

# DEBRANCHING TECHNIQUES: OSAKA STYLE

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# Disclosure

Speaker name: Kazuo Shimamura

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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

# Aortic arch TEVAR In Osaka Univ.

1997-2017.Feb

Aortic arch TEVAR

401case

Zone 0  
157(39.1%)

Zone 1  
74(18.5%)

Zone 2  
170(42.3%)

GR(Asc) + total debranch  
N=72



Total debranch  
N=35



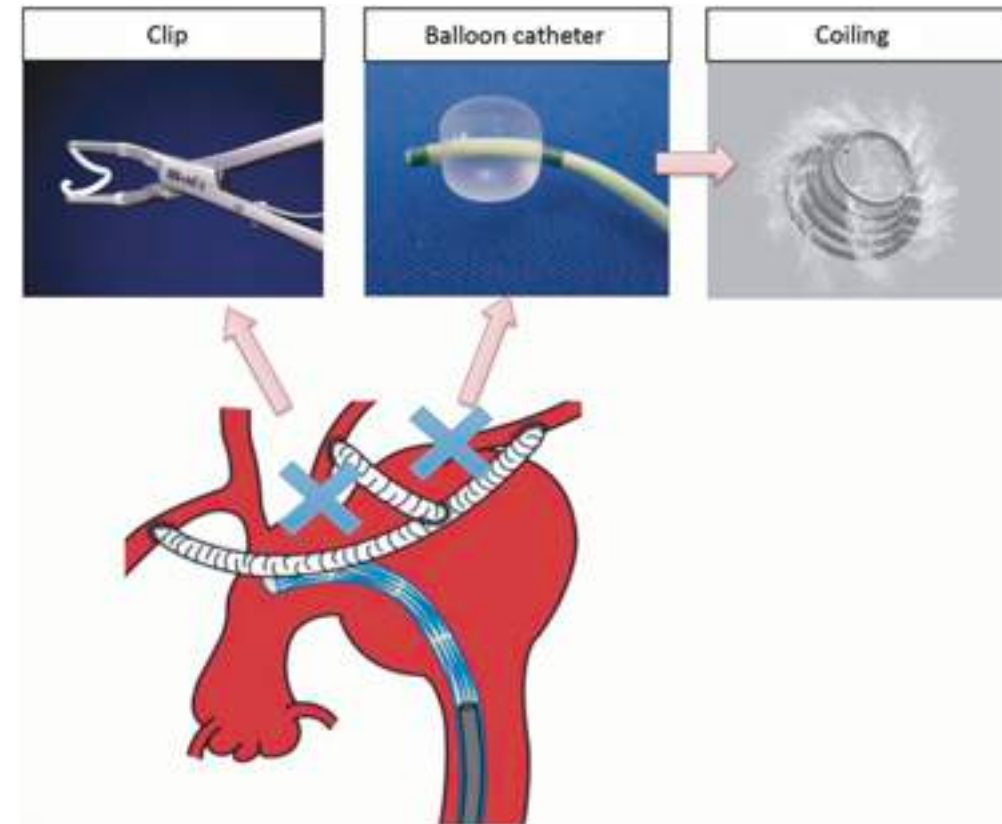
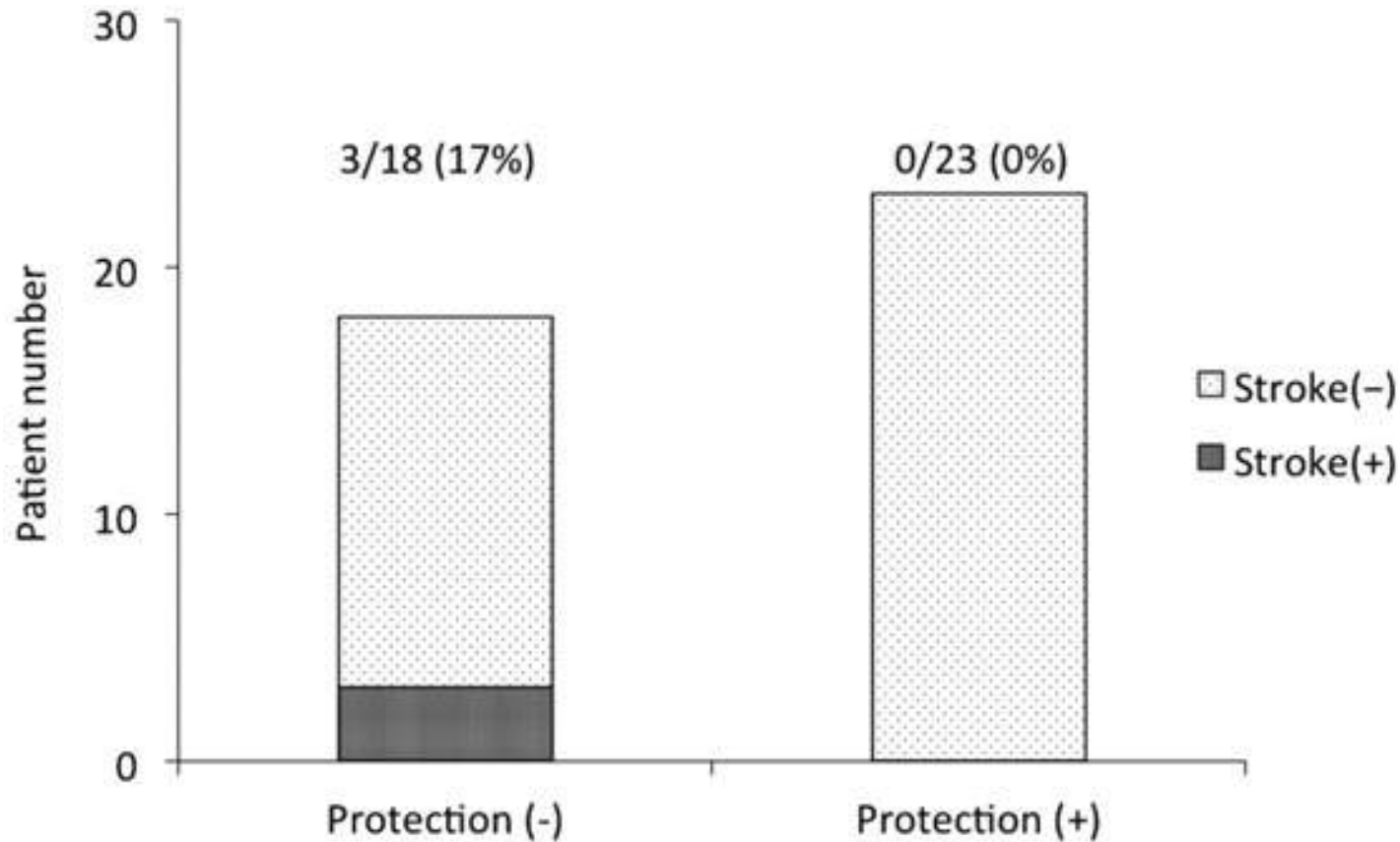
Chimney/fene  
N=23



