GORE® VIABAHN® VBX
Balloon Expandable Endoprosthesis

A MODERN APPROACH TO ILIAC ARTERY STENTING UTILIZING THE LOWER PROFILE GORE® VIABAHN® VBX BALLOON EXPANDABLE ENDOPROSTHESIS (VBX STENT GRAFT)

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NOW
6 Fr
compatible

GREATER
VERSATILITY

Challenge:

- 83-year-old male presented post-extensive right lower extremity endovascular revascularization. Aortography demonstrated ectatic left common and external iliac arteries with hemodynamically significant atherosclerotic disease (*Figure 1*).
- Relevant patient history:
  - Diabetes, hypertension, chronic kidney disease, coronary artery disease with prior percutaneous coronary interventions, left transcarotid artery revascularization and peripheral artery disease.

Procedure:

- Bilateral common femoral arteries accessed with micropuncture systems.
- Advanced a 10 cm 5 Fr sheath over a wire into right groin followed by 5 Fr x 65 mm pigtail catheter placement in the infrarenal aorta.
- Advanced a 10 cm 6 Fr sheath with a radiopaque tip over wire into left groin followed by placement of a markered diagnostic catheter in the common and external iliac arteries to aid in stent graft sizing.

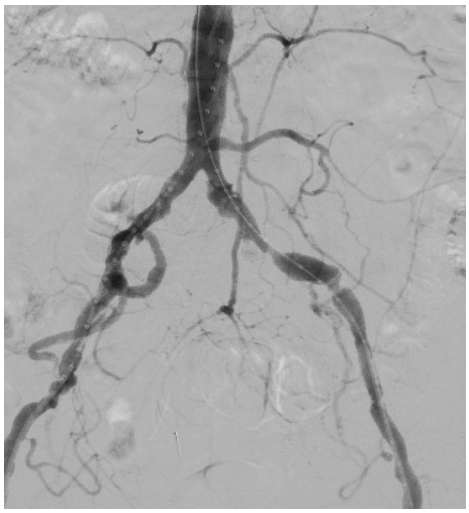

Figure 1. Aortography via infrarenal pigtail catheter via 5 Fr right femoral access. Markered diagnostic catheter introduced via 6 Fr left femoral access visualized in common and external iliac arteries to aid in stent graft sizing. Aortography demonstrated ectatic left common and external iliac arteries with severe atherosclerotic disease burden.

Together, improving life

- Aortography via power injection of the pigtail catheter demonstrated the previously described ectatic left common and external iliac arteries with severe atherosclerotic disease burden as well as a diminutive left hypogastric artery.
- Performed SHOCKWAVE® Intravascular Lithotripsy (IVL) of left common and external iliac arteries using a 5 x 60 mm balloon.
- Advanced a 7 x 79 mm VBX Stent Graft via the 6 Fr left femoral access and successfully deployed in the external iliac artery (*Figure 2a*), followed by successful deployment of a 7 x 29 mm VBX Stent Graft in the common iliac artery (*Figure 2b*).
- Serial post-dilation of stent grafts with an 8 x 40 mm and 9 x 20 mm MEDTRONIC® EVERCROSS® PTA Balloon Catheter.

Result:

- Technical success was achieved in all aspects of this case and can be seen on completion angiography demonstrating a now widely patent aortoiliac system with good distal flow (*Figure 3*).
- At 3-week follow-up, patient was neurovascularly intact with no lower extremity or buttock claudication symptoms.
  - Bilateral lower extremity duplex ultrasound demonstrated patent in-line flow to the foot bilaterally without abnormal velocities or waveforms.

Case takeaways

TASC II A lesions are preferentially treated endovascularly.[1] Covered stents have demonstrated superior post-intervention ankle-brachial indices (ABI) and reintervention rates versus bare metal stents[2], and the VBX Stent Graft has demonstrated excellent technical success as well as long-term patency in the treatment of aortoiliac occlusive disease.[3,4]

Historically, even the smallest VBX Stent Graft, at 5 mm in diameter, required a 7 Fr profile sheath. However, with a reduction in device profile, the 5, 6 and 7 mm VBX Stent Grafts can now utilize a 6 Fr access sheath (versus legacy device 7 Fr sheath compatibility), while larger stent graft sizes including 8 and 9 mm diameter can now utilize a 7 Fr access sheath (versus legacy device 8 Fr sheath compatibility).

In this case, due to VBX Stent Graft compatibility with a 6 Fr sheath, diagnostic pigtail catheter access was maintained throughout all portions of the case which contributed to successful deployment of the stent graft, obviating the need for hand-held retrograde injections from the treatment side. Utilizing the contralateral side for diagnostic purposes also allows for minimal exchanges through the diseased iliac artery, decreasing the chance of losing wire access or unintentionally disrupting an already heavily diseased vessel.

