

# Treatment of an Iliac Chronic Total Occlusion

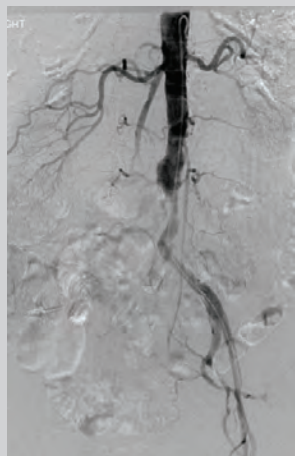


Figure 1

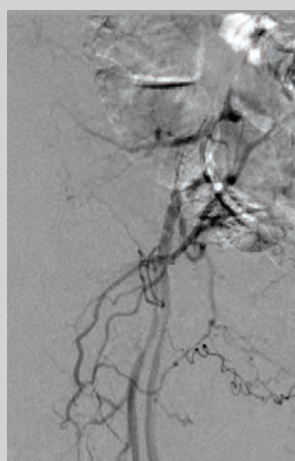


Figure 2

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## CLINICAL CHALLENGE

The patient is a 77-year-old woman evaluated for right buttock claudication. She has past medical history notable for spine surgery, severe hypertension with left ventricular hypertrophy, and hyperlipidemia. She also has a history of smoking. Current medications include lisinopril, olmesartan, aliskiren, metoprolol, aspirin, and fish oil. Lower extremity Doppler exam revealed reduced ankle-brachial index (ABI) of 0.55 in the right lower extremity and 0.70 in the left lower extremity. CT angiogram showed flush ostial chronic total occlusion of the right common iliac artery with reconstitution of the proximal common femoral artery. There was 50% stenosis of the left common iliac artery and no femoro-popliteal disease or significant trifurcation vessel disease. The occlusion was not felt to be well-suited to percutaneous revascularization but the patient declined surgical revascularization.

## PROCEDURE

The patient underwent angiography via a left common femoral approach. This confirmed flush ostial total occlusion of the right common iliac artery with reconstitution of the proximal right common femoral artery (Figures 1, 2). Access was planned for the proximal right superficial femoral artery but a short 6 cm 7 Fr sheath was inadvertently placed in the proximal profunda femoris. The sheath was exchanged for a 11 cm 7 Fr sheath and the iliac occlusion was crossed retrograde but subintimally using a 90 cm Spectranetics QUICKCROSS® Catheter and a 0.035" Terumo GLIDEWIRE®. A Cordis OUTBACK® LTD® Catheter was used to advance a 0.014" Abbott ASAHI Grand Slam Glidewire into the aorta with re-entry at the aorto-iliac bifurcation.



*Continued on back*

**PERFORMANCE**  
through experience

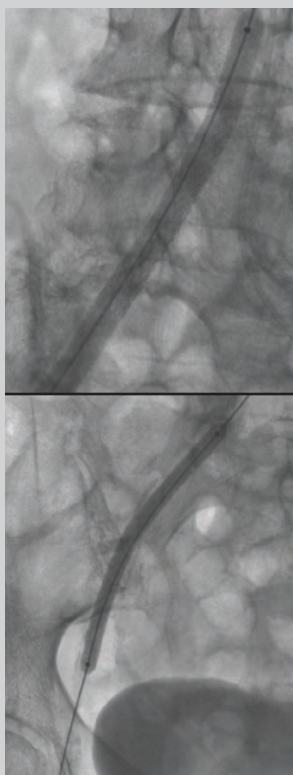


Figure 3

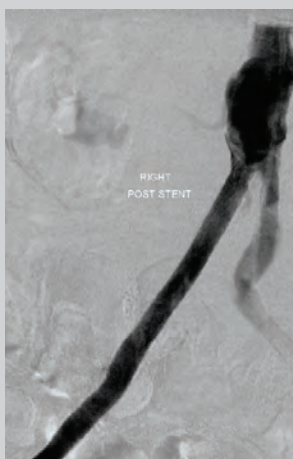


Figure 4

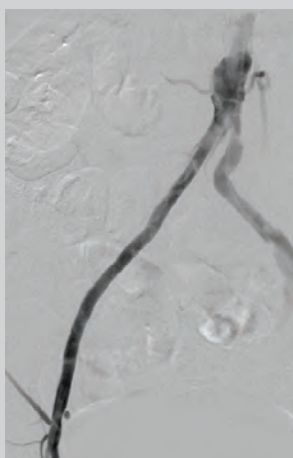


Figure 5

The entire iliac artery was dilated with 5 x 100 mm and 7 x 100 mm angioplasty balloons (Figure 3). The ostial right iliac artery was stented with an 7 x 59 mm Atrium iCAST Balloon Expandable Covered Stent. The remainder of the common iliac artery and the entire external iliac artery were stented with a single 7 x 150 mm GORE® VIABAHN® Endoprosthesis with Heparin Bioactive Surface which extended to the site of reconstitution in the proximal common femoral artery. Post-dilatation of both stent-grafts was performed with a 7 x 100 mm angioplasty balloon.

## RESULTS

Completion angiography reveals a widely patent right iliac artery with brisk flow and no residual stenosis (Figures 4, 5). Although the right hypogastric artery remains occluded, the left hypogastric artery is patent. At clinical follow-up, the patient was asymptomatic with no claudication. A follow-up Doppler exam revealed improvement in her right leg ABI from 0.55 to 1.0.

## PHYSICIAN COMMENTS

The use of the GORE® VIABAHN® Endoprosthesis with Heparin Bioactive Surface is ideal for treatment of iliac total occlusions, particularly when the hypogastric artery is chronically occluded. Restenosis rates with bare metal stents, particularly when placed after subintimal crossing of iliac occlusions, is higher than desired. The flexibility of the GORE® VIABAHN Endoprosthesis is also well-suited to the non-linear course of the external iliac artery. Overall, percutaneous treatment of iliac occlusions with the GORE® VIABAHN® Endoprosthesis is an excellent alternative to surgical revascularization.



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**INDICATIONS FOR USE:** The GORE® VIABAHN® Endoprosthesis is indicated for improving blood flow in patients with symptomatic peripheral arterial disease in superficial femoral artery lesions with reference vessel diameters ranging from 4.0 – 7.5 mm. The GORE® VIABAHN® Endoprosthesis is indicated for improving blood flow in patients with symptomatic peripheral arterial disease in iliac artery lesions with reference vessel diameters ranging from 4.0 – 12 mm. **CONTRAINDICATIONS:** The GORE® VIABAHN® Endoprosthesis is contraindicated for non-compliant lesions where full expansion of an angioplasty balloon catheter was not achieved during pre-dilatation, or where lesions cannot be dilated sufficiently to allow passage of the delivery system. Do not use the GORE® VIABAHN® Endoprosthesis with Heparin Bioactive Surface in patients with known hypersensitivity to heparin, including those patients who have had a previous incidence of Heparin-Induced Thrombocytopenia (HIT) type II. Refer to *Instructions for Use* at [goremedical.com](http://goremedical.com) for a complete description of all warnings, precautions and adverse events. R<sub>only</sub>

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