Branch device  
N=27

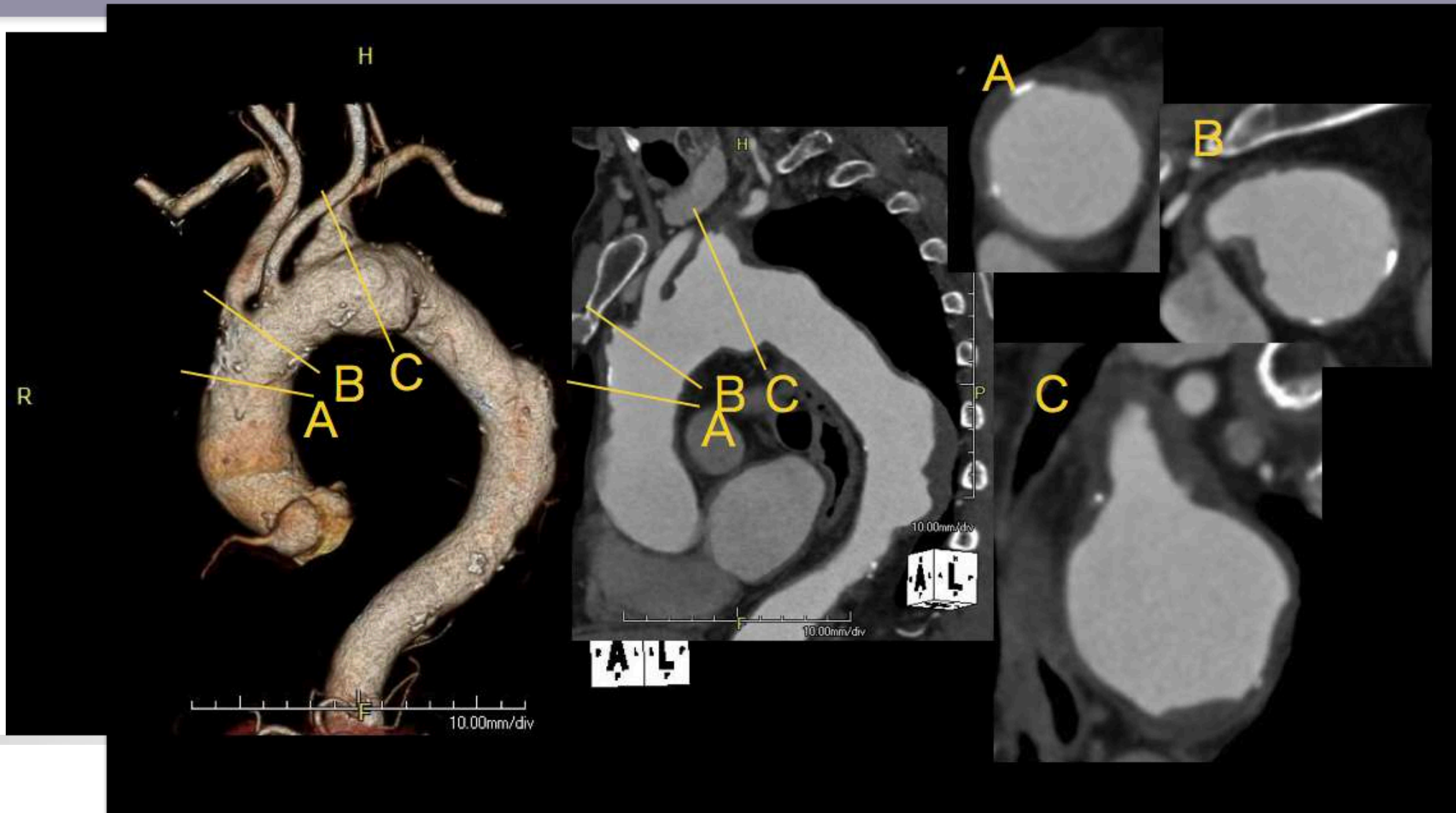


# Effectiveness of arch vessel protection In debranching TEVAR



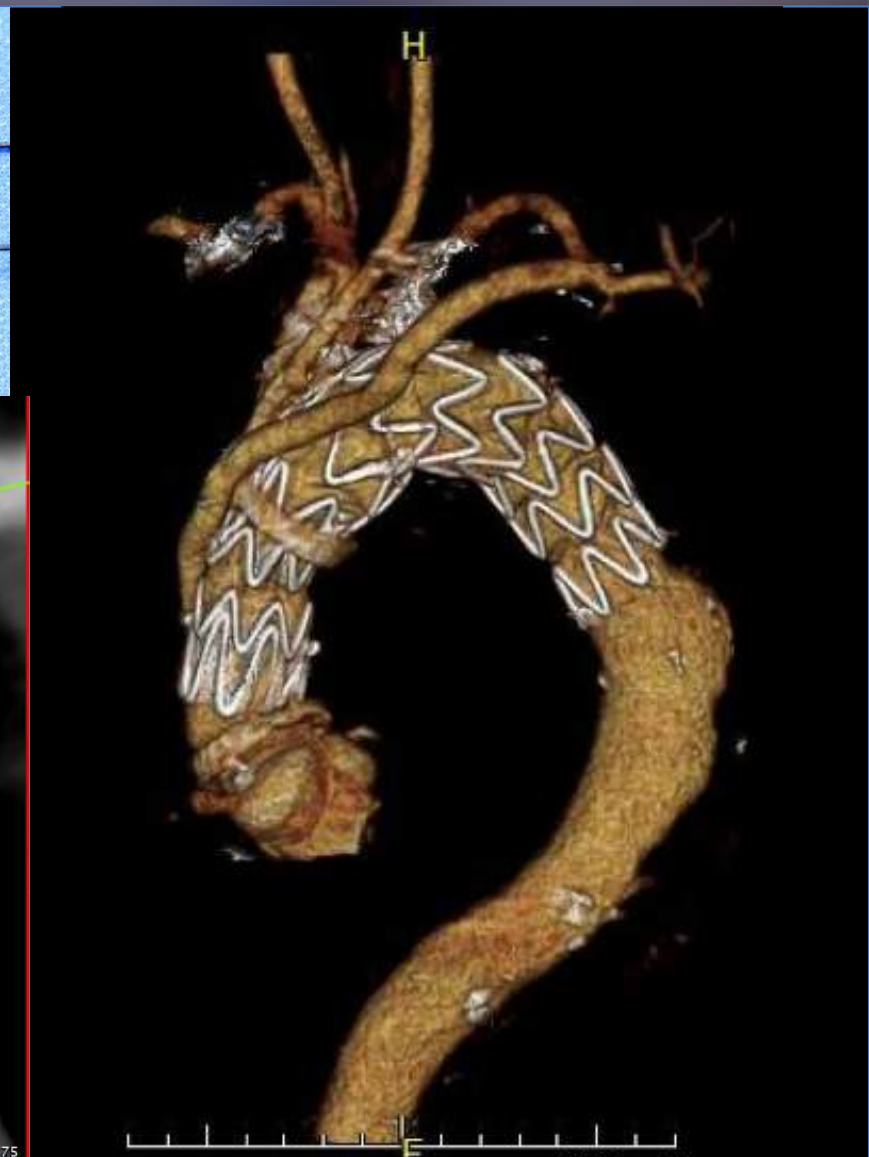
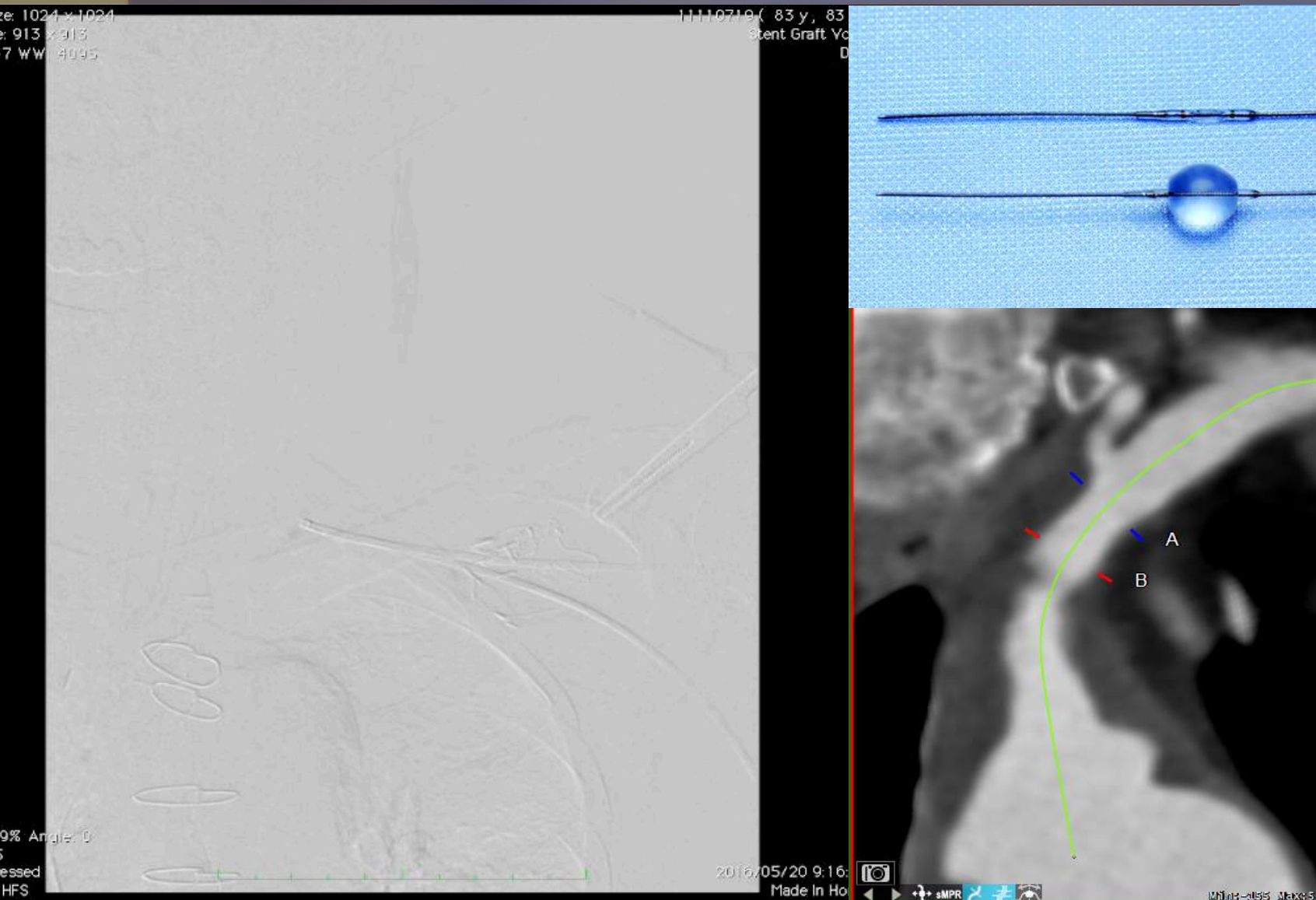
Shijo et al. Thoracic endovascular aortic repair for degenerative distal arch aneurysm can be used as a standard procedure in high-risk patients. Eur J Cardiothorac Surg 2016

