

How to make Chimneys work in the arch?

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Disclosures

I have the following potential conflicts of interest to report:

Consulting W.L Gore & Associates

Educational Program W.L Gore & Associates

Covidien

Advisory Board Member Covidien

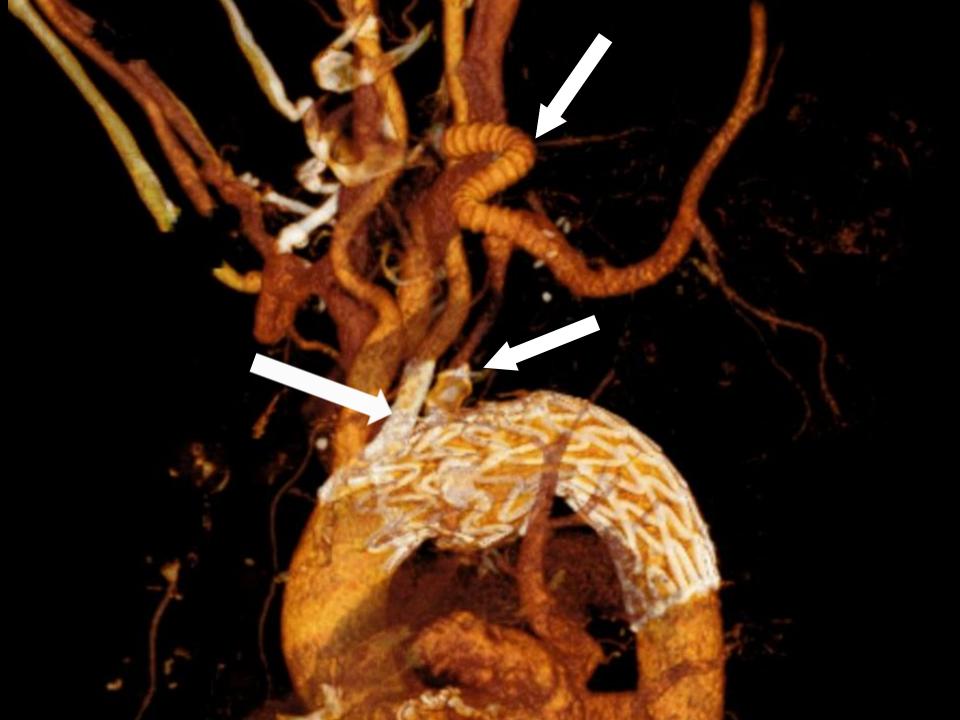
Stockholder LeMaitre

Partner AHIT

Je déclare les informations suivantes : je suis consultant pour la société W.L Gore & Associates, fais partie du comité de direction de la société Covidien,

History

- 2003 Greenberg* adjunct technique to treat AAA with short proximal necks
- 2005 Larzon** adjunct technique for TEVAR in the aortic arch
 - * J Vasc Surg 2003;38:990-6
- ** Eur J Vasc Endovasc Surg 2005;30:147-151





