**CASE STUDY**

**Lower Extremity Arterial Lysis After Acute on Chronic Thrombosis**

**Patient History**

A 54yo male presented to the emergency department with worsening of left calf claudication, and now with rest pain

- History of hypertension, COPD, morbid obesity, atrial fibrillation and end-stage ischemic cardiomyopathy status post 3 LVAD (HeartMate XV) devices, the last being in December of 2007
- The right popliteal was determined to have chronic thrombus that could not be crossed with a wire after multiple attempts
- ABI 0.54 on the right, 0.37 on the left
- Duplex showed no flow in the left common femoral artery or distally
- Arteriogram via the right femoral artery revealed left common, profunda, and superficial femoral as well as distal tibial occlusion due to emboli
- Evidence of chronic thrombosis to the right lower extremity with less severe occlusive disease than the left

**Treatment**

EKOS® 50 cm treatment zone device was placed from the left femoral down to the knee joint in order to lyse the more recent acute thrombus

- EKOS® thrombosis treatment with 0.5 U/hr reteplase, and 500 U/hr heparin

**Results**

Patient brought back 12 hours after EKOS® was placed

- Left SFA was patent except for some minimal non-flow limiting thrombus in the proximal SFA and thrombus in the profunda
- Decision made not to reposition device and continue lysis due to patient’s difficulties lying flat on the angio table and concomitant heart failure
- Brief attempt was made using AngioJet™ (Boston Scientific) of the proximal SFA without any change
- Post-lytic ABI was significantly improved at .77 and the patient was symptomatically greatly improved

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