

ENDOVASCULAR REPAIR OF COMPLEX EXTRA-CRANIAL SUPRA-AORTIC ANEURYSMS

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Disclosure Statement of Financial Interest

Within the past 12 months, I or my spouse/partner have had a financial interest/arrangement or affiliation with the organization(s) listed below.

Affiliation/Financial Relationship

- Grant/Research Support
- Consulting Fees/Honoraria
- Major Stock Shareholder/Equity
- Royalty Income
- Ownership/Founder
- Intellectual Property Rights
- Other Financial Benefit

Company

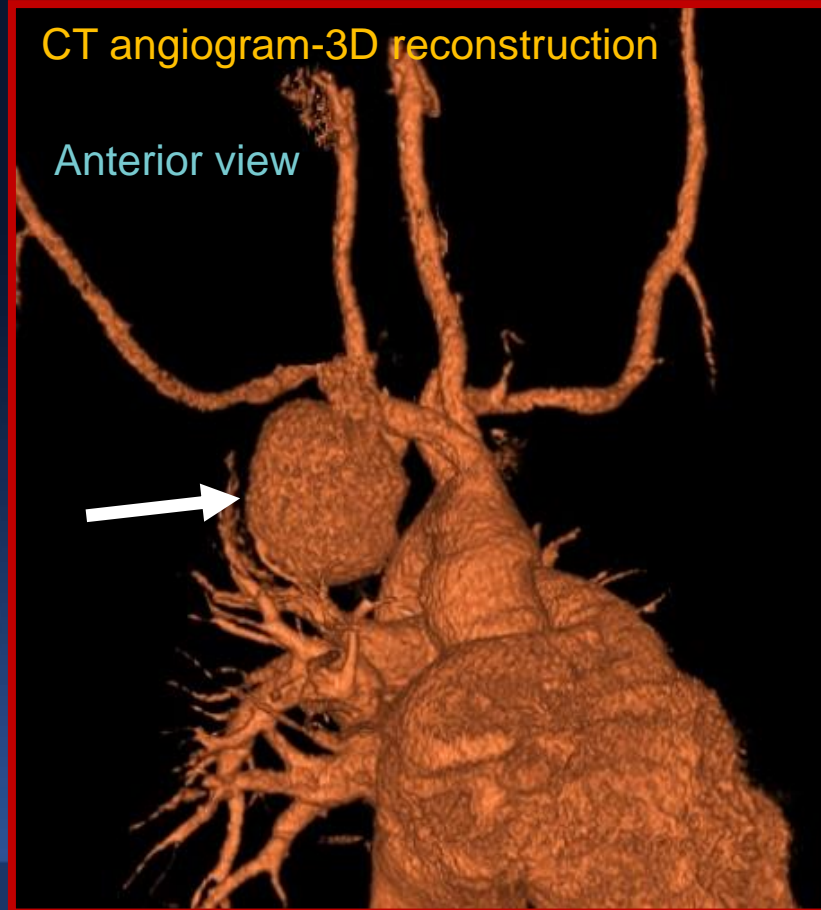
- The Madras Medical Mission
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- nil
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- nil
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- nil

Disclosure Statement of Financial Interest

I, Deep Chandh Raja DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation

Case 1

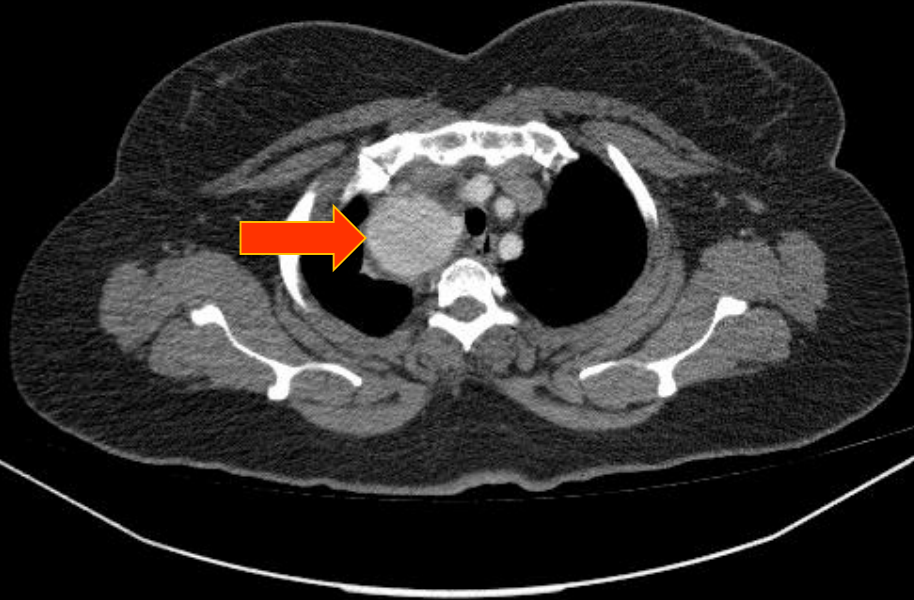
- 46-year-old woman
- Pulsatile right-sided neck swelling
- Hoarseness of voice - right vocal cord palsy x 6 months
- Road traffic accident 5 years back
- No infections, CAD, DM, HTN