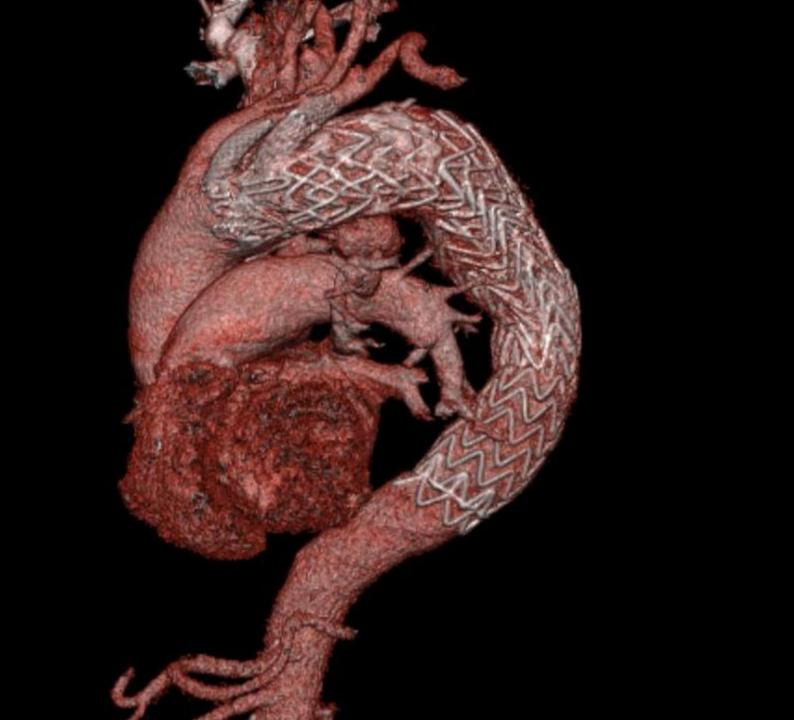














Gutter



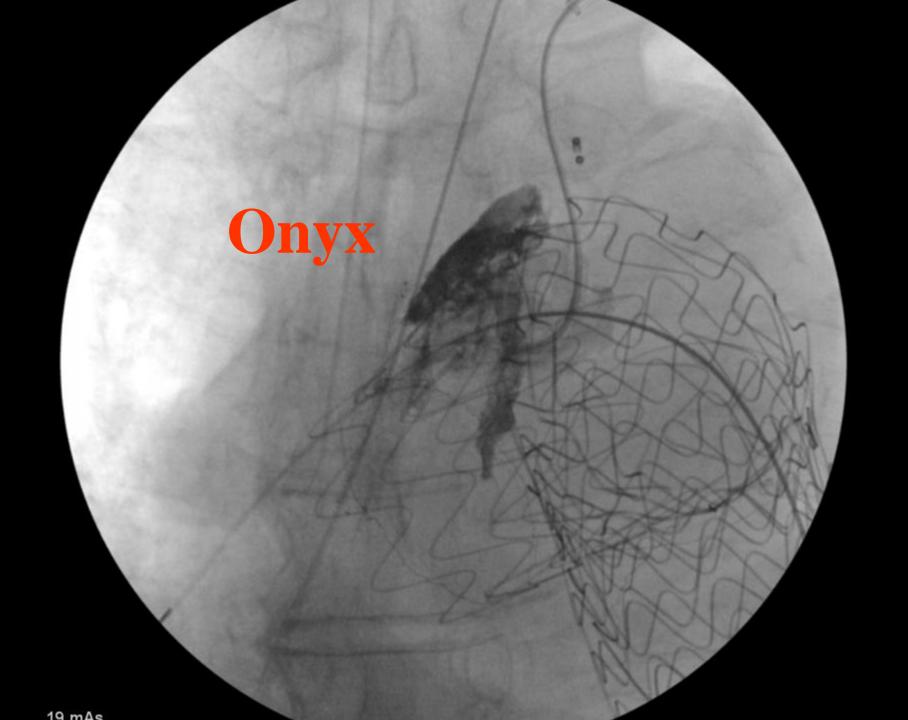




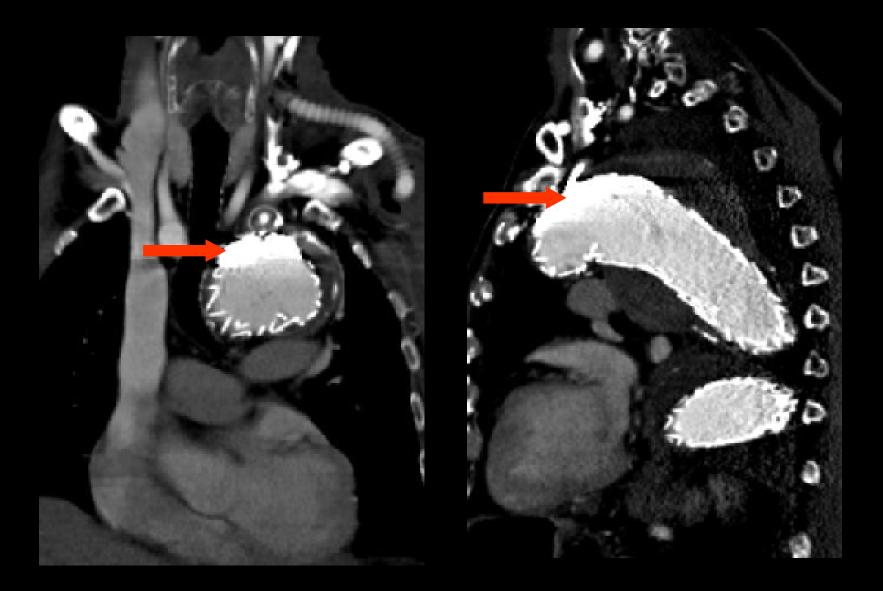


Same patient @ 2 years









Experience (from Sept 2004)

Chimneys		1	2	
Thoracic aneurysms	s 37 pts	35	2	
AD/Transections	9 pts	9	0	
	46 pts	44	4	

Material

(minimum 1 year follow-up)

- Sept 2004 May 2011
- 26 patients with aneurysm
- 5 emergency (3 were ruptured aneurysms)
- Median follow-up 36 months (12-100 months)

Operative details

- 25 single chimneys, 1 double chimney
- 19 left common carotid arteries
- 8 left subclavian arteries

Operative details

- 20 bare stents
- 6 had stentgrafts
- 1 had stent+stentgraft
- BX-stents (Primus, VisiPro)
- BX-stengrafts (Advanta)
- TAG or Conformable TAG

AAA size (> 5mm significant change)

	1 year	2 years	3 years
Decreased size	12	10	5
Unchanged size	10	6	4
Increased size	0	2	1
Dead	4	5	8
Lost follow-up	0	1	0
Number of patients	n=26	n=24	n=18

Late endoleak (@ latest control)

No endoleak	16
Proximal type I	1
Distal type I	1
Type II	2
No data	2
Dead within 30 days	4
