A case with severely calcified CFA stenosis which was optimally revascularized using X-ray guided needle penetration and CROSSER ®.

Yuki Matsubara, MD  Department of Cardiology  Kyoto First Red Cross Hospital

CASE

A 50-year-old male presented with worsening intermittent claudication in his left foot. CT showed severe stenosis with heavily calcified nodule (CN) in the left common femoral artery (CFA). Endovascular treatment was planned because of skin disease in his groin.

Pre-procedure Angiography and IVUS

Lt. CFA with severely calcified nodule

What should we do to keep it open?

• Conventional balloon dilatation would stretch only the healthy vessel wall and result in suboptimal angioplasty.

• Therefore, we intentionally penetrated through the center of the CN to obtain optimal dilatation.

Step 1

punctured the distal site of the CFA with an 18G one-part needle

Step 2

inserted the needle under multi-direction X-ray guidance and made a pull-through system

Step 3

performed CROSSER ® and POBA

Post-procedure Angiography and IVUS

Lt. CFA with severely calcified nodule

Conclusion

• Our intentional plaque penetration using one-part puncture needle might be effective to vascular optimally for CFA stenosis with severe calcification nodule.

• He has had no recurrent claudication and restenosis for 9 months after the procedure.

Endovascular treatment was planned because of skin disease in his groin.