1142 A case of successful limb salvage for CLI patient with triple CTO from the left SFA to BTK using bi-directional approach at step by step.

A 82 years old male suffering from diabetes mellitus had tissue necrosis in his left toes and heel (Rutherford 5). Angiography showed long CTO at the left SFA, CTO from the left popliteal artery to tibio peroneal trunk (TPT), and CTO at the distal part of PTA. At first, we did EVT for CTO lesion of left SFA at 1st session, and then we did EVT for CTO lesion of left BTK at 2nd session.

1st session:

We did our procedure by bi-directional approach from the left femoral artery and the left popliteal artery. After a guide wire from retrograde approach successfully made rendezvous to sheath from antegrade approach, three 7.0mm SMART stents was deployed from distal part of SFA to proximal part of SFA, in such a way as to fully cover the CTO lesion. Final angiography showed the blood flow in the left SFA was improved.

2nd session:

First, 6.0Fr sheath was inserted from the left femoral artery. Guide wires from antegrade approach couldn't pass through the CTO lesion from the left popliteal artery to the left TPT. Next, we did retrograde puncture from distal part of PTA. Guide wires from retrograde approach was advanced through the true lumen of the left popliteal artery. After a guide wire from retrograde approach made rendezvous to guiding catheter from antegrade approach, 2.0mm balloon was dilated from PTA to popliteal artery. Furthermore, 4.0mm balloon was dilated from TPT to popliteal artery. Then, we tried to cross the guide wire to distal PTA, but a guide wire from antegrade approach couldn't pass through CTO lesion of distal PTA. So, we did distal puncture from medial planter artery using 22G needle. FPW19-FMD-009 from retrograde successfully crossed the CTO lesion to the proximal true lumen of distal PTA. After a guide wire from retrograde approach made rendezvous to micro catheter from antegrade approach, 2.5-3.0/210mm balloon was dilated from medial planter artery to proximal part of PTA. Final angiography showed the blood flow from the left SFA to the left planter artery was improved.

In consequence, tissue necrosis in his left toes and heel were healed in one month.

In this way, we succeeded in recanalization of CTO from proximal part of SFA to distal part of BTK using bi-directional approach at step by step.