

Conformability and dissection, is it important?

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

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

- I do not have any potential conflict of interest



Conformability in Stent Grafts?

- Adequacy of contact between material and landing zone, independently of anatomic characteristics
- Rigidity of stents
- Amount of radial force



What are we trying to protect against by improved graft conformability?

- Retrograde Type A dissection (proximal SINE)
- Bird beaking
 - Endoleak
 - Graft collapse
- Distal stent induced new entry tears (SINE)

Retrograde Type A Dissection

- 2.5% risk following TEVAR

Risk Factors

- Dissection
 - 5.1% vs. 0.66% following TAA
- Proximal bare metal stent
 - 2.3% vs 1.2%
- Landing zone
 - Zone 0 – 8.1%
 - Zone 1 – 2.5%
 - Zone 2 – 2.6%
 - Zone 3 and 4 – 0.67%
- ? Oversizing
- Stent graft length <165mm
- Longitudinal connective bars (spring back force)
- Connective tissue disease



Bird Beaking

- > 5mm gap between aortic wall and stent
- Greatest test of conformability?
- Migration
- Endoleak
- Graft collapse

Risk Factors

- <50 degree angulation
- Smaller neck diameter



Stent Induced New Entry Tears - SINE

- Up to 25% of cases
- ~80% distal

Risk Factors

- Chronic Type B dissection
- Excessive over-sizing distally
- Longitudinal connective bars ('spring back' force)
- ? Stent radial force
- Marfan's disease



Why I like the GORE® TAG® Conformable Thoracic Stent Graft with ACTIVE CONTROL System

Retrograde Type A

- Partially covered proximal stent
- Minimal effect on aortic shape / little to no 'spring back' force

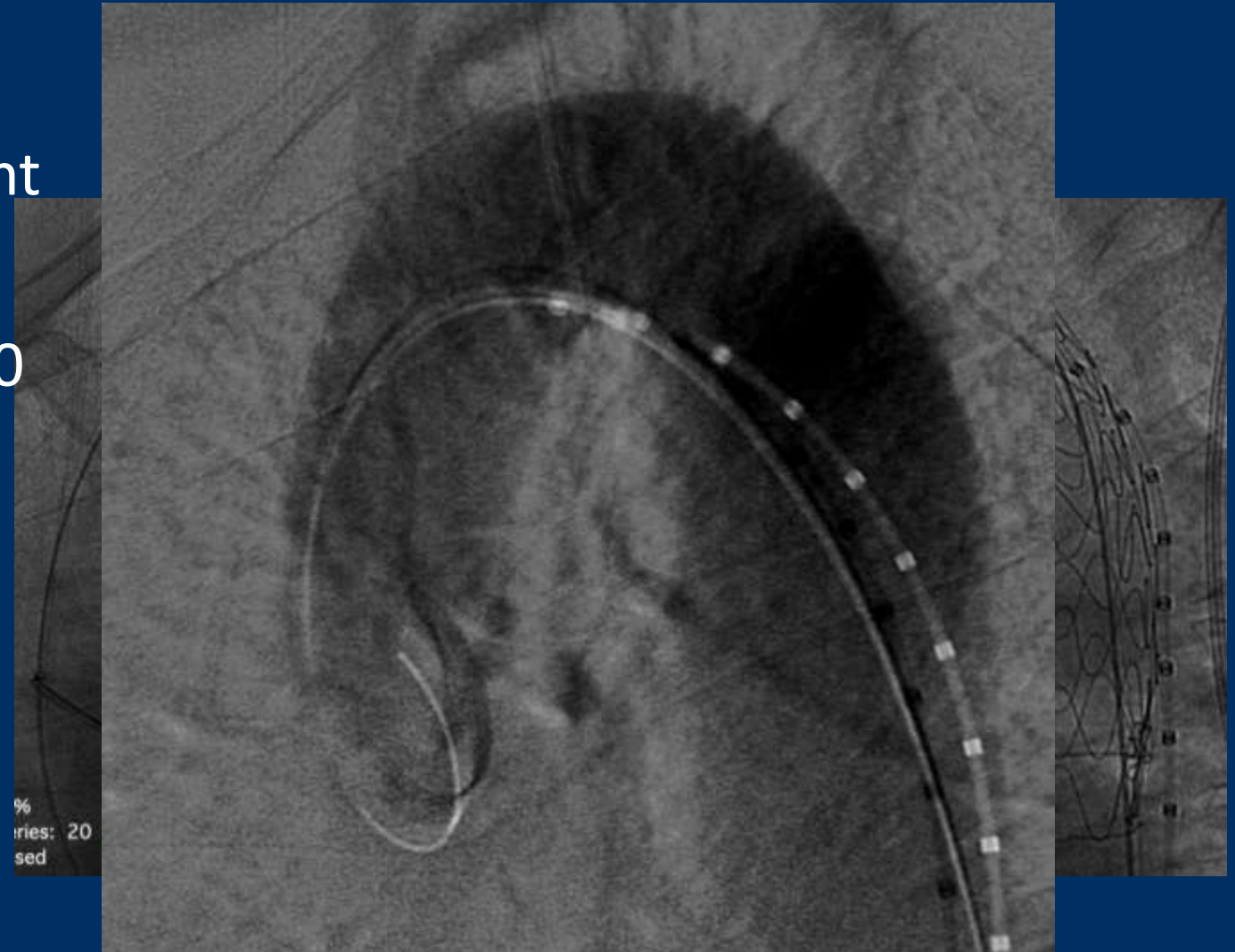


Adapts to anatomy

Why I like the GORE® TAG® Conformable Thoracic Stent Graft with ACTIVE CONTROL System

Bird Beaking

- 21mm smallest diameter stent
- Can snug inner curve down
- IFU angulation 20mm LZ at 60 degrees (longer for < 60)



Why I like the GORE® TAG® Conformable Thoracic Stent Graft with ACTIVE CONTROL System

Distal SINE

- Tapering grafts
- Little to no 'spring back' force
- Minimal effect on aortic shape
- Low radial force

		Radial force (N)		Radial force (N)		Radial force (N)	F	p-Value
Device	c-TAG ^a	1.14 ± 0.03	Relay ^b	1.22 ± 0.03	Valiant ^c	1.46 ± 0.03	29.6	<0.0001

- 4% incidence (GREAT registry)

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Thank You