

Crossing CTO Cap in Right Popliteal Artery with Wingman™

CASE HISTORY

A 42-year-old female presented to the clinic with worsening claudication and rest pain of the right foot. An arterial duplex suggested popliteal artery stenosis and a possible chronic total occlusion (CTO). Patient has a history of type 2 diabetes, Rutherford class 3 disease, and smoking.



Pre/post right popliteal artery

PROCEDURE

Ultrasound-guided access to the left common femoral artery was obtained, and a 6F 45cm Roadster[™] sheath was placed up and over the iliac arch. Selective right popliteal angiography was performed. A Berenstein catheter and an Asahi Mongo[®] 0.018" guidewire were used. The wire was unable to cross the stenotic and impenetrable fibrocalcific cap in the right popliteal artery. An 0.035" Wingman[™] catheter was able to slowly make its way through the CTO. The Wingman was exchanged for an 0.035" angled NaviCross[®]. A selective angiogram confirmed true lumen. IVUS evaluation was performed and indicated both thrombotic material and focal calcification. Aspiration and laser treatment were performed followed by 4.0 X 100mm ballooning. After further ballooning, the vessel had continued recoil which required placement of a Supera[™] stent.

PHYSICIAN



Siddhartha Rao, MD, RPVI Interventional Cardiologist, Vascular Solutions of North Carolina

"The Wingman was indispensable in helping cross a CTO cap in the popliteal artery."

Dr. Rao graduated with honors in 1998 from one of the most competitive medical schools, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), located in Pondicherry, India. He served as Chief Medical Resident from 2003-2004 after finishing a three-year Internal Medicine residency at Wayne State University in Detroit, MI. He finished a three-year Cardiology Fellowship followed by a one-year Interventional Cardiology fellowship at the University of North Carolina, Chapel Hill, NC. He obtained additional training in interventional vascular procedures at Ochsner Medical Center in New Orleans, LA and Prairie Cardiovascular, Springfield, IL. Dr. Rao is the founder and operator of Vascular Solutions of North Carolina.

PRODUCTS USED





Wingman[™] Facilitates CTO Cap Crossing



Pre/post right foot perfusion

CASE CONCLUSION

Revasculation of the right popliteal artery with reduction of stenosis to <20%, restoring TIMI-3 flow and a 3+ palpable right dorsalis pedis pulse at the end of the procedure. The Wingman 0.035" was able to navigate the previously uncrossable CTO cap and segment all the way to the distal cap. This provided a pathway to revascularization.