EVAR is gold standard for aorto-iliac aneurysm repair

Some aorto-iliac aneurysm anatomy is unsuitable for standard devices

- Isolated (aortic or iliac) aneurysm
- Wide proximal landing zone
- Narrow distal landing zone

In case custom made device is not option

Methods

2005 – 2014
16 patients (14 male)
Mean age 71.5 ± 7.3 years

- 12 isolated common iliac artery aneurysms
- 2 pseudo aneurysm post aortoiliac bypass
- 2 internal iliac artery aneurysms
- 1 saccular aortic aneurysm
- 1 ruptured aortic aneurysm due to type IB endoleak
Methods

Reversed stentgrafts
- 13 TFLE Zenith Cook
- 1 ZSLE Zenith Cook
- 2 Endurant Medtronic

Aneurysm diameter: $41 \pm 12$ mm
Proximal landing zone diameter: $16 \pm 2$ mm
Proximal landing zone length: $29 \pm 19$ mm
Distal landing zone diameter: $11 \pm 2$ mm
Distal landing zone length: $\geq 23$ mm

Results

100% technical success
No type I endoleaks

6 limb extensions (planned)
4 adjunctive bare metal stents (unplanned)
1 thrombectomy intra-operatively
1 kissing stent for protrusion of stentgraft
Conclusions

Back table reversed iliac stentgrafts can be used for isolated aortic or iliac aneurysm with unsuitable anatomy for standard EVAR devices

Technically possible with different devices (Cook, Medtronic, Gore)

High technical success

Significant rate of early limb occlusions

No complications or re-interventions during long-term follow-up

Results

30-day
1 mortality (6%)
3 limb occlusions (19%)

Follow-up
No aneurysm related mortality
1 persisting type II endoleak form internal iliac artery