Calcification in Peripheral Arterial Disease

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Patient Profile

This is a 60 years old gentleman with background history of triple vessel coronary artery disease, hypertension, dyslipidemia and cigarette smoking. He presented with non-healing left foot ulcer for 4 months. There was also severe resting leg pain, especially at night. He was treated as chronic-limb threatening ischemia.

Lesion

Lower limb angiogram showed severe calcified stenosis at proximal left superficial femoral artery, followed by chronic total occlusion popliteal artery. Distal runoffs were poor.

Strategy

Retrograde right femoral crossover.

Left superficial femoral stenosis and popliteal chronic total occlusion segment crossed with V-18 guidewire and 2.5 x 100mm over-the-wire balloon.

Sequential predilated popliteal artery with balloon 2.5 x 100mm, 4.0 x 100mm and scoring balloon 4.5 x 40mm. Heavily calcified proximal superficial femoral artery. Decided to debulk with Jetstream rotational atherectomy.

SpiderFX embolic protection device deployed at distal superficial femoral artery.

Rotational atherectomy performed for 4 short runs. Good luminal gain.

Embolic protection device retrieved.

Stented popliteal- mid superficial femoral artery with Supera self-expanding stent 5.0×100 mm and 5.5×60 mm.

Proximal superficial femoral artery treated with plain old balloon angioplasyy 5.0 x 100mm.

Final result good with improved distal runoffs.