A

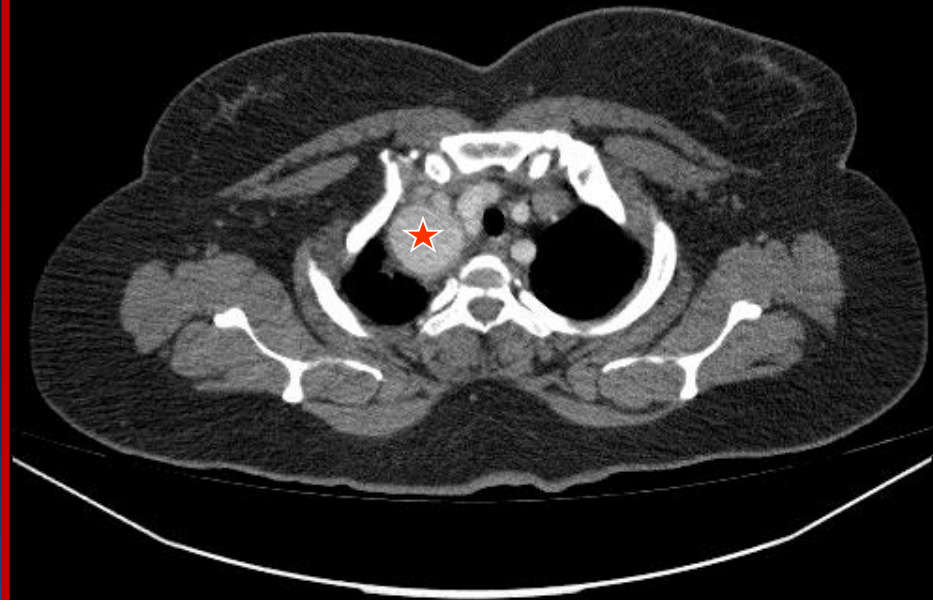
Intra-thoracic extension →

- Compression of esophagus
- Displacement of trachea



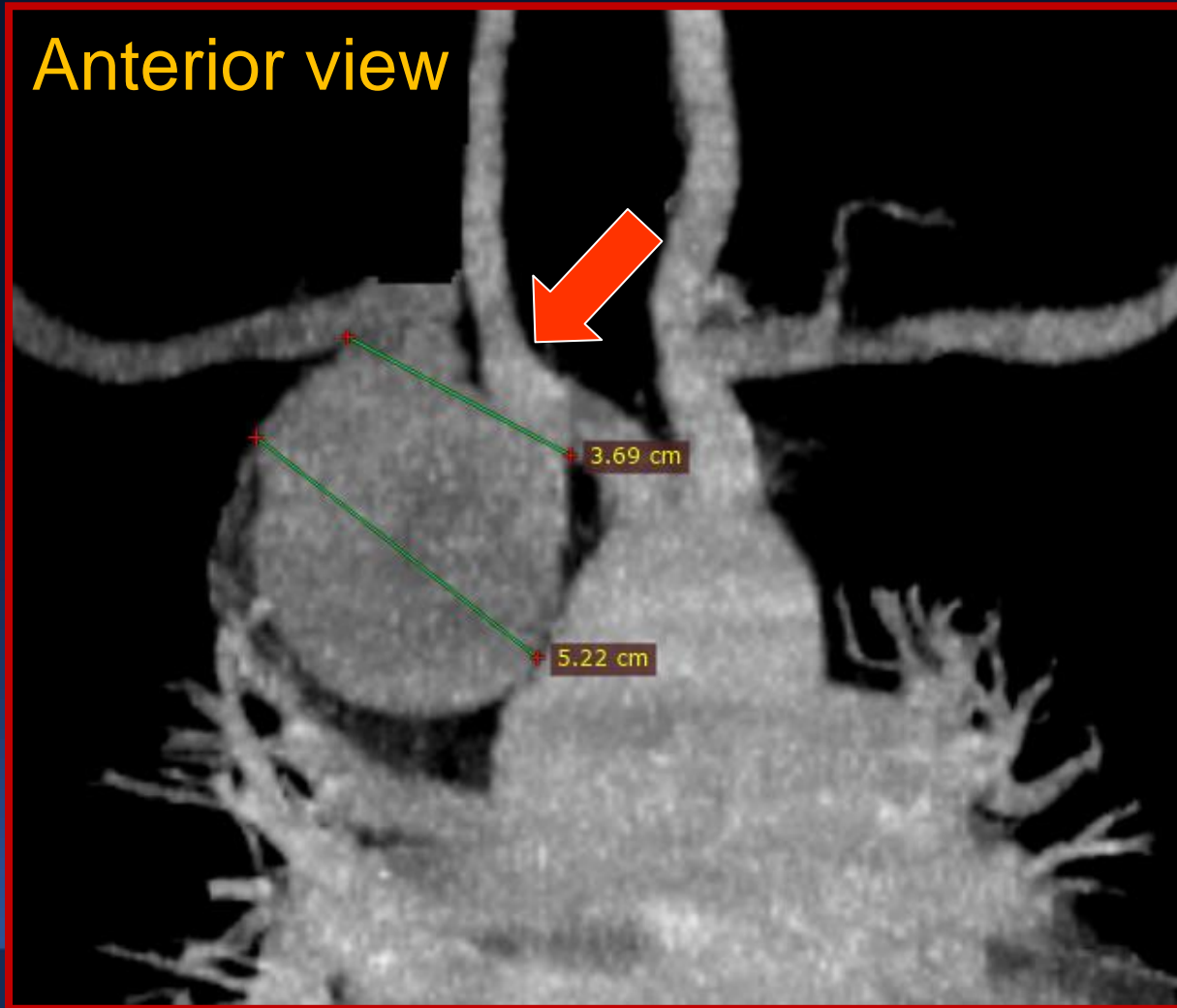
B

Retro-clavicular position



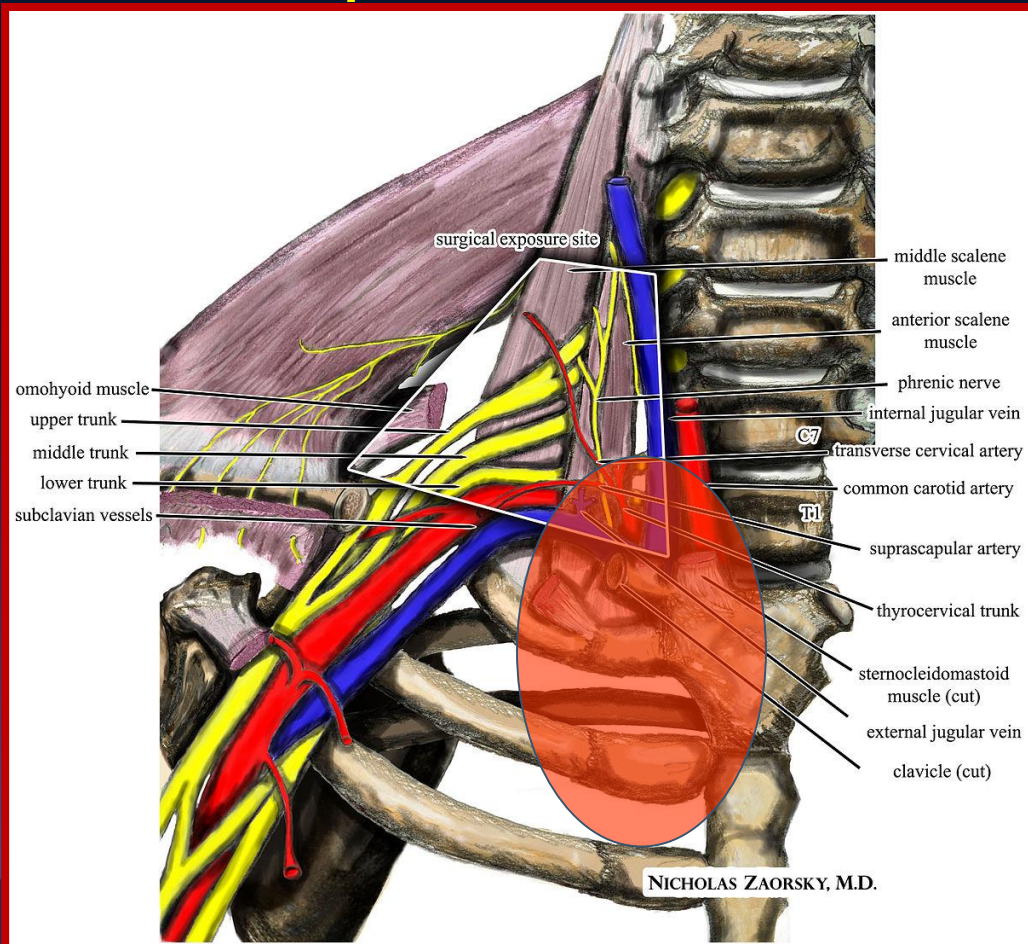
'Complex anatomy'

