i-MEET

NEXT GENERATION

Multidisciplinary European Endovascular Therapy

Iliac Branched Devices Outcomes and Surveillance Modality

I. Roy, S. Vallabhaneni, R. McWilliams, R. Fisher

Mr Iain N Roy

Vascular Research Fellow

Liverpool Vascular & Endovascular Service

LiVES

Disclosure of Interest

Speaker name: **Iain N Roy**

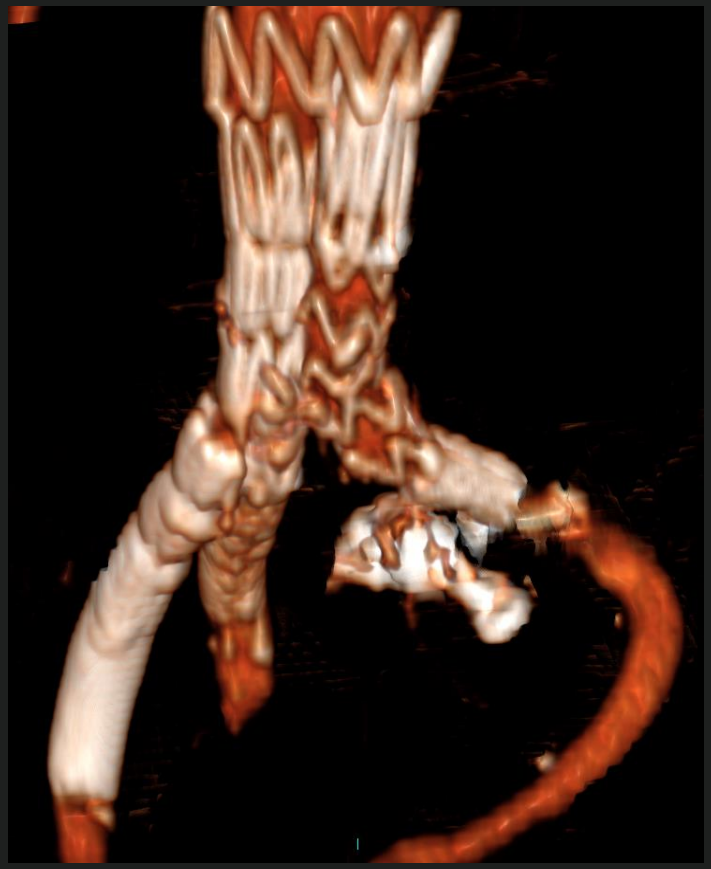
I have the following potential conflicts of interest to report:

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

- **X** **I do not have any potential conflict of interest**

Iliac Branched Devices

- Preservation of Internal Iliac Artery (IIA) while allowing sealing distal to ectatic Common iliac artery (CIA).
- Reduce incidence of;
  - Gluteal Claudication
  - Impotence
  - Colonic Ischemia



Inpatient Results

Follow-up Results

Imaging Results / Issues

Study

- Retrospective analysis of first 33 IBDs used in our institution, with emphasis on subsequent surveillance.
- Reviewed;
  - Operative Notes & Imaging
  - Discharge Letter
  - Subsequent Clinic letters
  - Secondary interventions
  - Surveillance imaging

  ] from prospective database

Patients & Devices

- All IBD's in our institution between 2010 -2015
- 33 IBDs implanted in 32 patients
  24 Zenith™ IBD (Cook), 9 Excluder ™ IBE (Gore)
- 31 (97%) Male Patients
- Median Age 76 (IQR 71-81)
- Inserted with;
  1 bEVAR
  4 fEVAR
  26 EVAR
  1 isolated IBD devices

Inpatient Results

Follow-up Results

Imaging Results / Issues

In-patient Results

- 2 Intra-operative Technical Failures (94% Success)
  - 1 Mal-deployed, 1 Failed IIA cannulation
  - 1 type 1b endoleak from IIA (resolved by 1 month)
  - Represent only 2 IIA occlusions (6% occlusion rate)
- 4 Patients required EIA wall stents intra-op

  (Compared to 3 for contralateral sides)