Number of patients	n=26

Reintervention rate was 19%

Target vessel patency

- None of 23 target vessels had occluded during follow-up
- None of the patients that died within
 30 days had an occluded target vessel

Target vessel patency

GLOBASTAR registry in UK for fenestrated stentgrafts

93% @ 1 year

91% @ 2 years

85% @ 3 years

Circulation 2010;125:2707-15

Target vessel patency

Our own experience of 62 EVAR patients 91% @ median 36 months follow-up

Why?

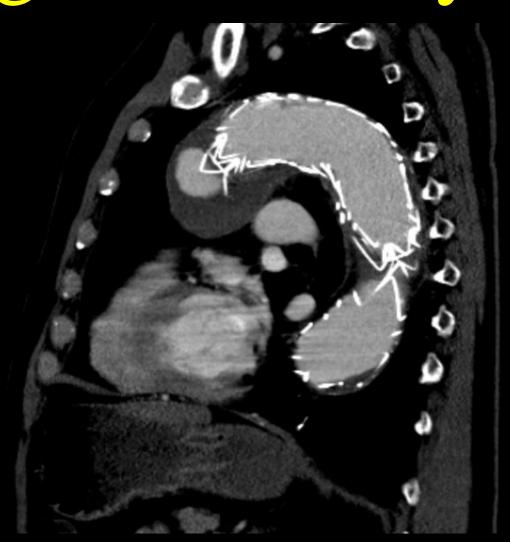
Diameter?

Kinking?

Different stents?



Migration @ 8 years







Lessons learned

- Can be used for distal arch aneurysms with 1 chimney and left subclavian debranching
- Optimize the sealing zone
- BX-stentgrafts works well
- Conformable aortic stentgrafts
- Rescue tools

Conclusion

- Midterm results are good in distal aortic arch aneurysms treated with 1 chimney and debranching of the left subclavian artery
- Target vessel patency seems not to be a problem



Thank you!



The vascular team

Department of Cardiothoracic and Vascular Surgery Örebro University Hospital, Sweden

