Long Term results of Aortic Arch Chimney and Endo Grafts - the impact of gutters

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Conflict of Interest

Consultant:
- Medtronic
- Trivascular
- Silkroad Medical

Ascending and Arch Aneurysms - how to avoid gutters

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Keys to success
- Long overlap
- Optimal sizing – stent graft
- Immediate Gutter Sealing - Onyx

Dual Endo Debranching Aortic Arch and Ascending Aorta

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Common Denominator: Very Long Overlap 10 cm

4 Barrel Endo Debranching ViaBahn

Conflict of Interest

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How to avoid gutters

**Sandwich Technique**

Direct Contact between Chimney graft and Stent Graft

- ViaBahn graft in left common carotid
- ViaBahn graft in innominate artery
**Sandwich Bridging Stent**

No gutter

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**Challenges**

2009  **6.3 cm**

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**Postop CT**  
2009

Bird Beacon?

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**February 2010**  
6 cm

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**Chimney Innominate Artery + Left Carotid + Carotid-Subclavian Transposition**

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**September 2011**  
6.9 cm
Type I b

December 2012

Patency: Chimney Carotid Artery

Long Term Results Subclavian Chimney

Carotid Versus Subclavian - Patency

Type I Endoleak: 28%}

Future Developments - Active Graft Fixation

Aptus Stapler
Reduction of Gutters: In situ Fenestration

When there is no time for Chimneys
Type B Dissection, Rupture, Retrograde Type A Dissection

Conclusion
There is still ample space for improvement

Thank you