1. Width: 52 mm
2. Mouth: 37 mm
3. Bifurcation
4. RCCA arising

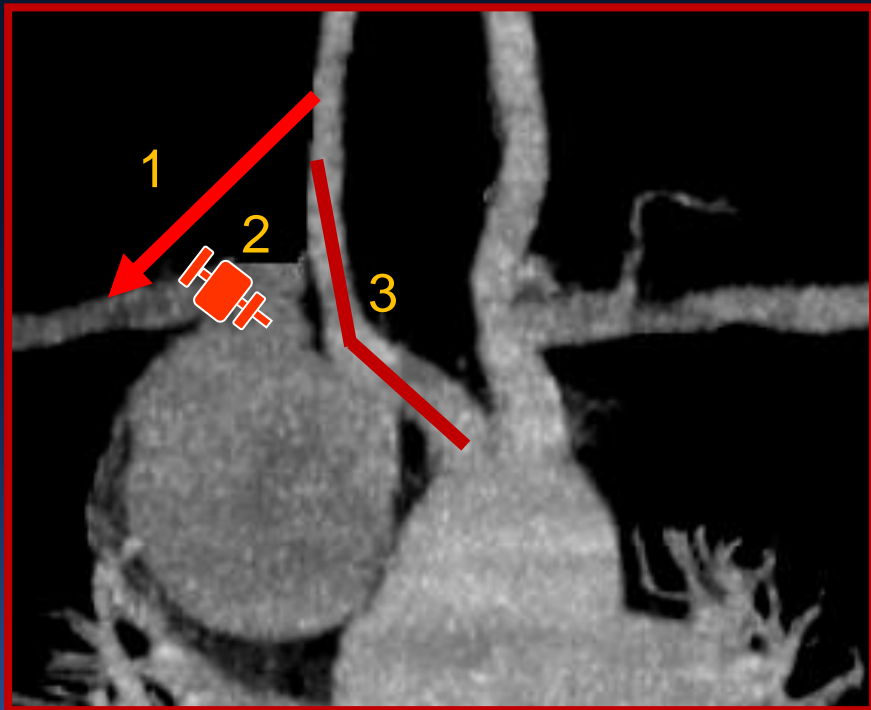


Treatment options

- Surgical
- Hybrid
- Endovascular



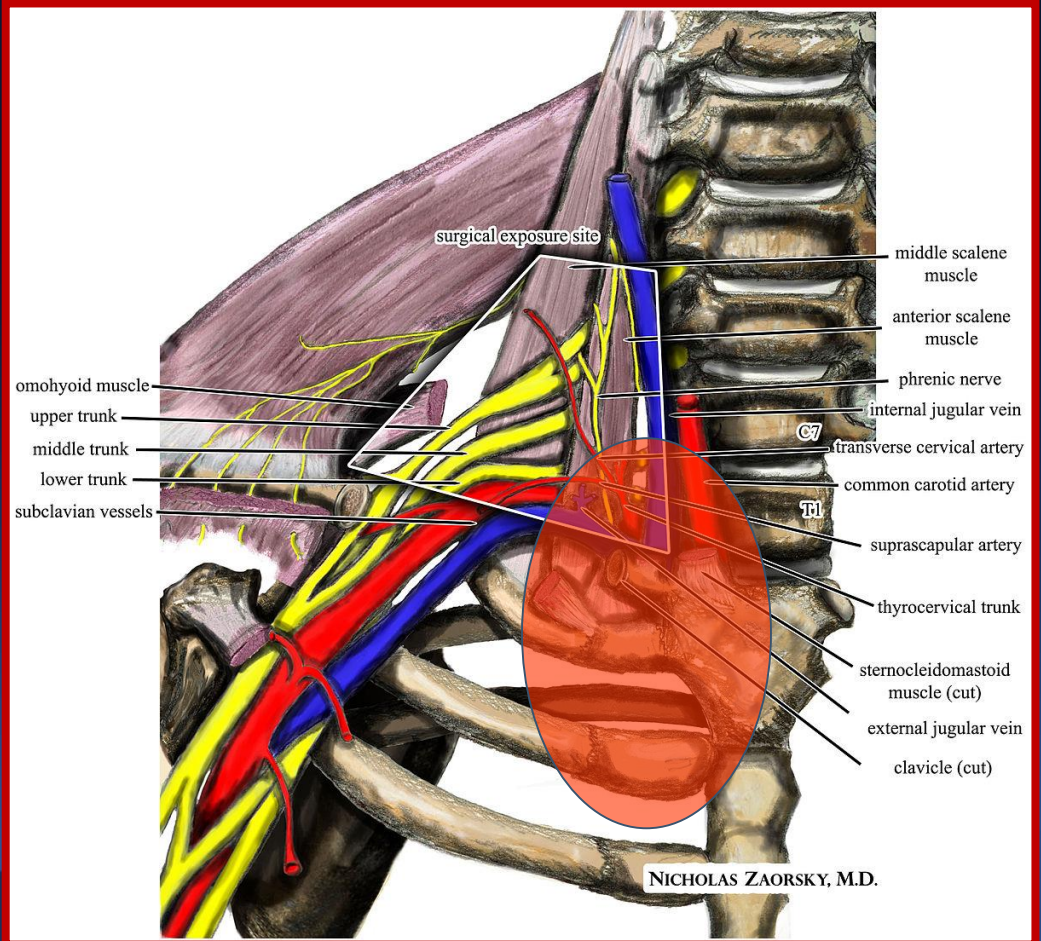
Hybrid option



1. RCCA to right axillary artery bypass
2. 'Vascular plug' in right subclavian artery beyond aneurysm
3. Innominate to RCCA stent-graft

