Successful limb salvage in a critical limb ischemia with bilateral variant of arterial anatomy in below-the-knee lesion.

The patient in our case was an 88-year old male. He was admitted to our hospital for treating of refractory ulcerations in both feet. Contrast computed tomography showed the patency of anterior tibial artery (ATA) alone in both lower limbs. Firstly, we performed endovascular treatment (EVT) for left lower limb. Because the entry point of tibial-peroneal trunk could not be detected, we started trans-collateral angioplasty from the ATA. And we succeeded in recanalization of the peroneal artery (PA). Thereby, the PA turned out to be a donor artery of the plantar artery. Next, we performed EVT for the right lower limb. Because the occluded pattern in the below-the-knee (BK) arteries was similar to the one in the opposite side, we approached retrogradely toward the distal PA, and succeeded in recanalization of the PA. Thereby, we detected the right PA was also the donor artery of the plantar artery. After these treatment, ulcerations in both lower limbs healed favorably, and we could avoid any limb amputation.

We sometimes encounter EVT cases with variant of arterial anatomy in BK lesions. Our case had similar variant on both sides. By referring the anatomical information of the opposite side, we could perform EVT in the second session with reducing the procedure time and irradiation dose.