1150 **Successful Limb Salvage in a Case of Popliteal Artery Occlusion Caused by Organized Thrombus**

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Case Summary:

A 77-year-old male on daily hemodialysis with a history of endovascular therapy (EVT) for a left popliteal artery occlusion at another institution presented with recurrent occlusion, which has been managed conservatively. He was referred to our hospital due to the resting pain and ischemic toe discoloration of the left lower limb.

Endovascular Procedure:

The procedure was initiated via an ipsilateral antegrade approach from the left common femoral artery using a Parent Select 5082 guiding-sheath. Angiography revealed occlusion of P2 segment of the popliteal artery, with the peroneal and dorsalis pedis arteries run-off. The lesion was initially crossed with a Gladius wire using IVUS guide manner into the peroneal artery. Suspecting a thrombotic lesion, aspiration was attempted using a GoGo-catheter and a TVAC catheter, but with insufficient thrombus removal. Mechanical thrombectomy with an Indigo CAT6 catheter was then performed, revealing organized thrombus lodged in the P3 segment that resisted recanalization. Therefore, a Fogarty catheter was used to move the organized thrombus proximally above the knee, enabling sealing with a stent. Despite an Eluvia stent deployment, angiography showed distal embolization and no-reflow phenomenon. As vasodilators were ineffective to resolve the no-reflow phenomenon, we attempted to recanalize the anterior tibial artery. Using IVUS guidance, the origin of the anterior tibial artery was identified and crossed with a Halberd wire. A microcatheter was advanced, and step-down to a CrossLead Tracker allowed successful wire passage into the dorsalis pedis artery. However, due to severe calcification, neither a small-diameter balloon nor a Wingman catheter could be advanced even with guide extension support. As a final option, treatment was shifted to the posterior tibial artery despite poor run-off. The Halberd wire was advanced with microcatheter backup, followed by step-down to a Gladius wire. Although passage into the lateral plantar artery proved unsuccessful, the wire was eventually navigated into the medial plantar artery. Fortunately, a small-diameter balloon could be delivered, allowing sequential POBA and achieving a satisfactory straight-line flow from the popliteal to the medial plantar artery. The procedure was successful, and the patient's symptoms improved, enabling ambulation and discharge.

Conclusion:

We report a challenging case of popliteal artery occlusion caused by organized thrombus. Despite technical difficulties, successful limb salvage was achieved through comprehensive utilization of currently available devices and techniques. We present this case with brief discussion.