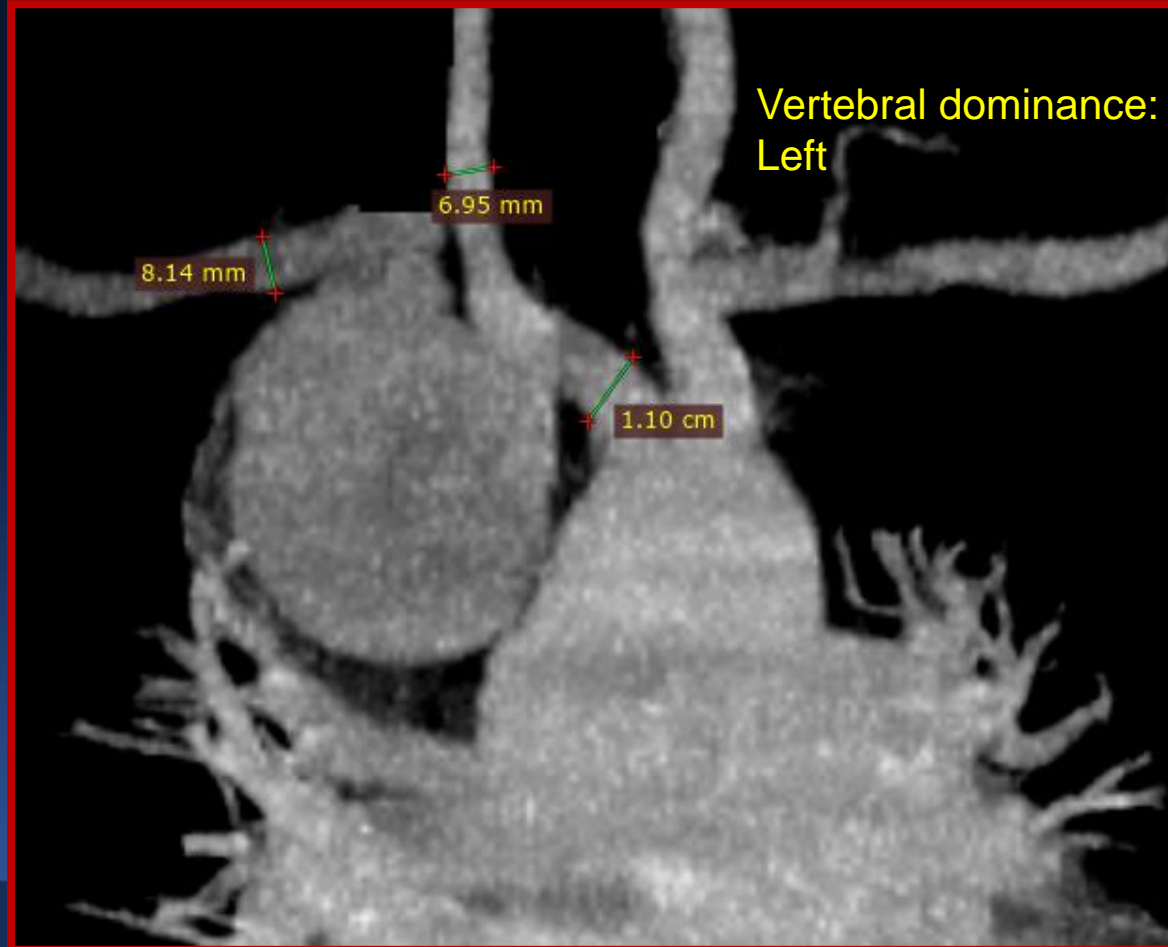
Treatment options

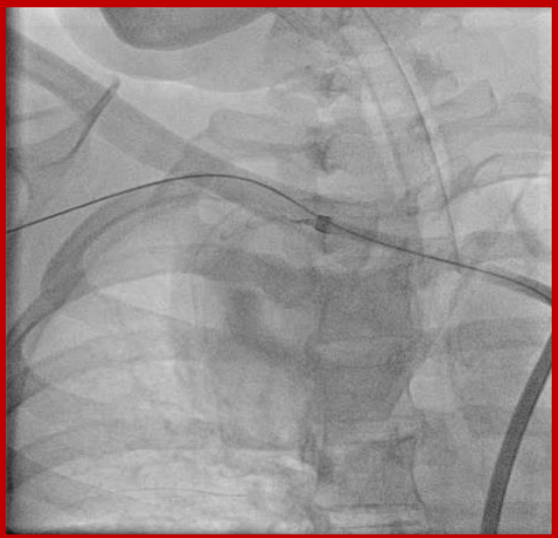
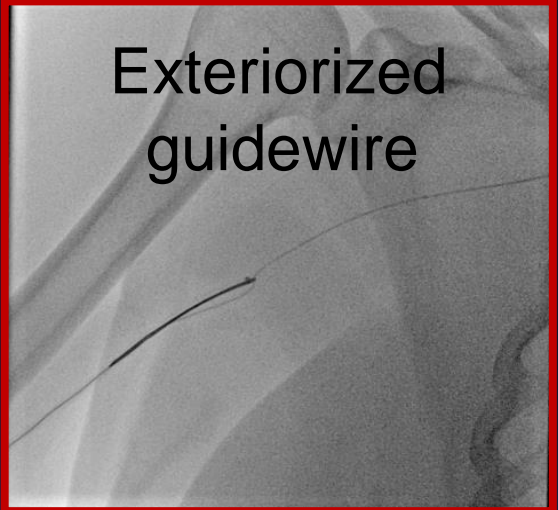
