Clinically driven target lesion revascularization in patients with CLI treated with overlapping EES stents for below the knee long segment lesions

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BACKGROUND

Critical Limb Ischemia (CLI) is a formidable disease process with significant associated morbidity and mortality – may ultimately lead to limb loss.

Small vessel size, large number of chronic total occlusions, diabetic patients with long calcified lesions, vessel tortuosity make treatment challenging.

PURPOSE

Evaluate long-term outcomes of patients with critical limb ischemia and long-segment (>38mm) infrapopliteal lesions treated with everolimus-eluting coronary stents (EES) with prior failed angioplasty (PTA).

METHODS

All cases in which EES were used were identified using the department's inventory management system (QSight)

Patient's who had 2 or more overlapping EES placed in a single, native infrageniculate vessel were included in the analysis

Angiograms were reviewed to confirm type of intervention, stent placement and lesion characteristics

ES		

Patients, n	63
Male	39 (61.3%)
Age, years	73±11.5
Comorbid Conditions	
Coronary artery disease	46 (73.0%)
Diabetes	36 (57.1%)
Chronic kidney disease	25 (39.7%)
Hypertension	58 (92.1%)
Treated limbs, n	65
Rutherford Grade	
Class 4	14 (21.5%)
Class 5	23 (35.4%)
Class 6	28 (43.1%)

Major amputation free survival is substantially higher in Rutherford 4/5 patients at 1 and 2-years (87.8% and 84.3%) when compared to Rutherford 6 patients (51.5% and 46.4%).

-	0.0
Treated vessels	66
Chronic total occlusion	35 (53.0%)
Reference vessel diameter, mm	3.5±0.4
Baseline lesion length, mm	103.1±52.6
Number of overlapping stents	2.8 [2-3]
Target vessels	66
Anterior tibial	24 (36.4%)
Posterior tibial	10 (15.2%)
Peroneal	14 (21.2%)
TP trunk into posterior tibial	8 (12.1%)
TP trunk into peroneal	10 (15.2%)
Immediate technical success	64/65 (98.5%)

