Will EVAS Replace EVAR?

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Disclosures

• Proctor and Speaker Bureau for Endologix



Stent design: Paradigm Shift

- Generations of EVAR solutions subtle design change
- Technological innovation to produce endografts with:
 - Reduced incidence of graft failure and endoleak
 - Improve long term outcomes
 - Expand indications for EVAR





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Features to Change EVAR Practice

- Broad applicability
- Technical simplicity
- Low perioperative morbidity/mortality
- Ability to identify problems in surveillance
- Long term durability



Nellix EVAS System

- New generation therapy
- Designed to overcome limitations of EVAR





EVAS – Expanding Patient Applicability



Karthikesalingam et al EJVES 2013













EVAS For Infrarenal Aneurysms

- Simple technical solution
- Eradicates type 2/3 endoleaks
- Early published outcomes good
- But:
 - Long term data on durability
 - Identify novel complications
 - Define limitations
 - Define surveillance and reintervention protocols





Where EVAS Might Replace EVAR

- Selected patients with:
 - Ruptured AAA
 - Challenging neck and iliac anatomy
 - Juxta-renal and supra-renal aneurysms



EVAS: Ruptured AAA

- Low profile
- Rapid haemostasis
- Technically simple
- No gate cannulation
- BUT:
 - Possible aortic trauma





EVAS: Challenging rAAA







EVAS: Short Iliac Arteries









EVAS: Challenging Neck Anatomy





Nellix: EVAS and Parallel Grafts





Nellix: EVAS and Parallel Grafts





EVAS Registry: Cohort Descriptions



Outcomes

MAEs	≤30 days N=268	> 30 days N=263	
All Cause Death	3 (1.1%)	7 (2.7%)	
Peri-operative mortality	3 (1.1%)	-	
Aneurysm related mortality	-	0	
Renal Failure	0	1 (0.4%)	
Myocardial Infarction	2 (0.7%)	1 (0.4%)	
Bowel Ischemia	0	0	
Respiratory Failure	3 (1.1%)	1 (0.4%)	
Stroke	1 (0.4%)	0	
Blood loss >1000 mL	2 (0.7%)	Not applicable	
Patients with one or more MAE	9 (3.4%)	9 (3.4%)	



Endoleaks/Reinterventions

	Total Patients	Endoleaks	Occlusion	Conversion	Other
Early ≤30d (n=268)	9 (3.4%)	4 (1.5%)	3 (1.1%)	2 (0.7%)	1 (0.4%)
Late >30d (n=263)	10 (3.8%)	5 (1.9%)	0	4 (1.5%)	1 (0.4%)



Conclusions

- EVAS may replace EVAR in some clinical areas
- EVAS increases proportion of patients suitable for intervention
- They are technically very different to EVAR
- Require robust data on durability