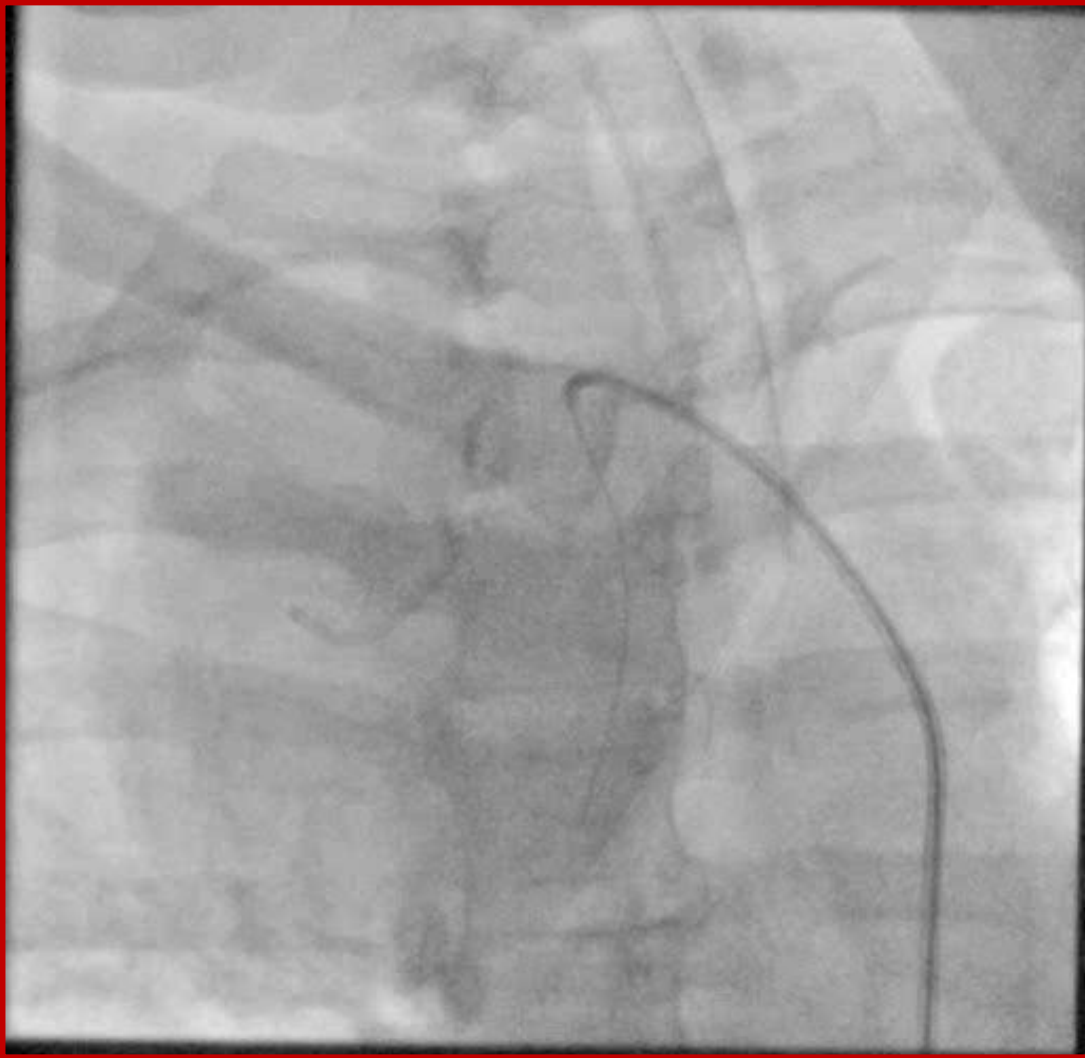
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Anterior view

