

An update on the Western Australian Experience with the Gore Excluder Iliac Branch device for common iliac artery aneurysm – technical and intermediate outcomes.

T. Pathmarajah, K. Sieunarine, N. Altaf, S. Baker, M. Garbowksi, J. Hockley, Prof. S. Jansen, S. Ponosh, C. Ritter, P. Tosenovsky.
Western Australia IBE Group

Background:

The aim of this study is to assess the safety and the mid-term results of endovascular treatment of common iliac artery (CIA) aneurysms using the new GORE EXCLUDER iliac branch endoprosthesis (IBE) device, which has the following advantages:

- › Flexible own internal iliac extension branch
- › Low profile delivery (16F)
- › Pre-cannulated internal iliac gate design
- › Repositional two stage GORE® SIM-PULL Delivery System

Methods:

- › The study is a retrospective with prospective follow-up nonrandomized, single-arm multi-institution evaluation.
- › Patients with a CIA aneurysm with or without an aortic aneurysm who underwent endovascular treatment with the Gore IBE were included.
- › Anatomic and procedural data were collected.
- › Computed tomography angiography (CTA) was performed within 30 days after the procedure and at 6 months then yearly intervals.

Results:

- › From May 2015 to January 2019, 55 patients with aneurysmal CIA (mean age 75.5 years old) underwent consecutive endovascular treatment with the Gore IBE.
- › The mean follow-up was 20 months.
- › The CIA aneurysm treated with the GORE IBE were associated with an abdominal aortic aneurysm (AAA) in 19 patients, with bilateral CIA aneurysm present in 15 patients. Internal iliac embolization was performed in 5 patients
- › No perioperative endograft complications were observed.
- › 96% two-year branch patency was noted (1 required balloon expandable stenting in the internal and external iliac artery orifice for stenosis, another patient requiring femoral-femoral bypass graft for occlusion)

Figure 1

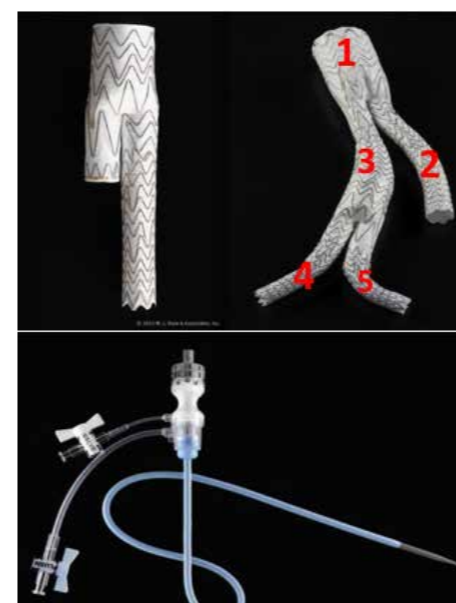


Figure 2

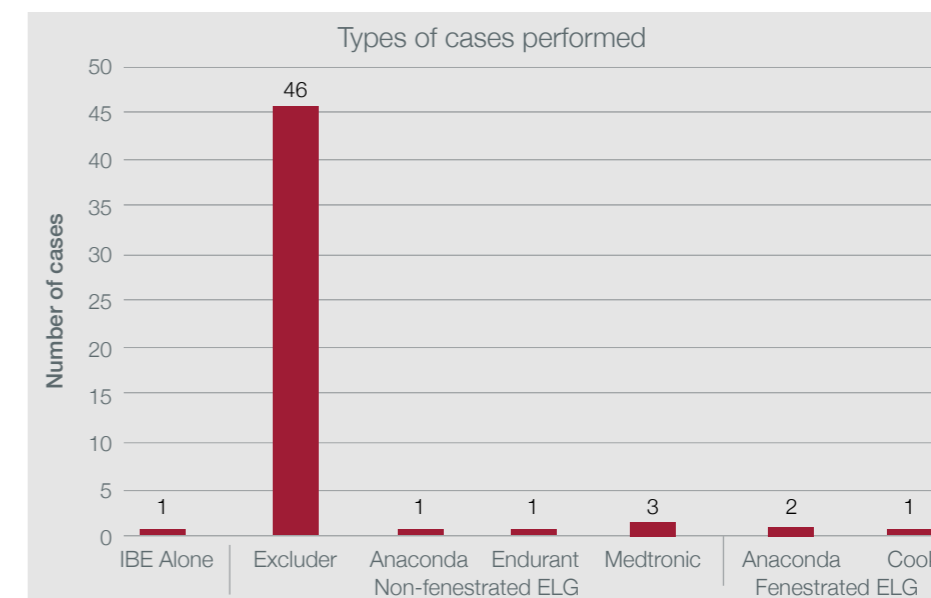


Figure 3

PROCEDURE DETAILS	
Median ASA classificatin (range)	3 (2-4)
Procedure duration (mins)	126 (SD 39.4)
Screening time (mins)	45.3 (SD 16.4)
Radiation dose (uGym2)	102119.7 (SD 148618.8)
Contrast modality	
Iodine	61%
Carbon dioxide	6%
Carbon dioxide + Iodine	33%
Access	
Femoral	96%
Brachial	4%
Anaesthesia	
General anaesthesia	73%
Regional anaesthesia	25%
Local infiltration	2%

Figure 4

FOLLOW UP DATA	
Technical success	88%
Conversion to open	0
Median Length of stay (days)	
Intensive care unit	1 (0 – 4)
Hospital	3 (1-57)
Endoleak	
Type 1	1
Type 2	12
Type 3	1
Mortality 30d	0
Buttock/Pelvic Claudication	7

Conclusion:

The technical success and mid-term results demonstrate encouraging results and clinical benefits of the new GORE EXCLUDER IBE. A prospective Western Australia Registry is in progress to provide longer follow-up as this is needed to assess long-term results.