## P-01 A Case of Successful Wound Healing Following Minor Amputation at the Lisfranc Joint for Acute Arterial Occlusion of the Left Lower Limb

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We report a case of successful wound healing after minor amputation at the Lisfranc joint in a patient with delayed presentation of acute lower limb arterial occlusion.

A 74-year-old man was emergently transported to our hospital with a three-day history of left lower limb pain and motor impairment. On admission, electrocardiography revealed previously undiagnosed atrial fibrillation. The left lower limb was cold and discolored, and a diagnosis of acute arterial occlusion due to a cardioembolic event was made. Emergency endovascular therapy (EVT) was promptly initiated. Initial angiography revealed thrombotic occlusion of the left popliteal artery. Thrombectomy was performed using CAT8, CAT6, and a conventional aspiration catheter, followed by balloon angioplasty. However, antegrade flow in the below-knee arteries showed minimal improvement, and final angiography demonstrated poor distal perfusion beyond the ankle.

Continuous intravenous heparin was administered as anticoagulant therapy. Subsequently, the patient developed acute decompensated heart failure and basilar artery occlusion. During this time, necrosis of the foot progressed. A second EVT was attempted, but a large volume of thrombus remained in the distal vessels, and restoration of adequate blood flow proved difficult. Angiography also revealed disruption of the vascular architecture, and revascularization was deemed unfeasible for wound healing.

Although below-knee amputation was proposed, the patient strongly wished to preserve the foot. Therefore, a minor amputation at the Lisfranc joint was performed. Negative pressure wound therapy (NPWT) was applied postoperatively to promote granulation tissue formation. During NPWT, angiography performed as part of EVT for below-the-knee arteries revealed increased neovascularization in the affected area. Subsequently, skin grafting was performed, resulting in successful wound healing.