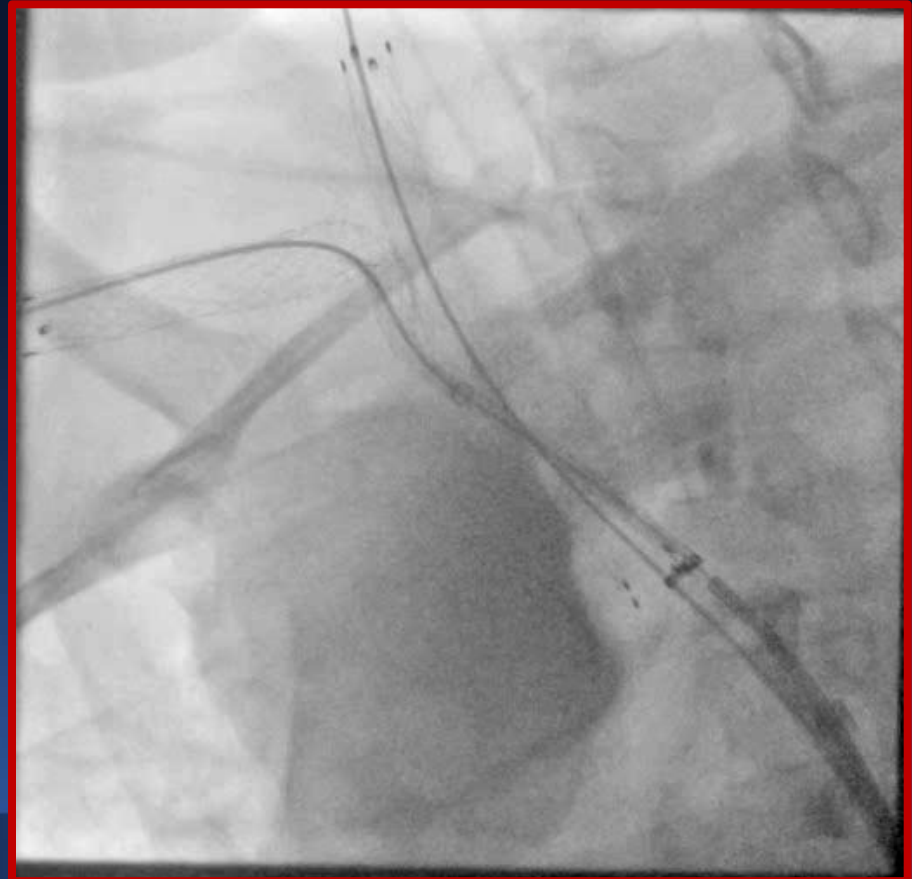
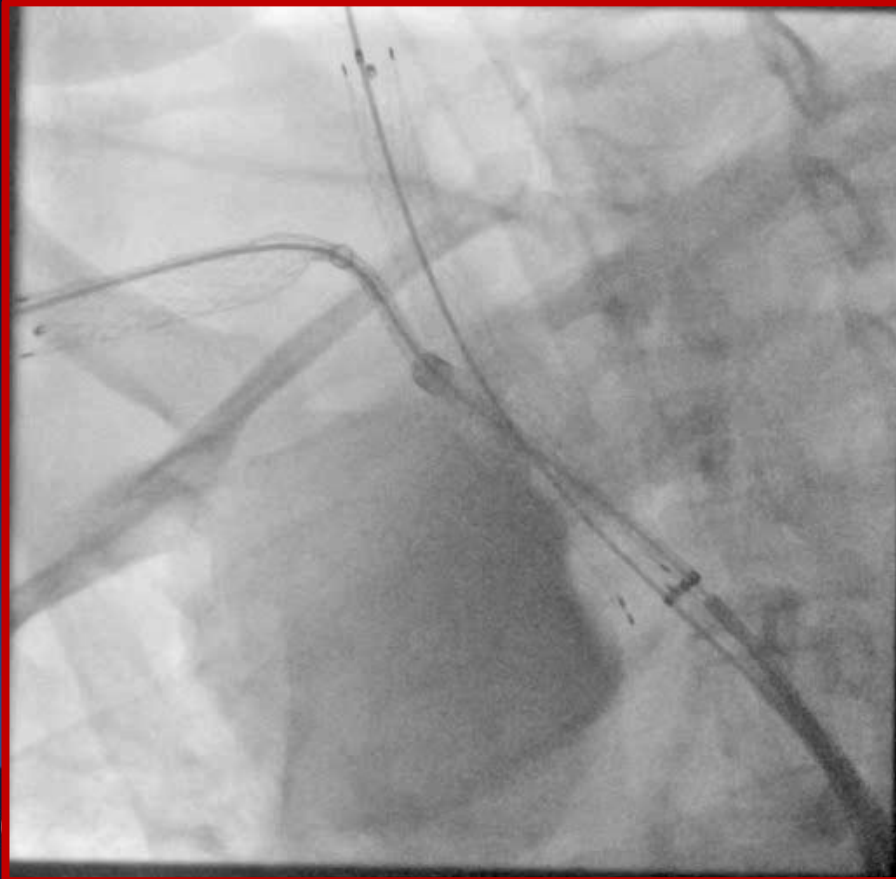
Subclavian: 8 mm
Carotid : 7 mm
Innominate: 11 mm





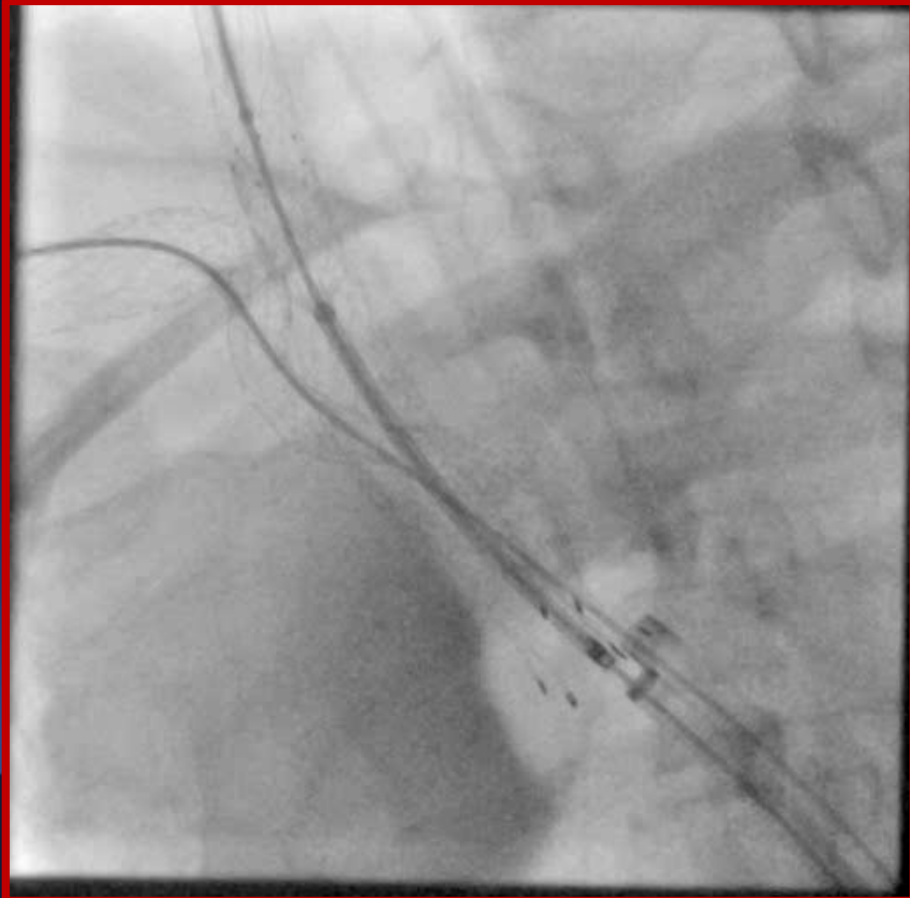
Deployment of self-expanding stent grafts