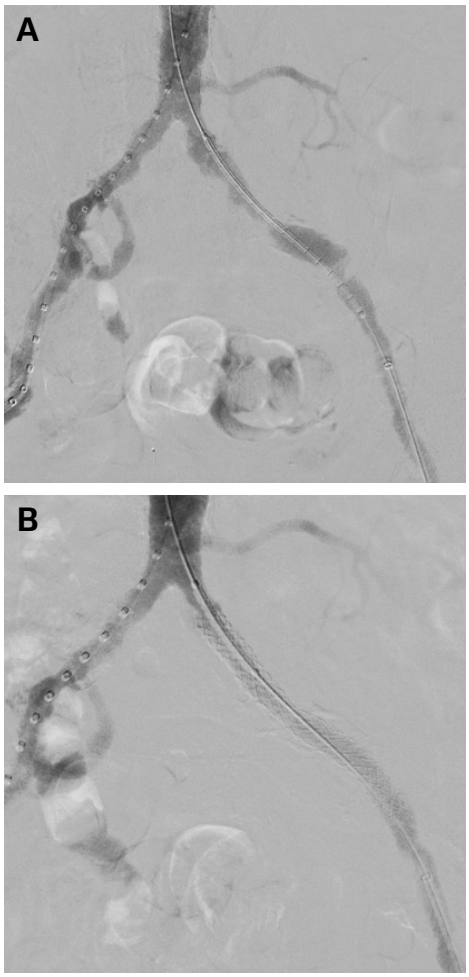

Figure 2. Aortography via 5 Fr pigtail catheter introduced via right femoral access to confirm placement of both VBX Stent Grafts. **A:** 7 x 79 mm VBX Stent Graft and **B:** 7 x 29 mm VBX Stent Graft.

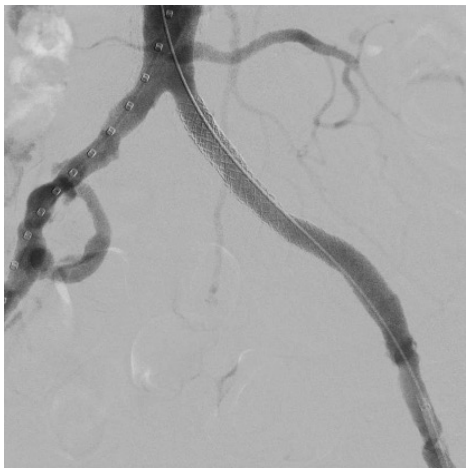

Figure 3. Completion angiography after post-dilatation demonstrating widely patent left common and external iliac VBX Stent Grafts.

Images courtesy of Peter Faries, M.D. Used with permission.

References:

1. Paisley MJ, Adkar S, Sheehan BM, Stern JR. Aortoiliac occlusive disease. *Seminars in Vascular Surgery* 2022;35(2):162-171.
2. Hajibandeh S, Hajibandeh S, Antoniou SA, Torella F, Antoniou GA. Covered vs uncovered stents for aortoiliac and femoropopliteal arterial disease: a systematic review and meta-analysis. *Journal of Endovascular Therapy* 2016;23(3):442-452.
3. Bismuth J, Gray BH, Holden A, Metzger C, Panneton J; VBX FLEX Study Investigators. Pivotal study of a next-generation balloon-expandable stent-graft for treatment of iliac occlusive disease. *Journal of Endovascular Therapy* 2017;24(5):629-637.
4. Panneton JM, Bismuth J, Gray BH, Holden A. Three-year follow-up of patients with iliac occlusive disease treated with the Viabahn Balloon-Expandable Endoprosthesis. *Journal of Endovascular Therapy* 2020;27(5):728-736.

The outcomes and observations reported are based on individual case experience and the patients treated. The steps described here may not be complete, and are not intended to be a replacement for the *Instructions for Use* or the education, training and professional judgment of health care providers (HCP). HCPs remain solely responsible for making decisions about patient care and the use of medical technologies.

Consult Instructions for Use
eifu.goremedical.com

INDICATIONS FOR USE IN THE U.S.: GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis is indicated for the treatment of de novo or restenotic lesions found in iliac arteries with reference vessel diameters ranging from 5 mm–13 mm and lesion lengths up to 110 mm, including lesions at the aortic bifurcation. The GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis is also indicated for use with thoracoabdominal and pararenal branched devices indicated with the GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis as a branch component.* **CONTRAINDICATIONS:** Do not use GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis in patients with known hypersensitivity to heparin, including those patients who have had a previous incident of Heparin-Induced Thrombocytopenia (HIT) type II. Refer to *Instructions for Use* at eifu.goremedical.com for a complete description of all applicable indications, warnings, precautions and contraindications for the market where this product is available. $\mathrm{R}_{\mathrm{X\ Only}}$

* Not applicable to Reduced Profile GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis. (BXB catalogue numbers).

Products listed may not be available in all markets.

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