

The Gore Iliac Branch Endoprosthesis as an alternate aortic main body: Promising results in select patients

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Off-label use of endovascular devices is common and allows for novel treatment options for challenging technical problems. In their article, Piazza et al¹ present their experience with 13 cases using the Excluder 3 Iliac Branch Endoprosthesis (IBE; W.L. Gore & Associates) as a main body aortic endograft in patients unsuitable for standard endovascular aneurysm repair. They thoughtfully select a patient population for this approach with a short segment between the lowest renal artery and aortic bifurcation, aneurysms in the distal aorta with a narrow neck, and those with bilateral IBEs or proximal branched/fenestrated thoracoabdominal endografts.¹

This off-label use takes advantage of the graft's short contralateral gate length (5.5 cm) and small proximal diameter (23 mm). The authors use the standard 20% to 25% oversizing for the proximal aortic neck diameter and selected patients with an aortic size ranging from 16 to 20 mm.

They report a 100% technical success rate and no adverse events, with a 100% graft stability, defined as the absence of any variation in the aneurysmal sac dimensions after the procedure, the absence of endoleak, and no device migration at the 3-month mark.¹

Although impressive, the reported results are early. The IBE lacks active fixation proximally, which presents concern for long-term durability and migration in aneurysmal disease, similar to past experience with the AneuRx graft (Medtronic). Sampaio et al² reported results of 109 patients treated with the AneuRx graft. Migration, defined as a >5-mm increase in distance from the lowest renal vessel to the device, occurred in 15.6% of patients. This migration was associated with increased risk of type Ia endoleak, and 33% of patients with device migration did develop type Ia endoleaks. Notably, the follow-up for their study was 30 months.² It is possible that migration and development of endoleaks has not been captured in the 3-month follow-up reported by Piazza et al.¹

The conformability of the IBE might offer some protective effects from migration. DeRoo et al³ noted the device's ability to conform to iliac tortuosity on pre- and postintervention axial imaging looking at changes in iliac tortuosity after deployment. Furthermore, others have

reported success using the IBE graft in off-label use. Oussoren et al⁴ presented 51 patients who underwent solitary use of the IBE for iliac artery aneurysms compared with on-label use with a standard endovascular aneurysm repair. Technical success, defined as no type I or III endoleaks or graft limb obstruction, occurred in 94.1% of patients, with 82% of patients free of complications and 90% free of secondary interventions at 24 months. No migration was noted during follow-up.⁴ Rodriguez et al⁵ reported a large retrospective study comparing on-label and off-label use of the IBE endograft with no differences in primary effectiveness between on- and off-label use at the 1-year mark.

The conformability, proximal graft diameter, and short contralateral length make the use of the IBE graft as an aortic main body intriguing. Longer follow-up looking at migration and the need for reintervention within this group will be important before widely deploying the graft into clinical practice.

The opinions or views expressed in this commentary are those of the authors and do not necessarily reflect the opinions or recommendations of the Journal of Vascular Surgery Cases, Innovations and Techniques.

DISCLOSURES

R.M. is a consultant for W.L. Gore & Associates. A.J.W. reports no conflicts.

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