Carotid: 10x80 mm; Subclavian: 10x120 mm



Super-imposition of self-expanding bare metal stents

Carotid: 10x60 mm; Subclavian: 10x80 mm



Kissing-balloon dilatation



Hemostasis:

Femorals: Proglide^R vascular closure device

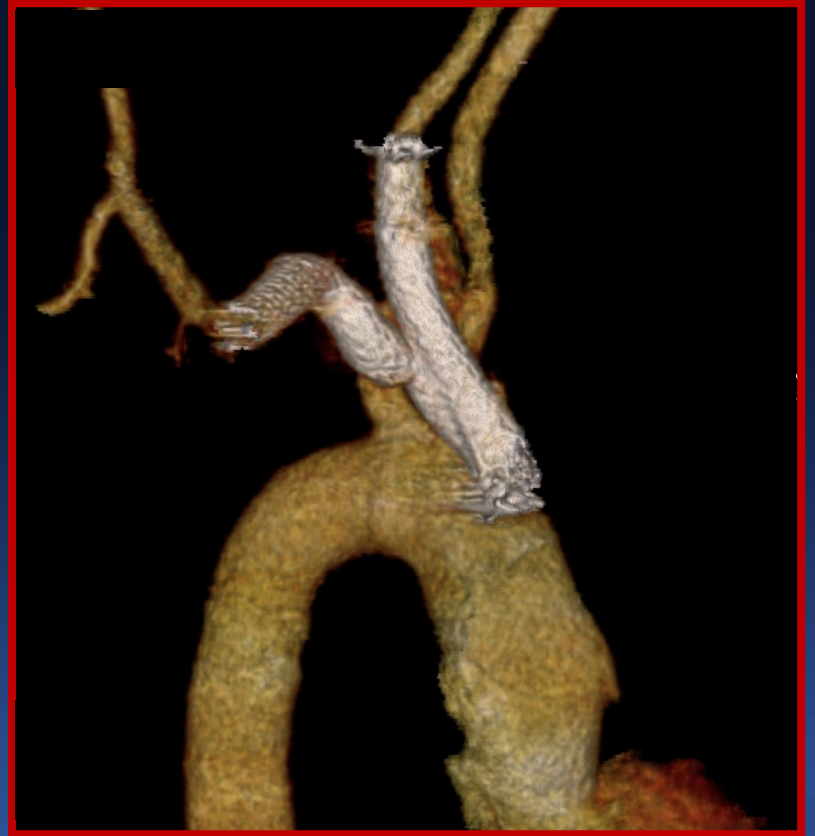
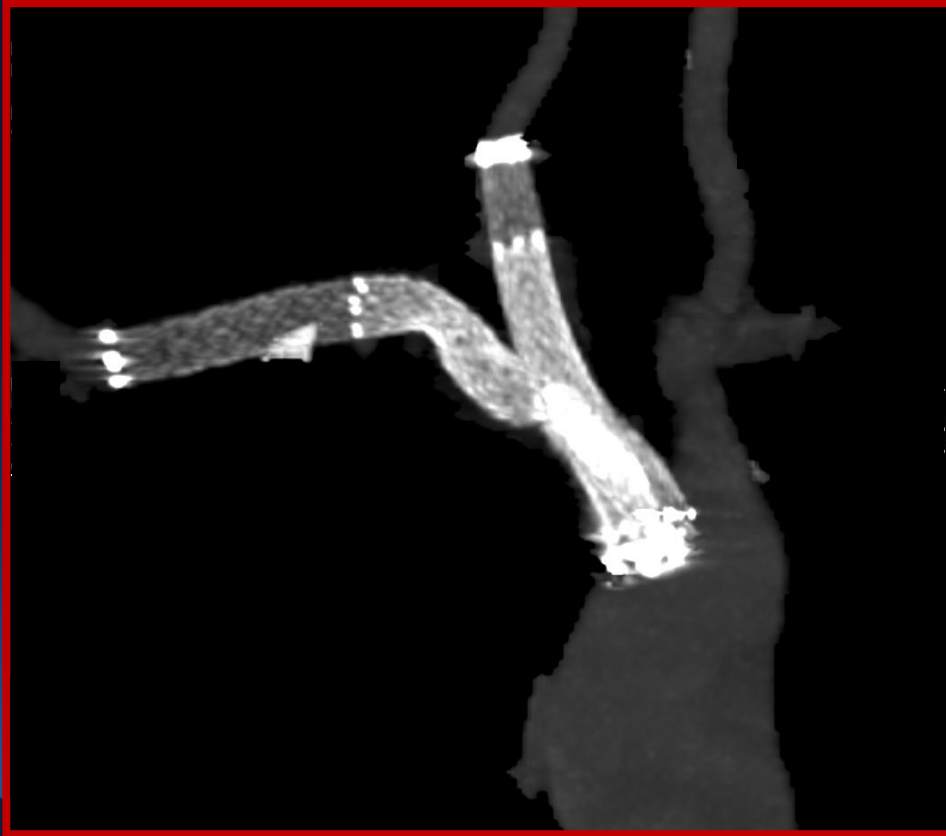
Radial: Wrist band

