A case of refractory acute lower limb ischemia successfully treated by endovascular therapy with heparin-coated stentgraft

A 36 year-old man was transferred to the emergency department due to pale left lower limb with severe resting pain. Contrast CT scan showed occluded left superior femoral artery (SFA) in proximal site without collateral flow to lower leg. Emergent surgical thrombectomy was performed, and massive red thrombus was removed from SFA. Next day CT scan revealed reocclusion of left SFA. Second surgical thrombectomy was done with adjunctive ballooning in lower leg arteries. Angiography at third day showed reocclusion of left SFA, again. Intravascular ultrasonography revealed occluded vascular lumen filled with thrombus in SFA and popliteal artery (PA). To get lumen expansion without prolapse of thrombus, heparin-coated stentgrafts, Viabahn, were implanted from PA to SFA. Additional metallic stents were implanted from ostial SFA to common femoral artery. After adjunctive ballooning and thrombus aspiration in lower leg arteries, superior blood flow to lower leg was achieved. Direct-catheter and intravenous thrombolysis were undergone in 7 days. In addition, both anticoagulant and dual-antiplatelet agents were administrated. Angiography at 15 days after endovascular therapy revealed no stenotic lesion in left lower limb arteries. Endovascular therapy with heparin-coated stentgraft could be an alternative strategy in patients with acute limb ischemia.