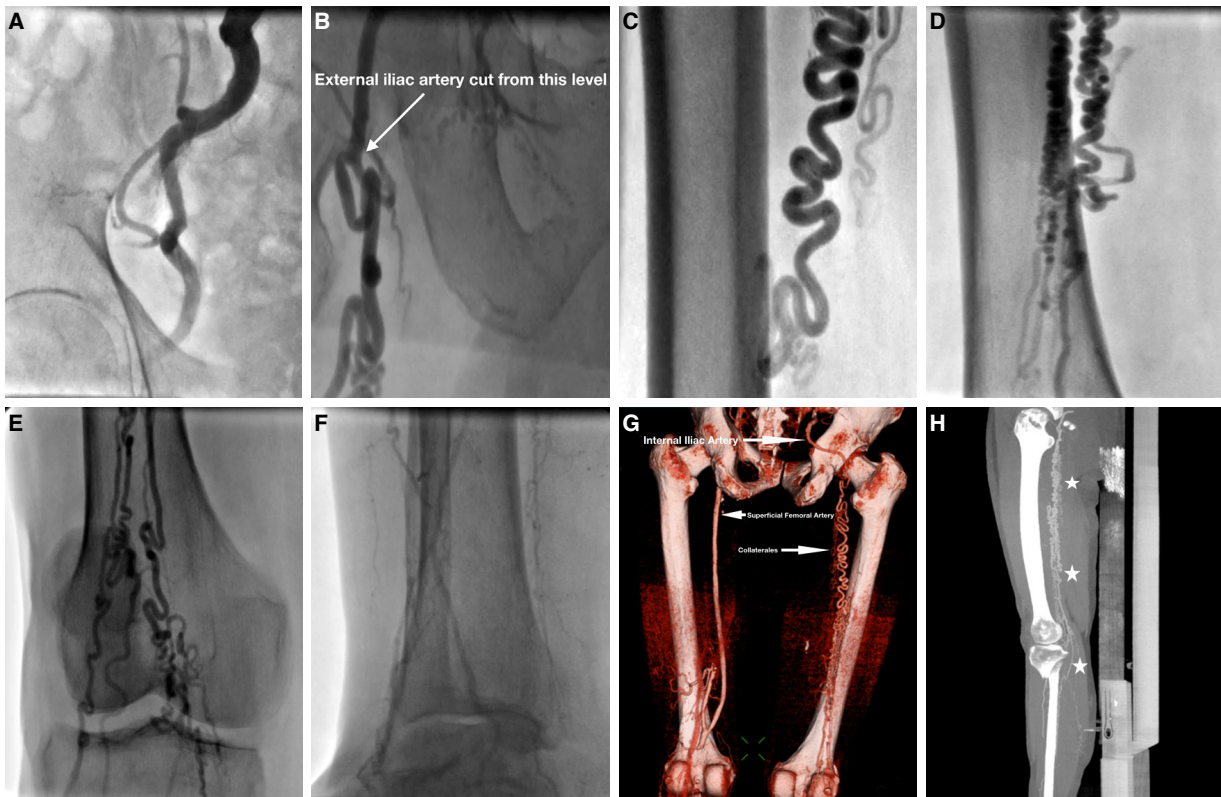


## CASE IMAGE

**Well-developed curly collateral arteries from the right internal iliac artery to the right ankle diagnosed with multimodality imaging***Sag internal iliyak arterden, sađ ayak bileđine kadar uzanan iyi geliřmiř kollateral ađı*ID Semih Kalkan<sup>1</sup>ID Ahmet Karaduman<sup>1</sup>ID Nuri Havan<sup>2</sup>ID Ferhat Keten<sup>1</sup>ID Elnur Alizade<sup>1</sup><sup>1</sup>Department of Cardiology, İstanbul Kartal Kořuyolu High Speciality Training and Research Hospital, İstanbul, Turkey<sup>2</sup>Department of Radiology, İstanbul Kartal Kořuyolu High Speciality Training and Research Hospital, İstanbul, Turkey

A 62-year-old male with a history of coronary artery disease with stent implantation, type II diabetes, and active smoking was admitted with severe lower right extremity claudication and pain at rest (Rutherford class IV). Lower extremity arterial Doppler ultrasonography images showed a biphasic waveform from the right superficial femoral artery to the patellar artery and a monophasic waveform below the knee level. Diagnostic peripheral angiography revealed total occlusion below the external iliac artery with well-advanced and very long corkscrew collateral arteries from the external iliac artery to the ankle (Fig. A-F, Video 1\*). Three-dimensional computed tomography determined that the origin of the collaterals was the internal iliac artery (Fig. G, H). Chronic total occlusions of peripheral arteries may lead to the development of collateral arteries around the lesions. Collateral development is related to angiogenic growth factors, such as vascular endothelial growth factor, fibroblast growth factor, and hepatocyte growth factor. The present case demonstrated the longest, well-developed collateral arteries ever seen in our catheterization laboratory. Currently, the patient is in follow-up with maximal medical treatment.



**Figures–** (A) This image shows the ordinary external iliac artery (EIA), (B) the location of the cut in the EIA before the inguinal ligament, (C) collaterals at the mid-shaft of the femur, (D) the distal femur level view of the collaterals, (E) trifurcation without a view of the patellar artery, (F) and the ankle, also clearly supplied by the collaterals. (G) Three-dimensional computed tomography clearly demonstrating the source of the collaterals, (H) and collateral arteries along the length of the lower right extremity. \*Supplementary video files associated with this presentation can be found in the online version of the journal.