## Case 1: 83 male, PMS: DM, HT, HL, CAD

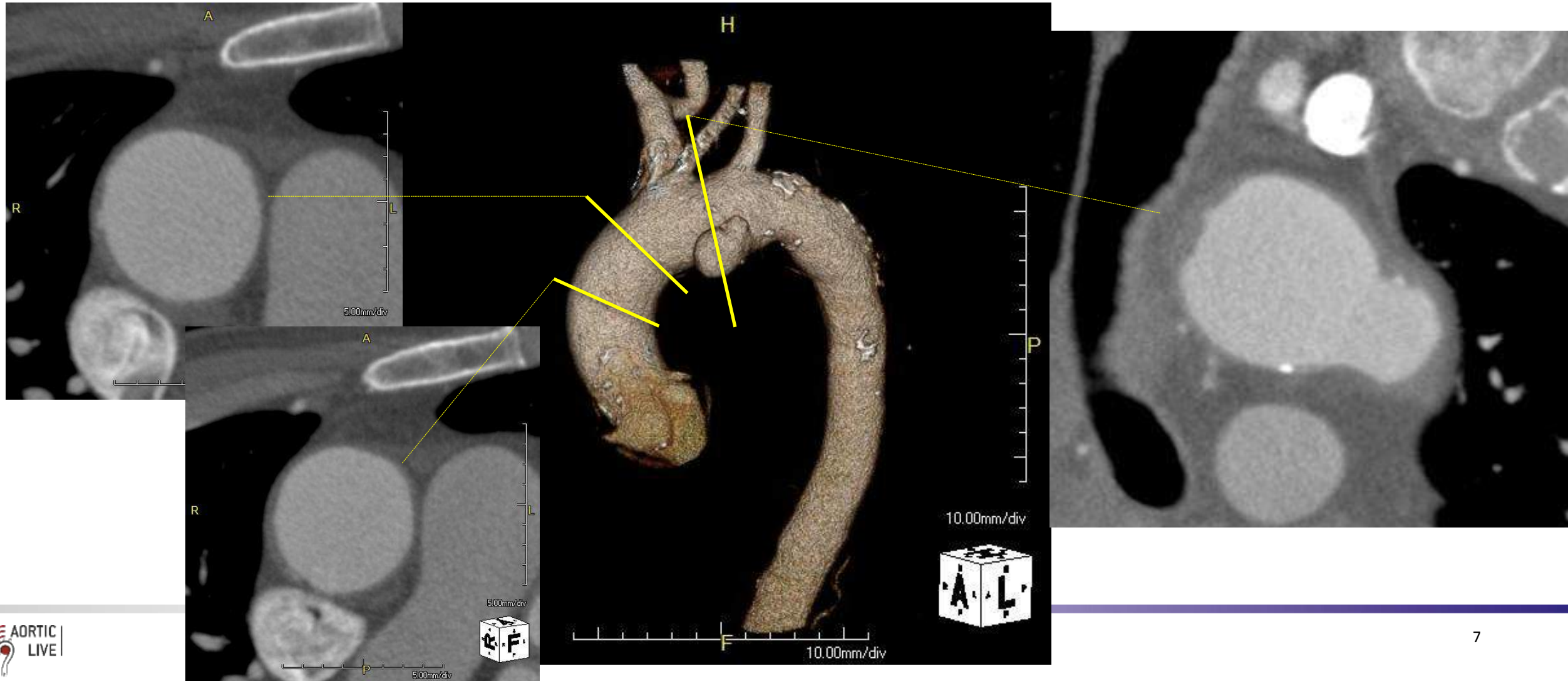




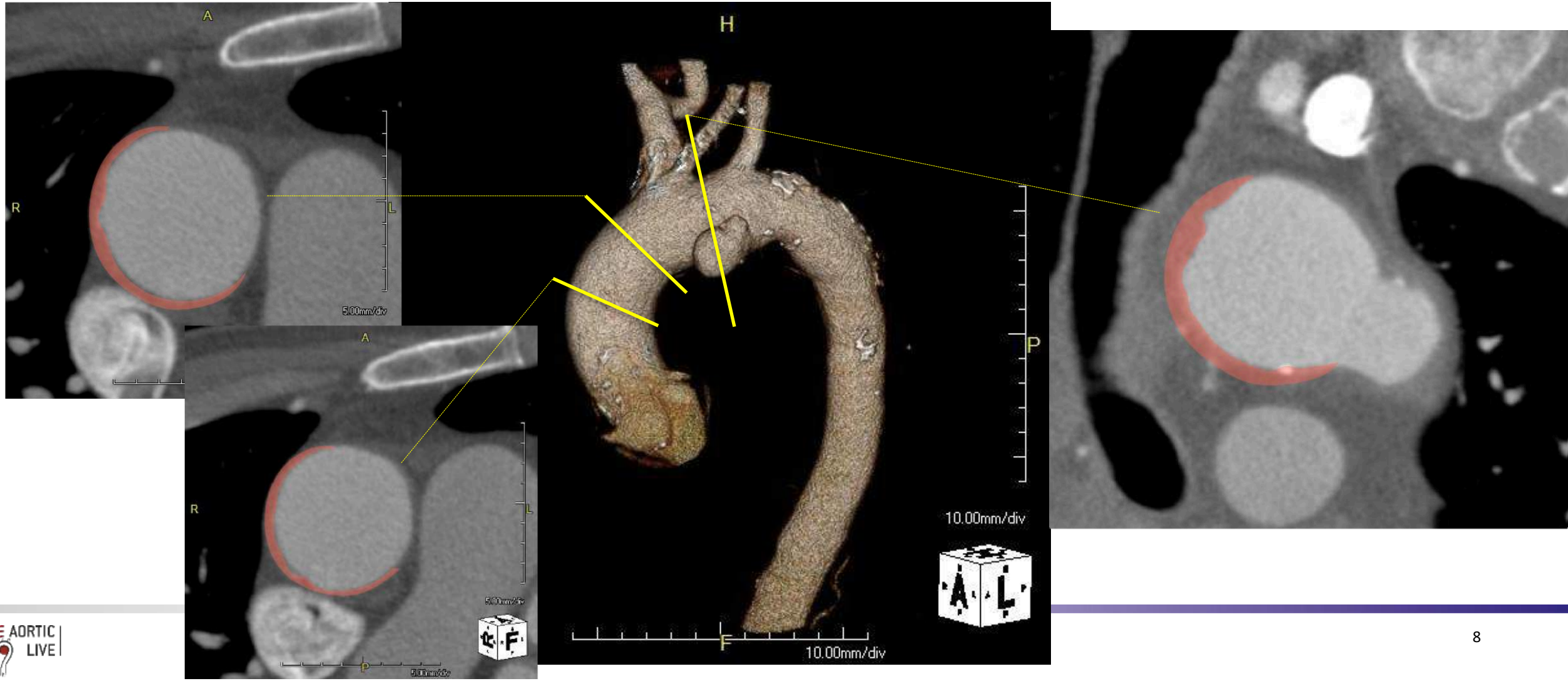
# Debranch TEVAR with left VA balloon protection



