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

Tishanthan Pathmarajah
Department of Vascular and Endovascular Surgery
Royal Perth Hospital
Perth, Western Australia

Western Australia IBE Group

Mr Kishore Sieunarine

Mr Nish Altaf

Mr Steve Baker

Mr Rick Bond

Mr Marek Garbowski

Mr Joe Hockley

Prof Shirley Jansen

Mr Stefan Ponosh

Mr Carsten Ritter

Mr Patrik Tosenovsky

Disclosure

Speaker name:

Tishanthan Pathmarajah

I have the following potential conflicts of interest to report:

- ☐ Consulting
- ☐ Employment in industry
- ☐ Stockholder of a healthcare company
- ☐ Owner of a healthcare company
- ☐ Other(s)

- ☐ I do not have any potential conflict of interest

Outline

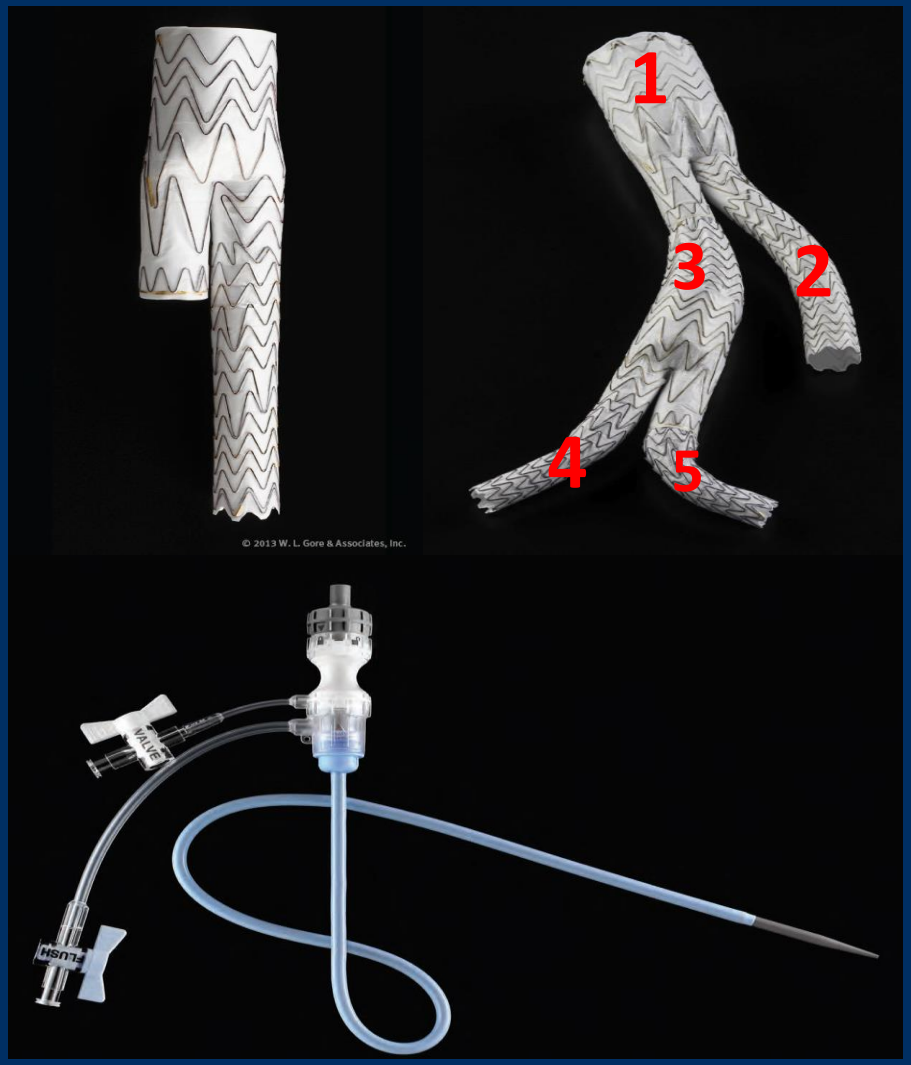
- Background
- Objective
- Methods
- Results
- Conclusion

Background

- EVAR is preferred treatment modality for AAA[1]
- 20-30% have co-exisiting iliac artery aneurysm[2]
  - Conventional EVAR – type 1 endoleak, limb occlusion[3]
  - "Coil and cover" – pelvic ischaemia[4,5]
    - Buttock claudication 28%
    - Erectile dysfunction 17%
    - Colonic/Spinal ischaemia – 1%
- Hybrid procedures, off label use of endografts, sandwich techniques, bell bottom limbs etc – uncertain long term outcomes!

