1160 **A Case of Chronic Total Occlusion of the Superficial Femoral Artery Following Femoro-Femoral Bypass with Careful Consideration of Access Site Selection**

Tomonari Takagi1, Akira Miyamoto1, Shigehiro Ishigaki1, Toru Nakanishi1, Yasutaka Yamauchi1

[1]Cardiovascular center, Takatsu General Hospital, Japan

A 73-year-old woman was transferred to another hospital in December, Year X-1 due to ventricular fibrillation. During the treatment, an intra-aortic balloon pump (IABP) was inserted via the left common femoral artery (CFA), resulting in acute occlusion extending from the left common iliac artery to the external iliac artery. In January, Year X, she underwent bilateral common femoral endarterectomy and femoro-femoral (F-F) bypass surgery at the same institution. At that time, both superficial femoral arteries (SFA) were already occluded distal to their ostium but were left untreated. In February, Year X, she developed rest pain and a non-healing ulcer on the left heel, for which she was referred to our hospital for revascularization. Preoperative enhanced CT revealed a long-segment chronic total occlusion (CTO) of the left SFA from its ostium to the distal segment, with severe calcification. The anastomosis of the right CFA was located just proximal to the occluded ostium of the right SFA, and the distance from the left CFA anastomosis to the SFA ostium was only approximately 1.8 cm.

Due to the occlusion starting at the SFA ostium and the severely calcified lesion, stent implantation was deemed essential. However, based on imaging findings, an antegrade approach was considered infeasible. As all infrapopliteal arteries were patent, we decided to proceed with trans-ankle intervention (TAI) via the anterior tibial artery (ATA).

Under ultrasound guidance, the distal ATA was punctured retrogradely, and a 6-Fr guiding sheath was advanced up to the popliteal artery. Owing to the severely calcified lesion, multiple stiff guidewires were required. However, with the assistance of extravascular ultrasound (EVUS) guidance, retrograde guidewire passage up to the CFA was successfully achieved. Intravascular ultrasound (IVUS) confirmed that although part of the wire passed through the subintimal space, it remained largely within the true lumen. A 6.0 mm balloon was inflated without significant indentation, and adequate expansion was achieved. An ELUVIA stent was deployed along the entire occluded segment, and satisfactory angiographic results were obtained, concluding the procedure.

Postoperatively, the patient’s rest pain resolved, and the left heel ulcer healed completely. We report this case of SFA CTO following F-F bypass, in which the selection of the access site required careful consideration.