## Case 2: 71 M, preoperative status of Rectal Cancer

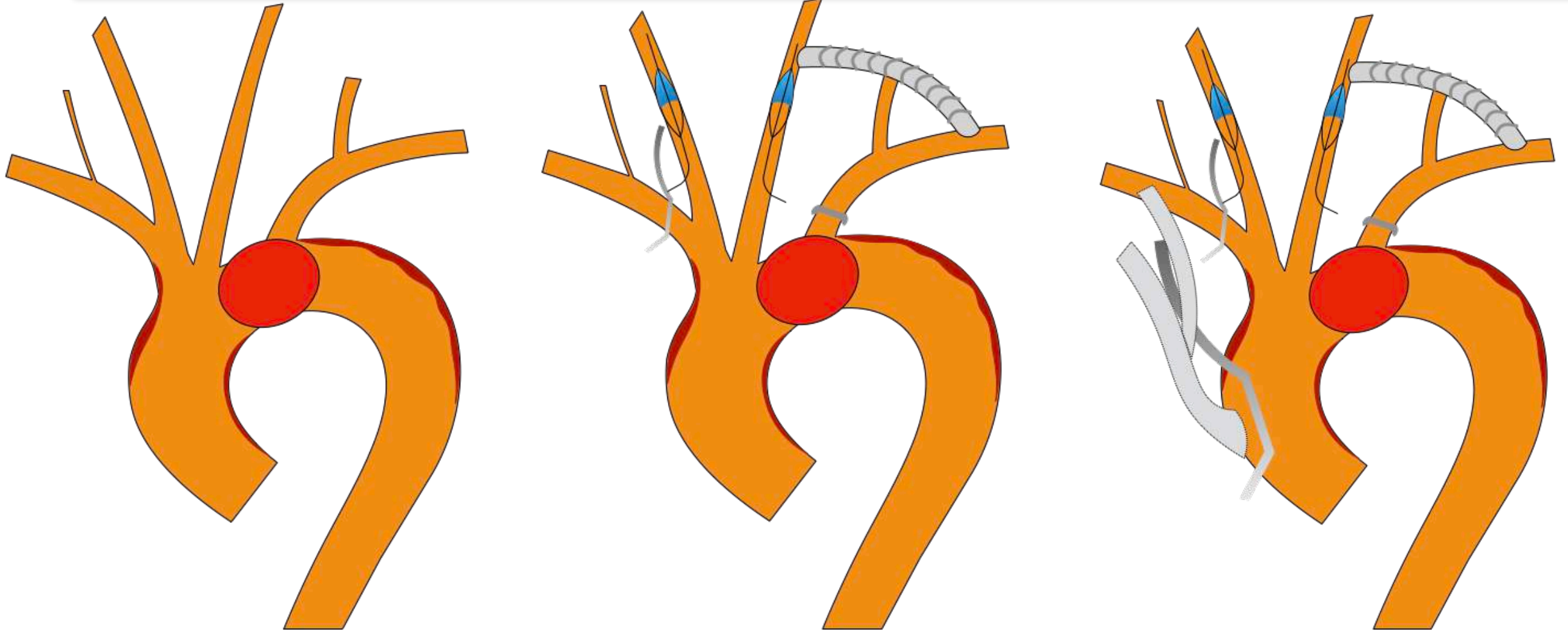


## Case 2: 71 M, preoperative status of Rectal Cancer

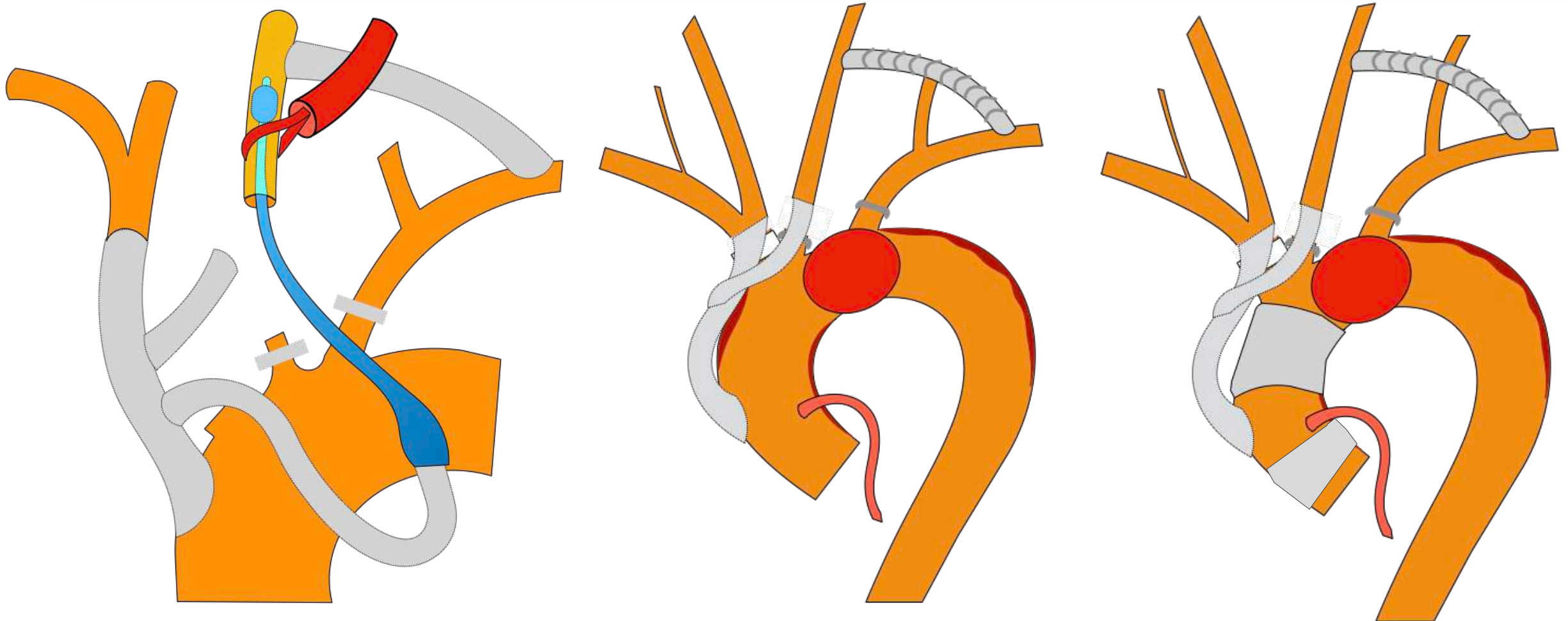




# Overview of debranching technique and brain protection method



# Overview of debranching technique and