Background

- Dedicated iliac branch devices developed specifically to preserve the IIA.
- GORE EXCLUDER Iliac Branch Endoprosthesis (IBE)
  - Flexible internal iliac extension branch
  - Low profile delivery (16F)
  - Pre-cannulated internal iliac gate design to potentially reduce procedure time
  - Repositionable two stage GORE SIM-PULL delivery system



Objective

The aim of this study was the assess the safety and mid-term results of endovascular treatment of common iliac artery aneurysm using the new GORE EXCLUDER iliac branch endoprosthesis device.

Methods

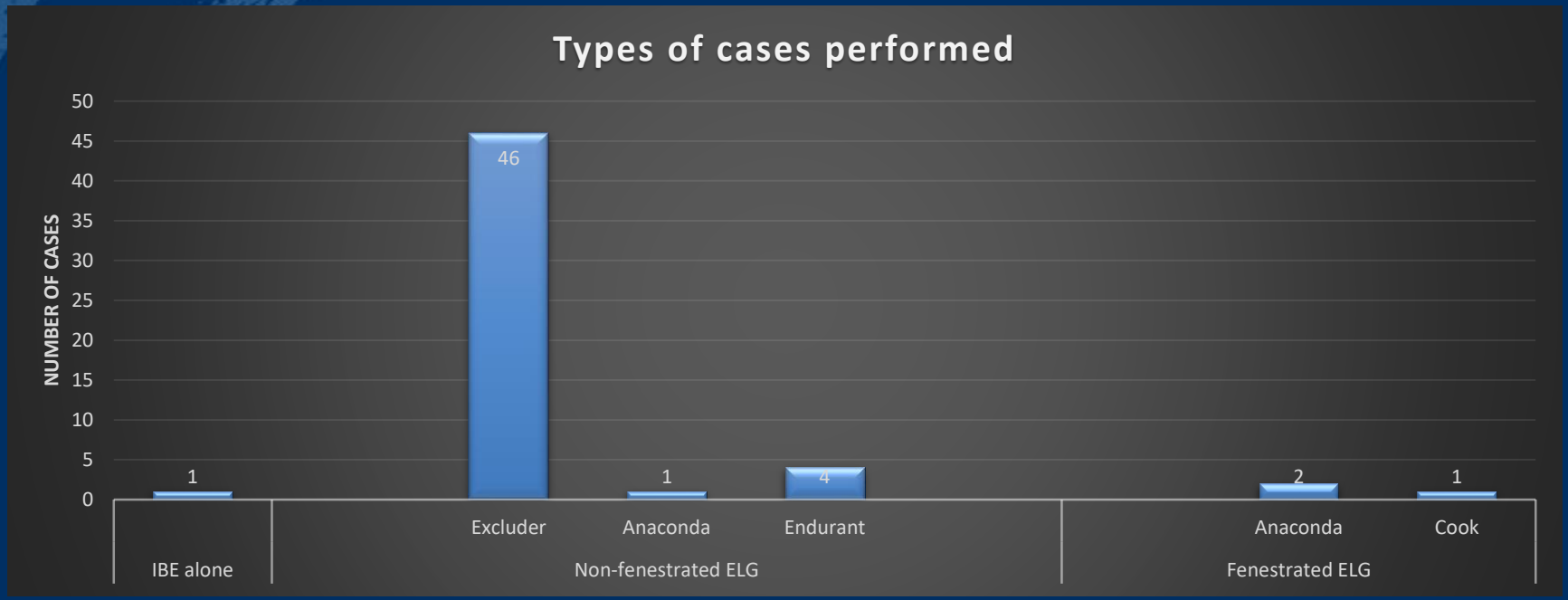
Western Australia IBE Registry

- June 2015 to January 2019 (4y FUP and continuing)
- Multi centre 6 sites
  - FSH, RPH, SCGH (public)
  - HPH, SJOGM, SJOGS (private)
- Prospective data collection – phone call to patient, rooms, hospital records, imaging and follow up letters
- Research Data Manager
- Database protected

- Patients with CIA +/- AAA who underwent treatment with GORE IBE device were included
- Anatomical and procedural data collected (CTA 30d, 6 months, yearly)

Results

- 55 patients with CIA
- Mean follow up 20 months
- Mean age 75
- Bilateral aneurysm in 15 patients, while 40 had single aneurysm of the common iliac artery
- 23 cases previous AAA intervention



Results

Procedure details	
Median ASA classficatin (range)	3 (2-4)
Procedure duration (mins)	126 (SD 39.4)
Screening time (mins)	45.3 (SD 16.4)
Contrast volume (mls)	125 (SD 102.8)
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%

Results

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

- 96% - 2 year branch patency
  (1) Balloon expandable stent to IIA & EIA for stenosis
  (1) Graft limb occlusion – requiring fem-fem bypass

Conclusions

- Technical success and mid-term results are encouraging
- Prospective registry is in progress to provide longer follow up

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THANK YOU
Merci
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