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A 67-year-old man undergoing hemodialysis was admitted with chronic limb-threatening ischemia and infected gangrene of the left toes that could not be controlled conservatively. He underwent left below-the-knee amputation; however, necrosis developed at the amputation stump shortly after surgery, suggesting persistent ischemia of the left lower extremity.

Endovascular therapy was therefore performed for a severely calcified, subtotal occlusive lesion of the left common femoral artery (CFA). Through a crossover approach from the right CFA, an interwoven nitinol stent was deployed in the left CFA. After stent implantation, an angiographic catheter was advanced into the superficial femoral artery (SFA) to obtain distal angiography. During catheter advancement, the catheter inadvertently entered a subintimal space near the distal edge of the stent, resulting in extensive dissection with a large false lumen extending from the CFA to the SFA and slow flow in the deep femoral artery (DFA).

Balloon angioplasty using a scoring balloon failed to create adequate re-entry or restore DFA flow. Therefore, guidewires were advanced separately into the true and false lumens. Both guidewires were then inserted together into the lumen of a 0.035-inch Wingman crossing catheter. Using the WINNER technique, fenestration between the true and false lumens was successfully created, resulting in restoration of blood flow to the DFA.

The WINNER technique may be a useful bailout strategy for iatrogenic femoral artery dissection with compromised side-branch flow when conventional balloon fenestration is unsuccessful.