brain protection method



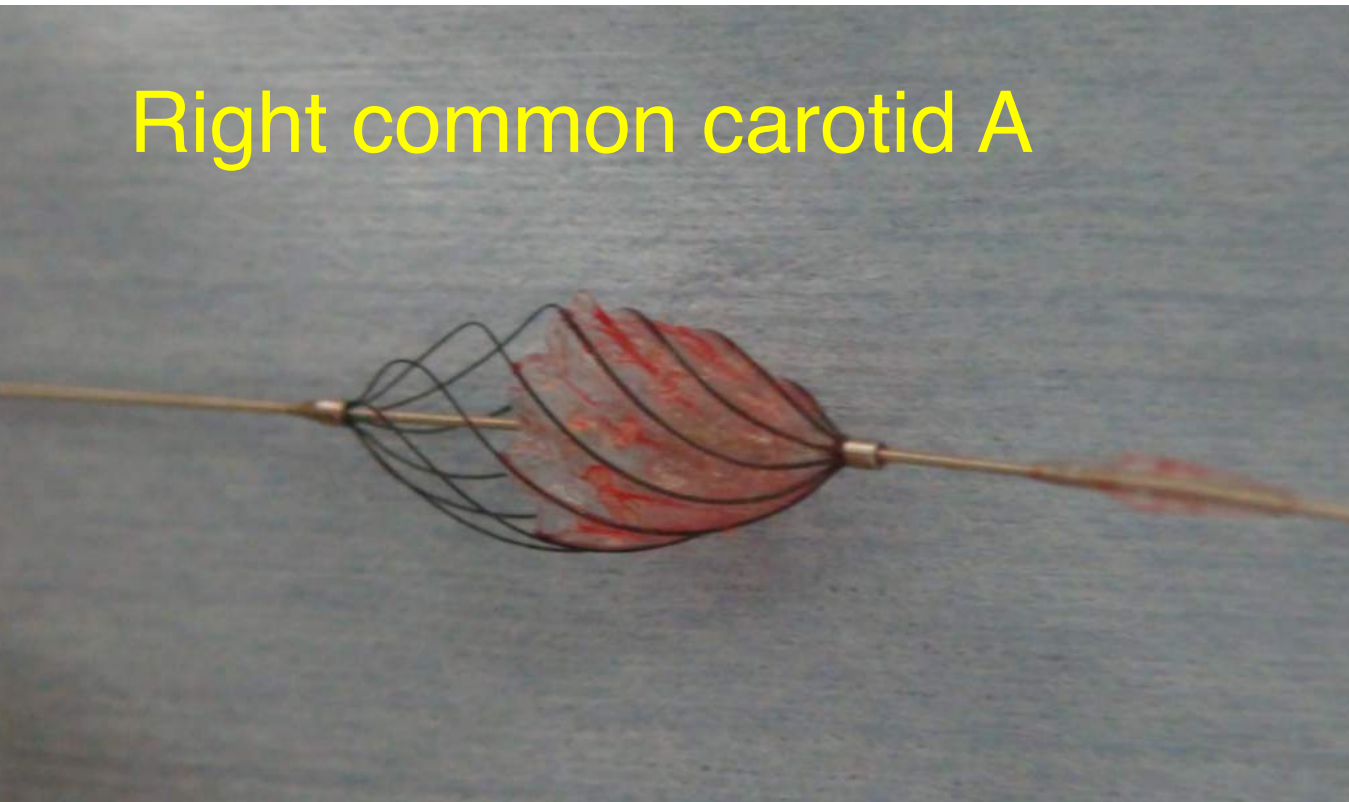




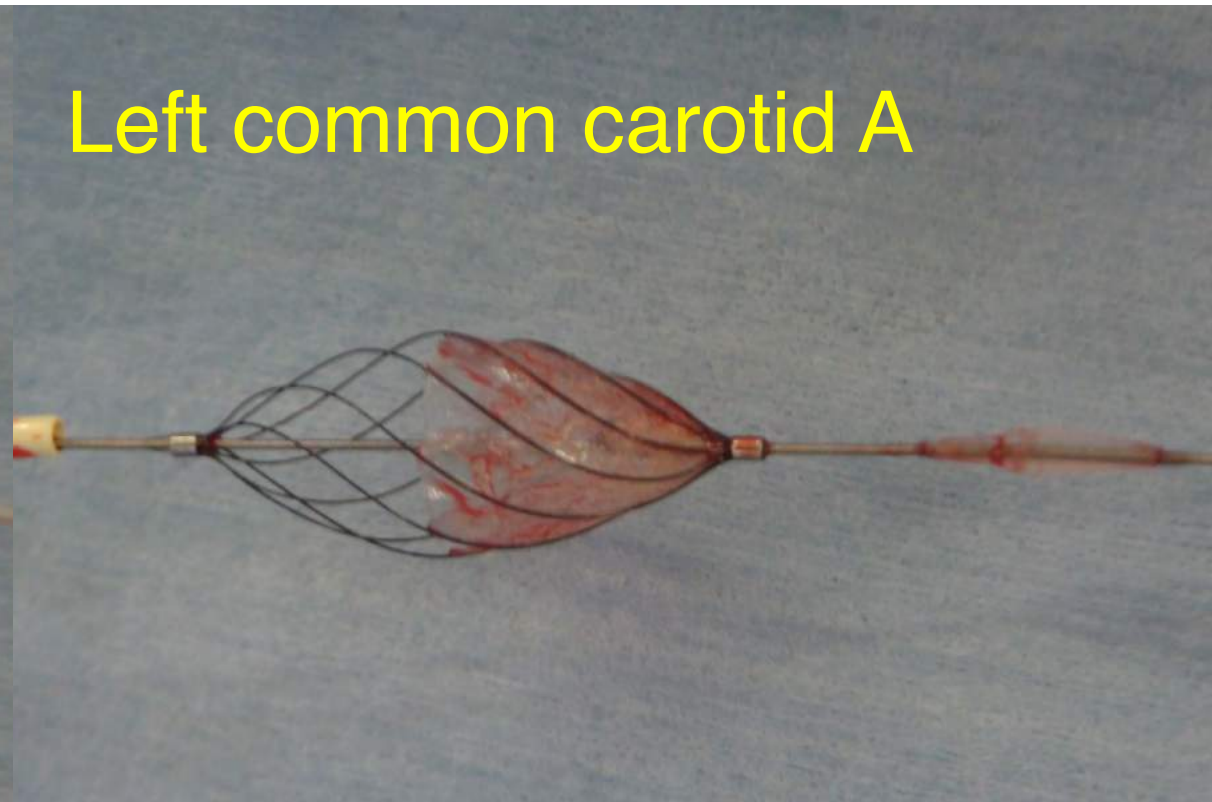


## Arterial filters (post operation)

Right common carotid A

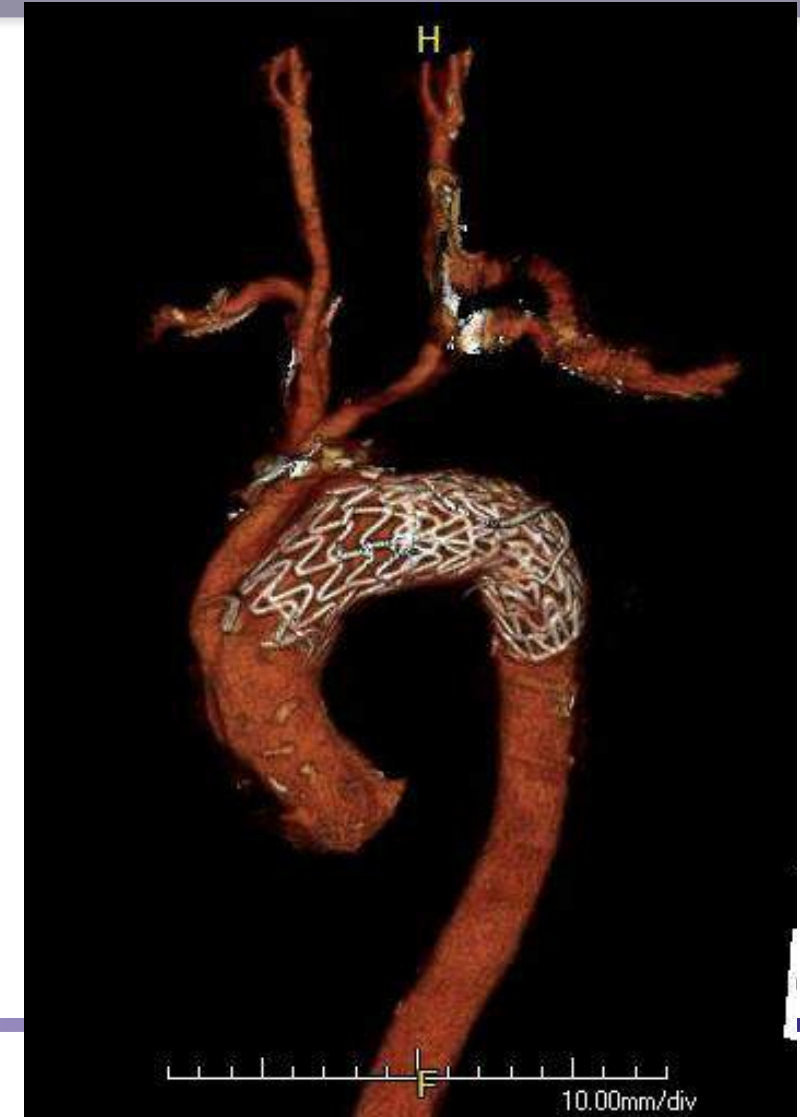
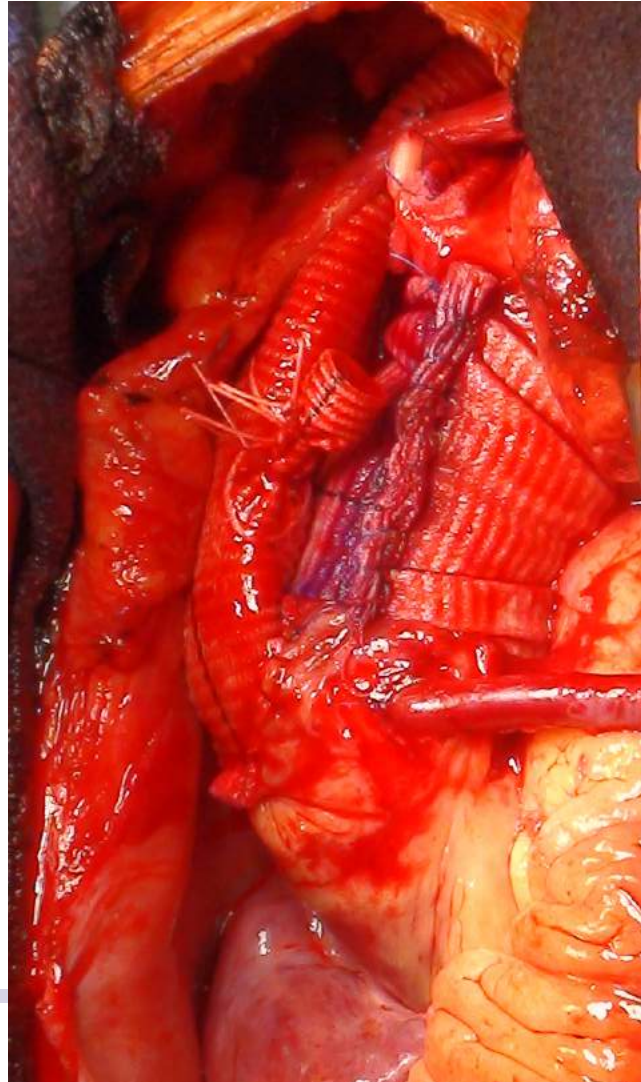
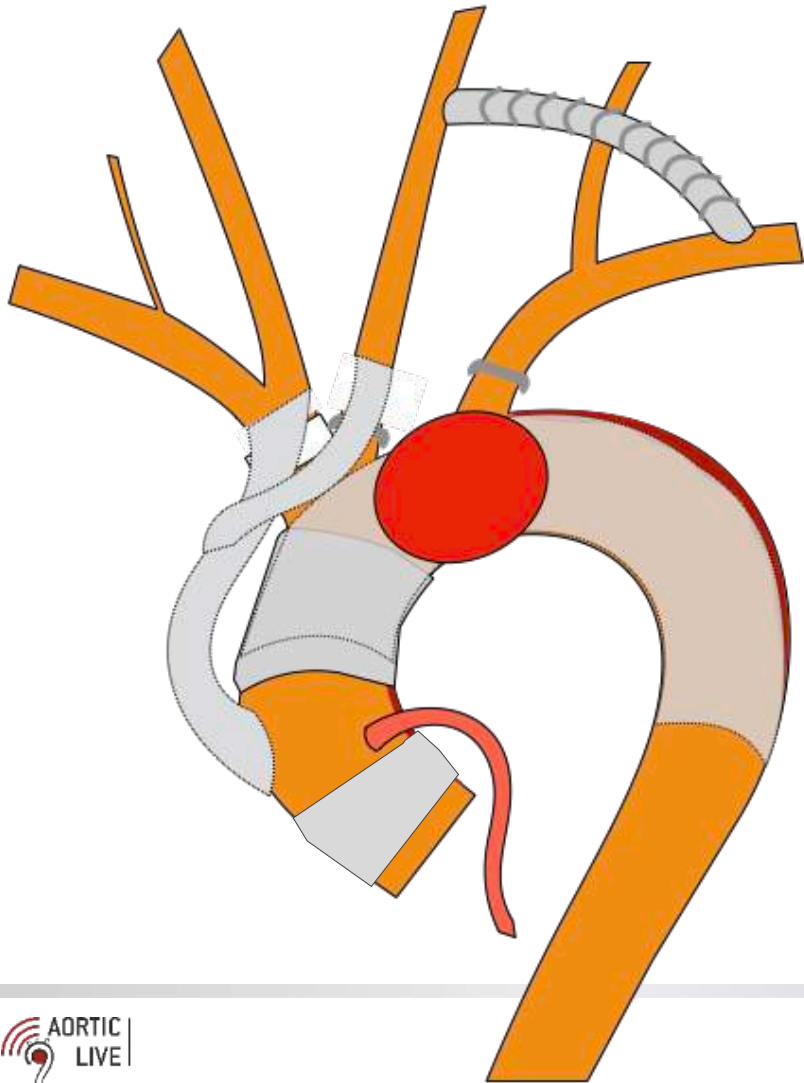


