1141 Successful SUPERA stent implantation in common femoral artery occlusive disease guided by CO2 angiography for a patient with severe renal dysfunction.

A 83 year old male patient presented life-limiting claudication and had referred to our institute. He had received previous bilateral iliac stenting more than ten years ago, which seemed to be patent. However his ankle-brachial was 1.04/0.59 which corresponded with his left-sided claudication. Due to his severely impaired renal function (serum creatinine level: 3.98) and suspected iodine contrast allergy, any investigation requiring contrast enhancement was suspended. Magnetic resonance angiography and duplex ultrasound indicated total occlusion of left common femoral artery (CFA). After discussion over risks and benefits of both surgical repair and endovascular procedure, the patient preferred an endovascular approach. Carbon-dioxide(CO2) angiography and Intra-vascular ultrasound (IVUS) guided endovascular treatment was performed. Contra-lateral crossover approach was made with a 6-fr guiding sheath. CO2 Angiography revealed a total occlusion in CFA. Carefully controlled 0.014 inch guide wire crossed the lesion. IVUS findings confirmed intra-plaque crossing of the guide wire. after pre-dilatation with 4mm scoring balloon and 6 and 7mm non-compliant balloon, there was still an eccentric calcified stenosis. A 6.5x6 mm SUPERA stent was successfully implanted carefully without elongation, and final CO2 angiogram showed good result. Claudication was resolved immediately after procedure.

CFA lesions often involve eccentric calcified nodules. Plain balloon angioplasty is likely to stretch only the healthy side of the vessel and provoke elastic recoil or target lesion failure sooner or later. SUPERA stent differentiates itself from conventional products by its minimum chronic outward force and re-puncturable structure. Scaffolding the CFA with SUPERA stent might be an option for patients with severe CFA disease who need revascularization and intolerance for surgical repair.