A case of Viabahn stent-graft placement for occluded femoropopliteal bypass

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A 74-year-old man admitted to our hospital due to severe intermittent claudicaton. He had underwent bilateral femoropopliteal (FP) bypass surgery 15 years ago with PTFE graft. Duplex ultrasonography demonstrated a newly formed thrombotic occlusion of left FP bypass. We performed endovascular therapy (EVT) with aspiration thrombectomy with "Indigo? system" and after balloon dilatation, restored satisfactory antegrade flow, but the F-P bypass graft occluded again in the next day and claudication recurred. Following a vascular team discussion, bypass redo was difficult because of heavy calcified stenosis at popliteal artery for distal anastomosis and poor saphenous vein for distal bypass.

We performed surgical thrombectmy and repeat EVT with stentgraft. We can remoded organized thrombus with Fogarty catheter, relining of the FP bypass with a Viabahn? stent-graft, and deployment of a Supera? interwoven stent at the popliteal artery to secure outflow. After the procedure, the patient's intermittent claudication resolved without any complication. We report this challenging case and discuss therapeutic considerations for managing FP bypass failure.