Left common carotid A





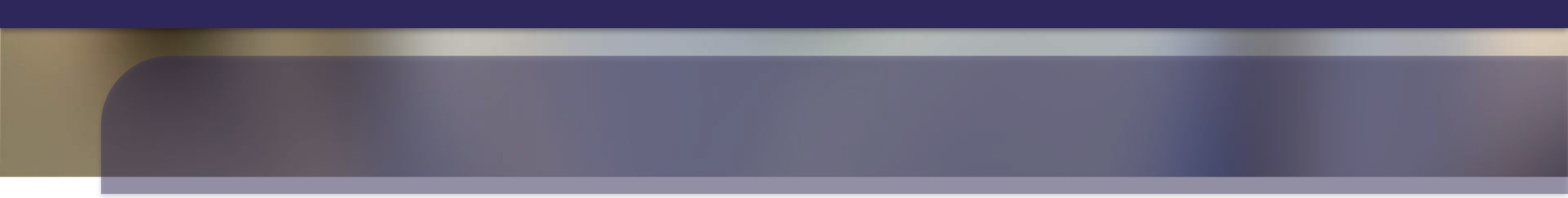
## Postoperative images



# Conclusion

In arch TEVAR,

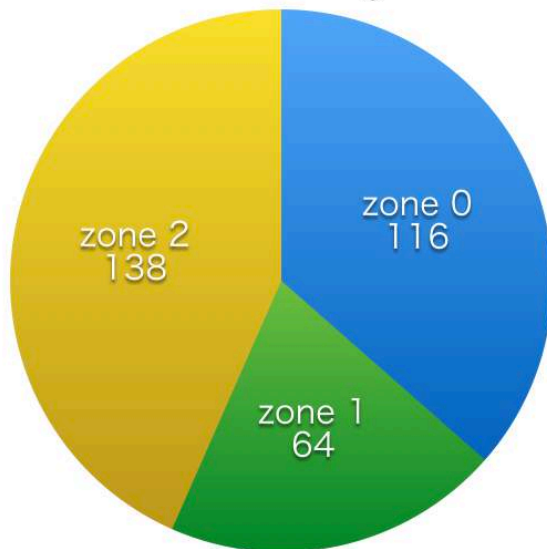
- ✓ Appropriate procedure selection is mandatory according to precise evaluation of the condition of ascending aorta.
- ✓ Supra-arch vessel protection could be effective to prevent embolic event.



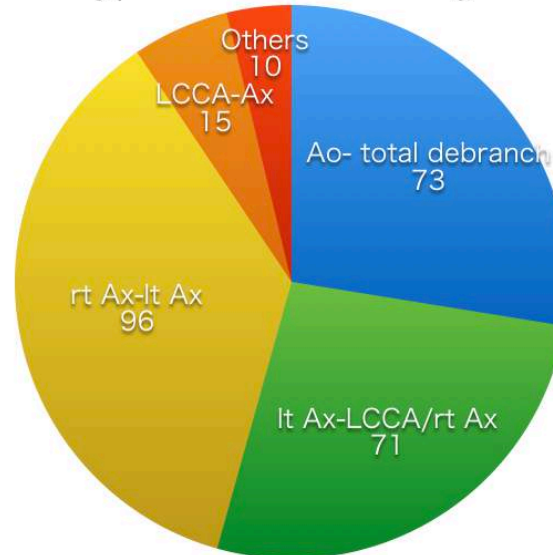
# Debranching TEVAR In Osaka Univ.

- 1997–2014 Aortic Arch TEVAR 318case

Proximal landing zone



Type of deb ranching



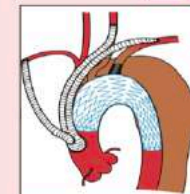
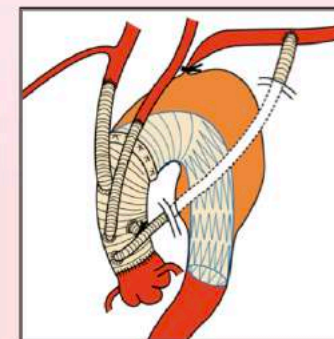


# Debranching TEVAR In Osaka Univ.

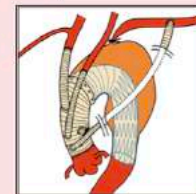
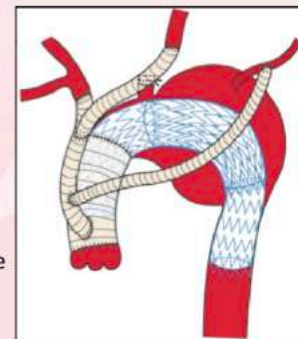
Zone 0 157

