Fenestrated Anaconda New technology for short & no neck AAA

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Faculty Disclosure

I disclose the following financial relationships:

Consultant and paid speaker for Vascutek UK

Paid speaker for EV3/Covidien

Fenestrated EVAR

Systematic review (n=368)

- 1.4% 30 day mortality
- 96.6% primary target vessel patency
- 92% late target vessel patency
- 1.4% permanent dialysis

Nordon et al EJVES 2009;38(1):35-41

So where's the revolution?

FEVAR limitations

- No level 1 evidence
- Limited anatomical suitability
- Concerns re long-term durability
- Technical difficulty
- Cost
- Manufacturing delay of custom grafts

Does a new graft address any of these issues?

Fenestrated Anaconda - Concept





Fenestrated Anaconda - History

- Anaconda infra-renal graft CE mark 2005
- First in man Fenestrated Anaconda June 2010
- Indicated for short-necked to type 4 TAAA
 1 to 4 fenestration devices, bifurcate or tube
- Publication of initial experience
 - Bungay et al JVS 2011;54(6):1832-8
- 100th implant April 2012
- Total to date 229



- Platform suitability
- Potential advantages
- Evidence: Registry
- Limitations

Platform suitability

Accuracy

• Repositionable graft body



Target vessel cannulation rate 99.5%

Zero conversion to open repair



Security

Dislocation Force (N)



Potential advantages

• Flexibility - 50° angulation



• Flexibility - 75° angulation



• Flexibility to accommodate non-parallel visceral segment



• Fenestrations of any size in any position



• Fenestrations of any size in any position



Percentage suitability not quantifiable

Cannulation from brachial access

- Bail out for failed femoral cannulation
- Elective for steeply angulated visceral vessels



Reducing technical difficulty

- Repositionable graft body
 - Accurate initial deployment
 - Repositioning function maintained throughout procedure



Reducing technical difficulty

Constraining graft assists cannulation



Long term durability

- Zero column strength fenestrated zone
- Bifurcate body eliminates risk of type 3 leak



Limitations

Limitations of fenestrated Anaconda

- Largest neck diameter 31mm (34mm graft)
- Longest body length 90mm
- Not a branched graft
- Custom made

Custom

High cost

Risk of interval rupture during planning/manufacture

Risk of technical failure (Type 1a endoleak & loss of target vessels) very low

Off-the-shelf

? Cost benefit

No delay. Applicable to acute aortic syndromes

Increased risk of technical failure



Summary

- New FEVAR graft
- Potential for wider anatomical applicability
- Ease of use
- Durability
- Custom versus OTS
- Encouraging registry data



Thank you