Inpatient Results

Follow-up Results

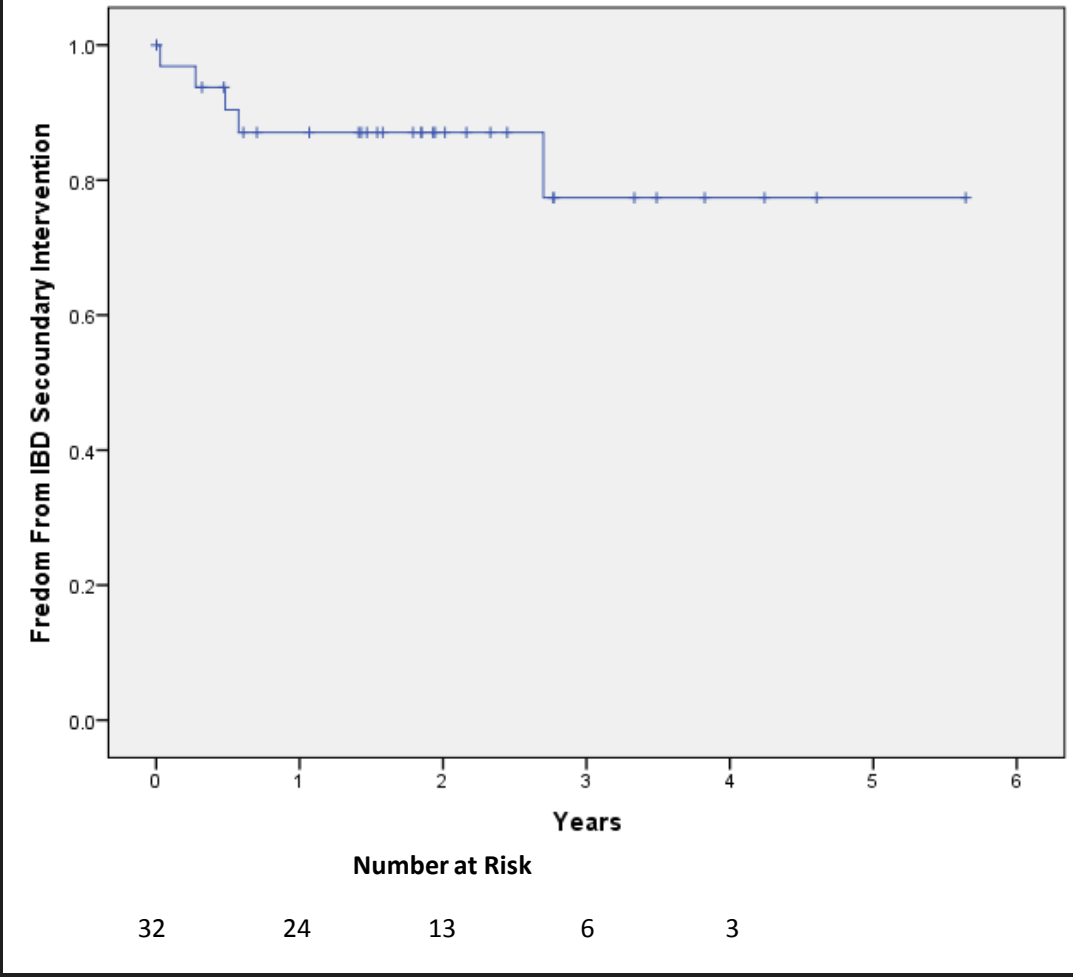
Imaging Results / Issues

Surveillance

- Median Follow-up 22 Months (IQR 16-33)
- Surveillance includes visits at 1 month and annually there after – AXR & DUS
- 32 Patients
  - 2 patients transferred surveillance to another institution
  - 2 patients died (Not aneurysm related)
  - 1 patient stopped surveillance (palliative diagnosis)
- 79 of 80 indicated surveillance visits completed

Results

- No IBD related endoleak detected
- Freedom from IBD Secondary intervention



5 Interventions

1 x Covering IIA gate
2 x Angioplasty / Stenting IIA
2 x Wall stents for CIA/EIA stenosis

Inpatient Results

Follow-up Results

Imaging Results / Issues

Surveillance - Imaging

Surveillance included;

82 Duplex Ultrasound Scans & 41 CTA's

CTA

No IBD endoleak

All adequately Imaged IIA flow

DUS

No IBD endoleak

Attempt to identify IIA flow was specifically reported on 52 occasions

73% seen, 27% insufficient views

Attempt to identify IIA flow wasn't mentioned on 30 occasions.

Conclusions

- IBD's are safe but challenging procedures
- IIA patency is excellent, but requires secondary interventions
- DUS require specific protocols in IBD patients to ensure imaging of IIA
- DUS has a ~75% ability to identify IIA flow
  - Probably acceptable in the context of long term follow-up