## Zone 2 170

OSG2 160

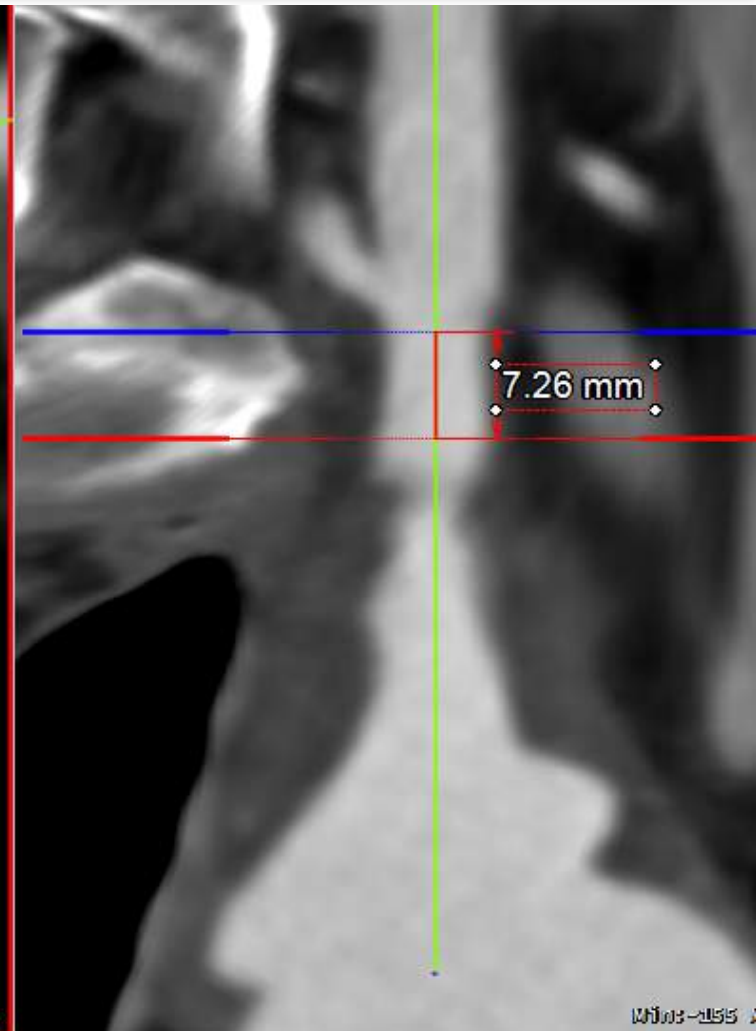
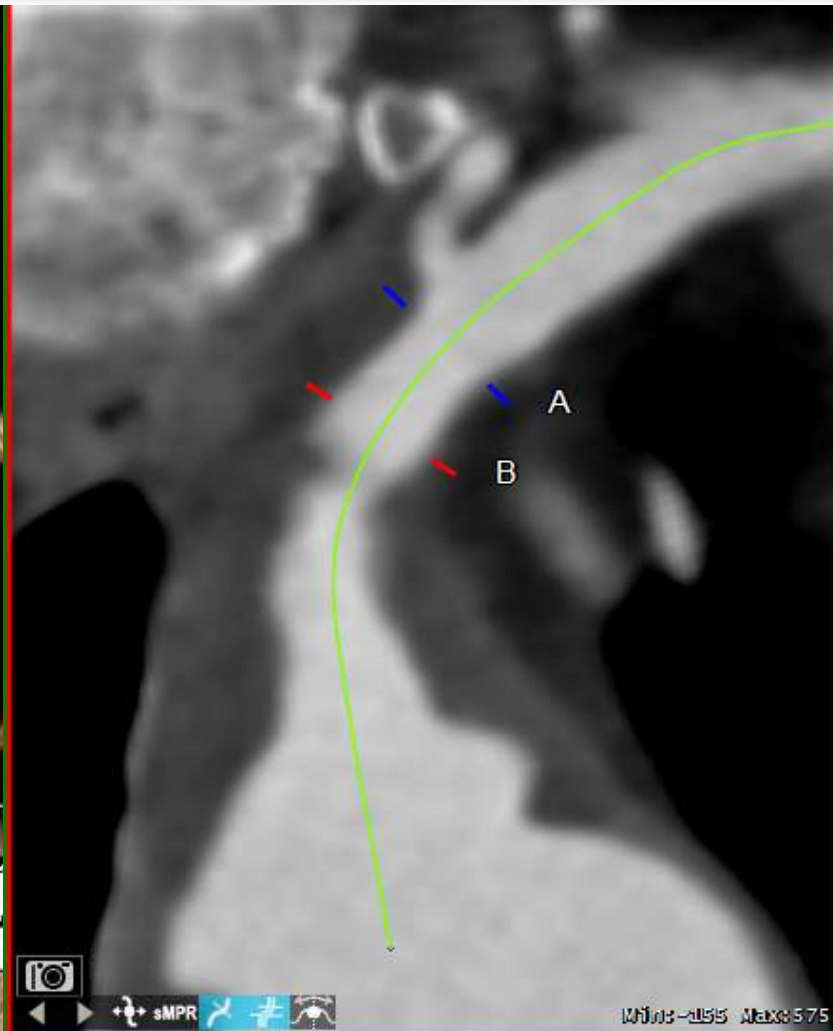
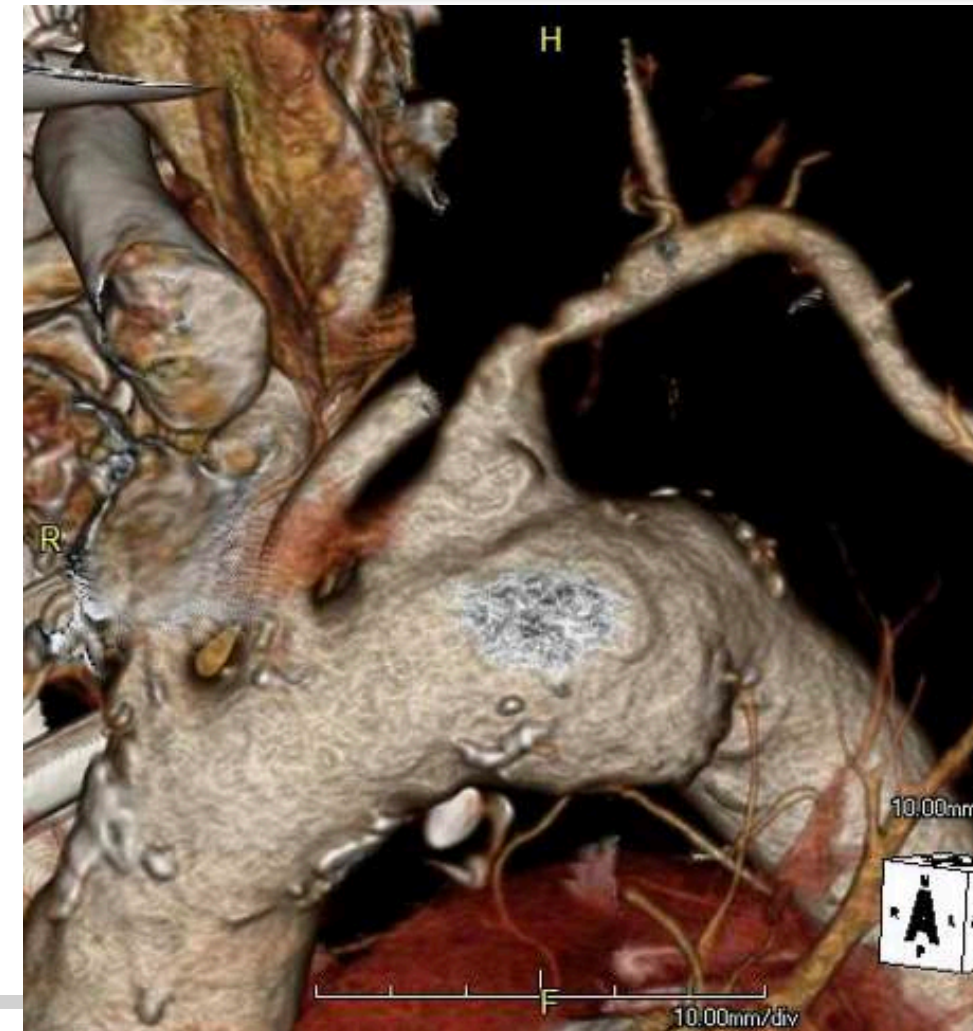


2010



- ✓ Requirement of one stage repair

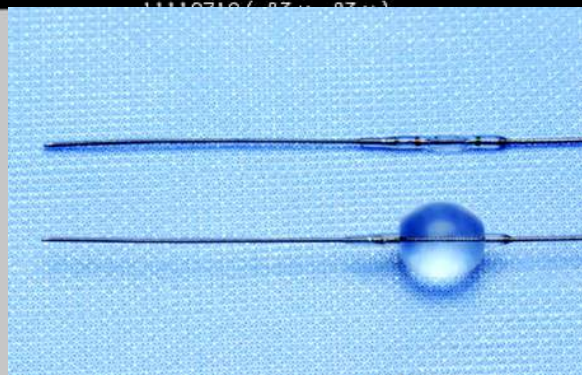
# Arch aneurysm with left SA aneurysm, shaggy aorta





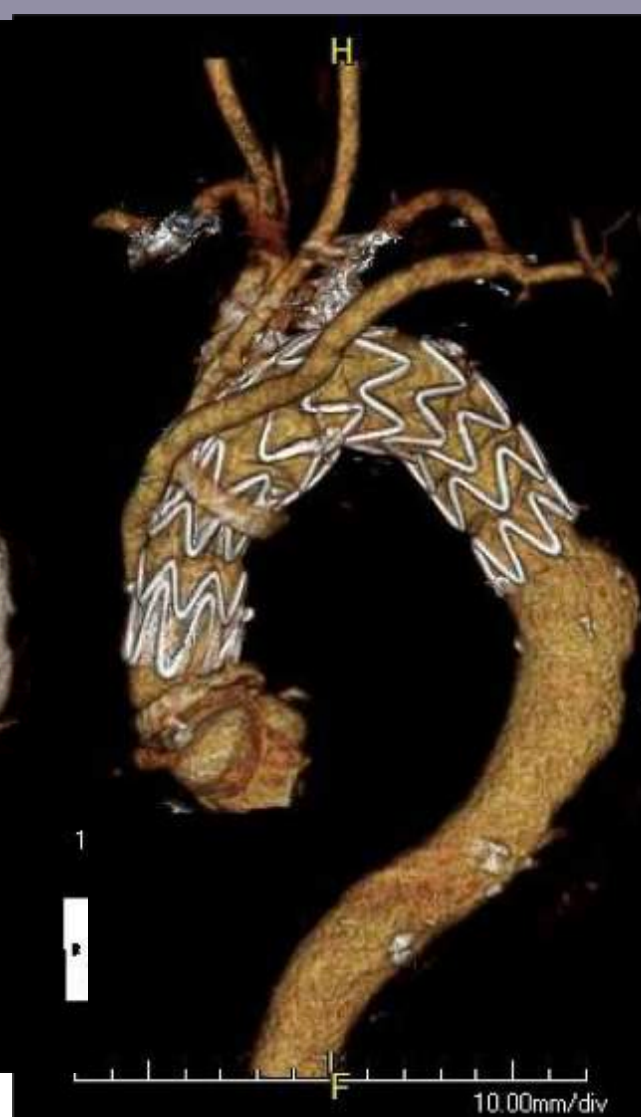
# Debranch TEVAR with left VA balloon protection

