Case Summary. This chronic heart failure case undergoing the CRT device implantation occurred the left ventricular lead dislodgement and the left brachiocephalic vein occlusion. We succeeded the CRT device re-operation using cardiovascular intervention techniques.

TCTAP C-185
Successful Endovascular Intervention for Below-the-Knee Arteries Using Various Bailout Techniques
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[CLINICAL INFORMATION]
Patient initials or identifier number. T.O

Relevant clinical history and physical exam. We present the case of a 60’s female with hypertension, dyslipidemia and hemodialysis due to diabetes mellitus. She presented rest pain of her right leg and was admitted to our hospital in August 2014.

Relevant test results prior to catheterization. Baseline skin perfusion pressures were 38 mmHg at the dorsal area and 30 mmHg at the planter area.

Relevant catheterization findings. Baseline lower-limb angiography showed severe stenosis at right popliteal artery (POP) and total occlusion at below the knee (BK) arteries. We could see only distal peroneal artery (PA) through bridge collaterals from proximal PA.
Procedural step. We performed endovascular intervention for right POP-BK arteries. After a 4.5Fr guiding sheath inserted antegrade into the right proximal POP artery, control angiogram showed that the only remaining distal PA flow was disappeared because of wire dissection at distal POP. So we performed antegrade wiring immediately, but the wire could not cross the lesion. We tried to perform high PA direct puncture under pretty poor angiogram guidance to build bi-directional approach. Fortunately, we were successful in this puncture and wire rendez-vous technique was performed. Finally PA was recanalized. Furthermore, trans-collateral angioplasty was performed through perforator branch from distal PA and we got posterior tibial artery. But, after these procedures, angiogram showed several bleeding points from mid PA. One of those due to wire perforation was stopped with wedging microcatheter into feeding branches and the other due to PA direct puncture was obliged to be stopped using thrombin injection around bleeding points. The final angiogram showed perfect result.

Case Summary. We performed additional procedure to get anterior tibial artery after a few days and perfect re-vascularization was achieved. After all procedure, she was completely free from symptoms. We report a case of successful endovascular intervention for BK arteries using various bailout techniques.