

10004

Successful endovascular therapy with the idea of five-stage rocket system for chronic total occlusion with severe calcified plaque.

A 71-year-old woman with hemodialysis was admitted to our hospital with intractable pain at rest. ABI was 0.65 on the right side, and contrast CT image could not reveal clearly the lumen of common iliac artery (CIA) due to severe calcification. Common femoral artery (CFA) was nearly pulseless, so we concerned CIA was occluded. We decided to try revascularization. The right CFA was accessed with 6-F sheath, and initial angiogram showed severe tortuosity and total occlusion in IA. We used several devices retrogradely but could not pass wire because of lesion characteristics. Therefore, we decided to set up system via left CFA. Wire with 6-F JR4.0 was manipulated antegradely but easily prolapsed to abdominal aorta due to proximal solid cap. Unfortunately, catheter was deformed by severe tortuous IA. We conceived five-stage rocket system; 6-F sheath, 6-F JR4.0 (cut off about 70cm), 4-F GLIDECAS2, 2.5-F Xsupport and wire. We used our system retrogradely and Nexus 50g was passed through the lesion by extra strong backup support. We used Coyote 2.0x40mm to dilate the lesion and assessed lesion characteristics by IVUS. IVUS revealed the lesion contained mainly calcification and the site of wire passed was almost intraplaque of CTO. Sequentially, the lesion was dilated by some balloons and EPIC 10.0x80mm was deployed. Final angiogram showed good flow from Abdominal Aorta to CFA through the stent. After procedure, ABI was 1.02 and her symptom was diminished. We report our system was useful and worth trying when you want a strong backup support.