Size: 1024 x 1024  
X: 913 Y: 913  
7 WW: 4095

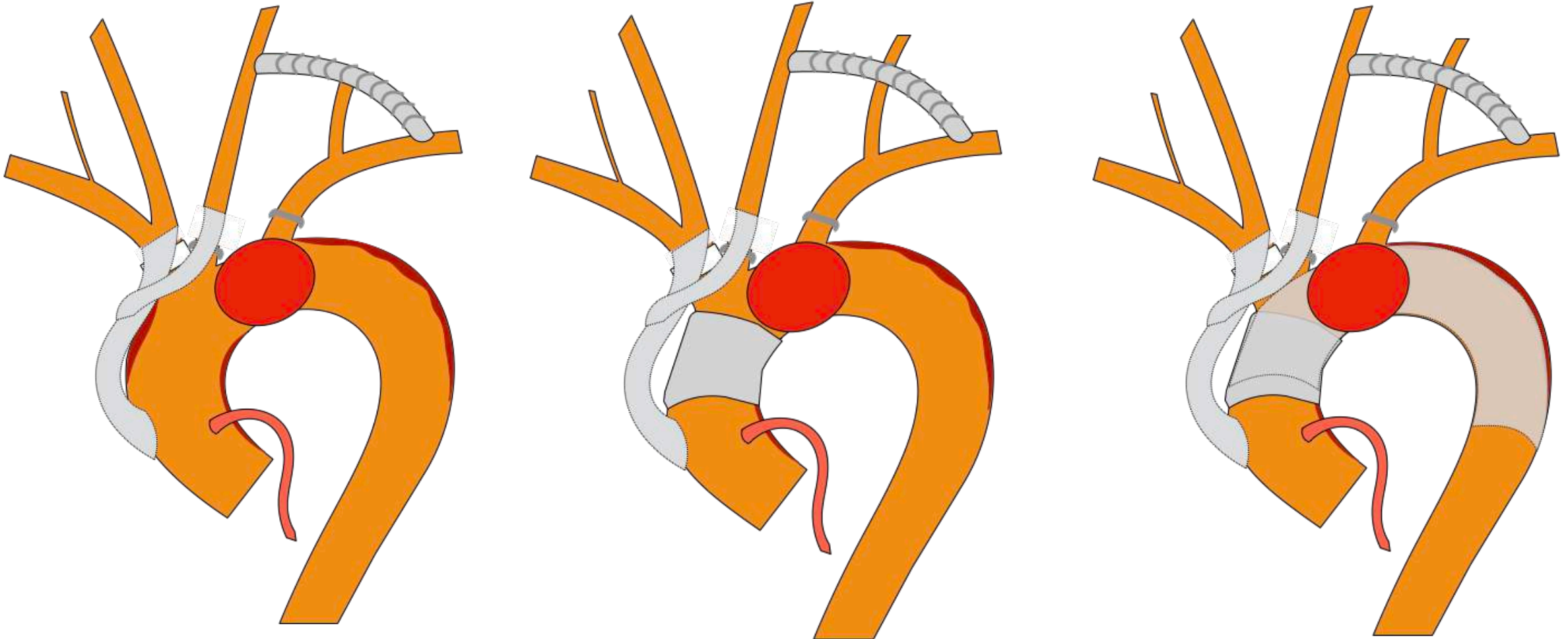


9% Angle: 0  
essed  
HFS

2016/05/20 9:16:49  
Made In Horos

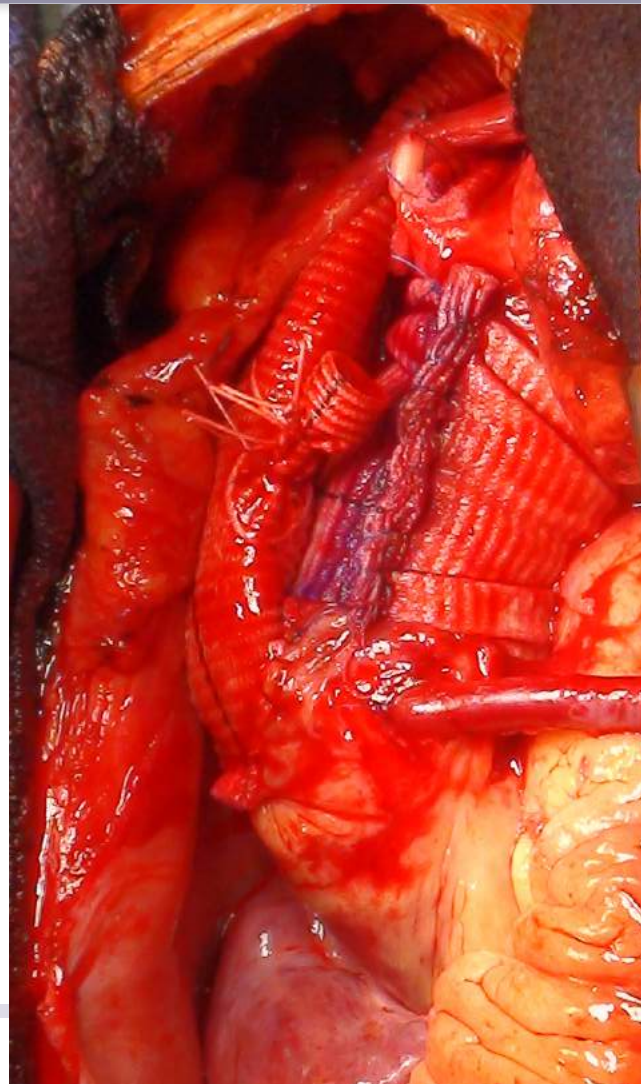


# Overview of debranching technique and brain protection method

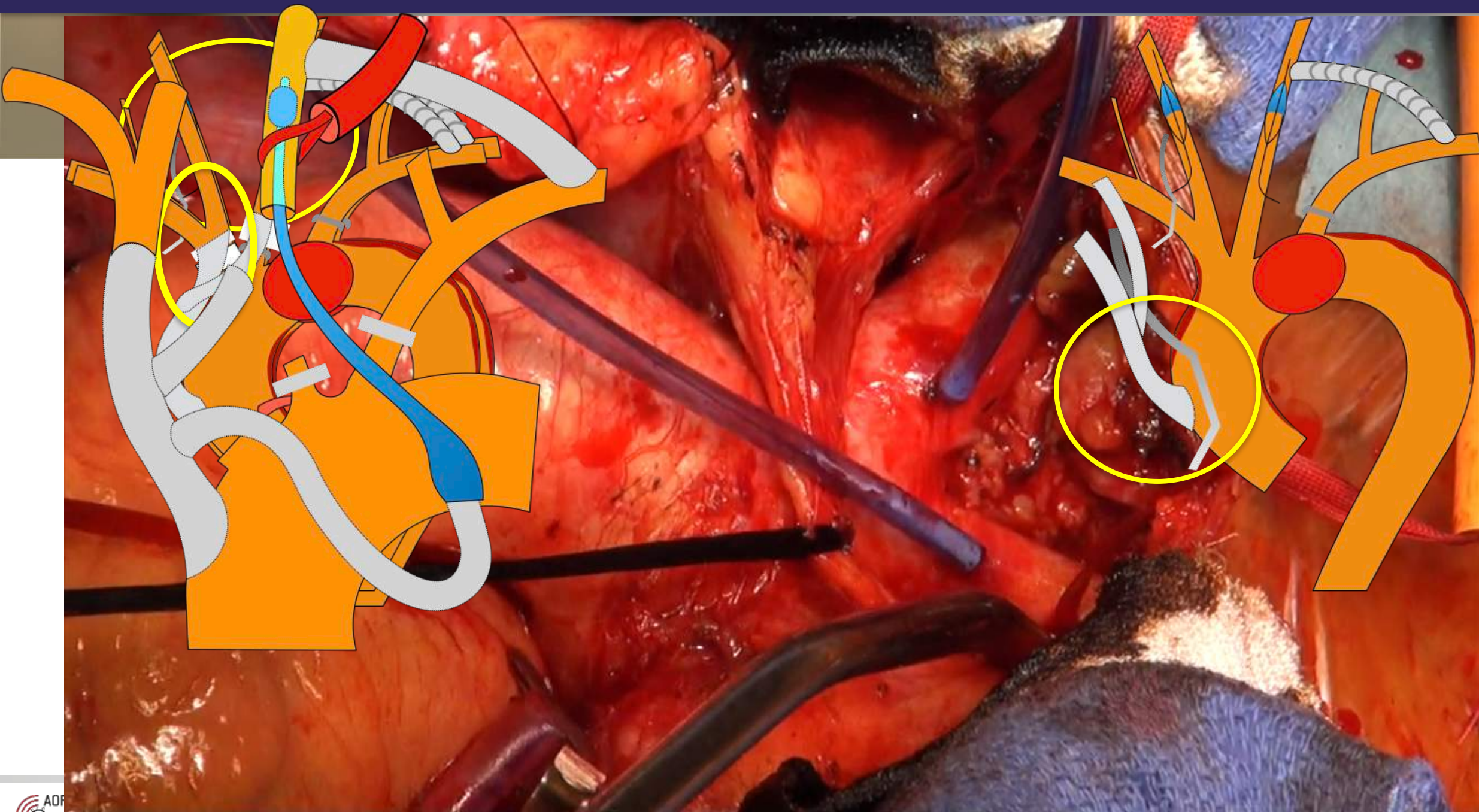




# pre CT, intra-operative figure and post CT







# Debranching TEVAR In Osaka Univ.

	Zone 0* n=40	Zone 1 and 2** n=101
Technical success	100.0%	100.0%
30-day mortality	3.0%	1.0%
stroke	0.0%	3.0%
type I/III Endoleak	3.0%	2.0%

\* Shirakawa et al. The efficacy and short-term results of hybrid thoracic endovascular repair into the ascending aorta for aortic arch pathologies. Eur J Cardiothorac Surg 2014

\* \* Shijo et al. Thoracic endovascular aortic repair for degenerative distal arch aneurysm can be used as a standard procedure in high-risk patients. Eur J Cardiothorac Surg 2016