Post-op: Palpable right arm and carotid pulses

Self-limiting pyrexia

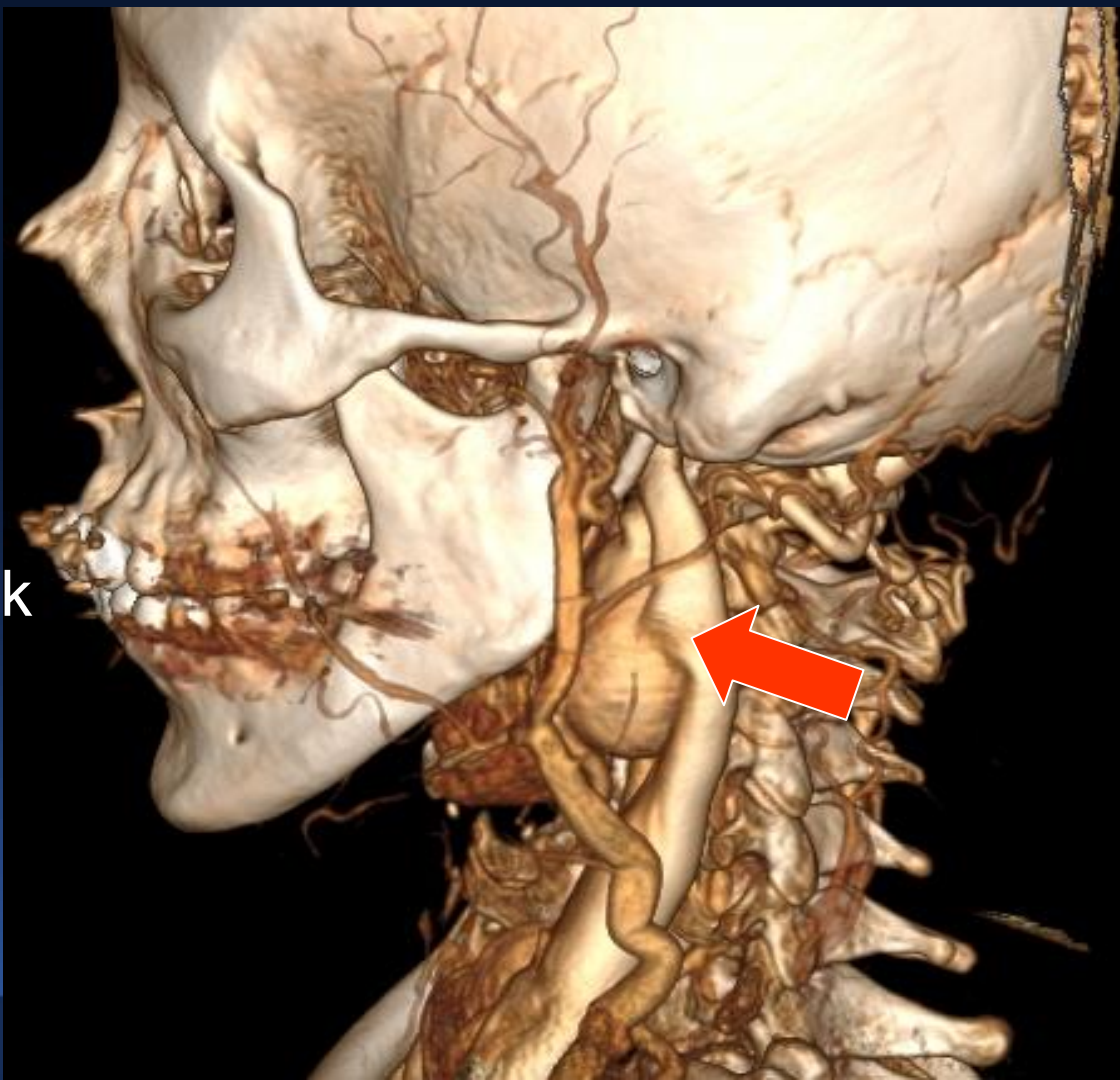
DAPT x 1 year

Follow-up CT angiogram at 6 months



Case 2

- 62-year-old-woman
- Pulsatile Left neck swelling x 3 years
- H/O trauma 6 years back
- No DM, HTN, CAD, infective etiology

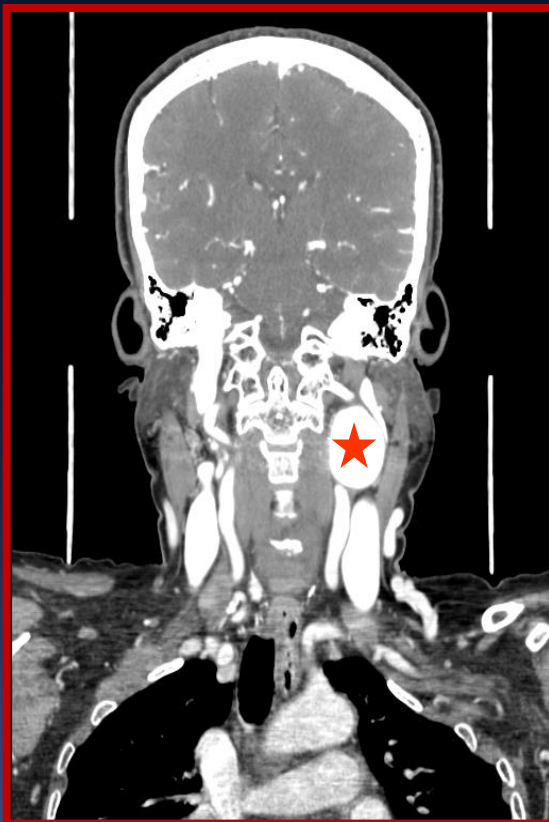
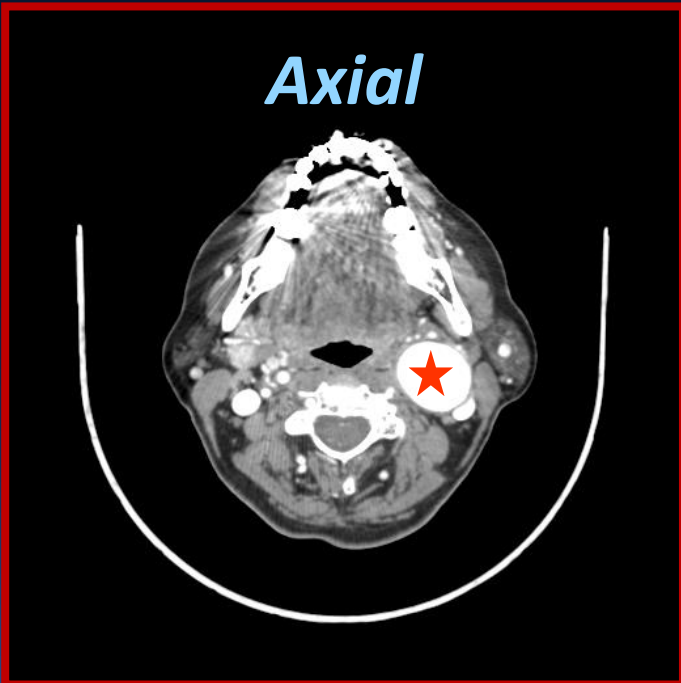


Baseline CTA

Coronal

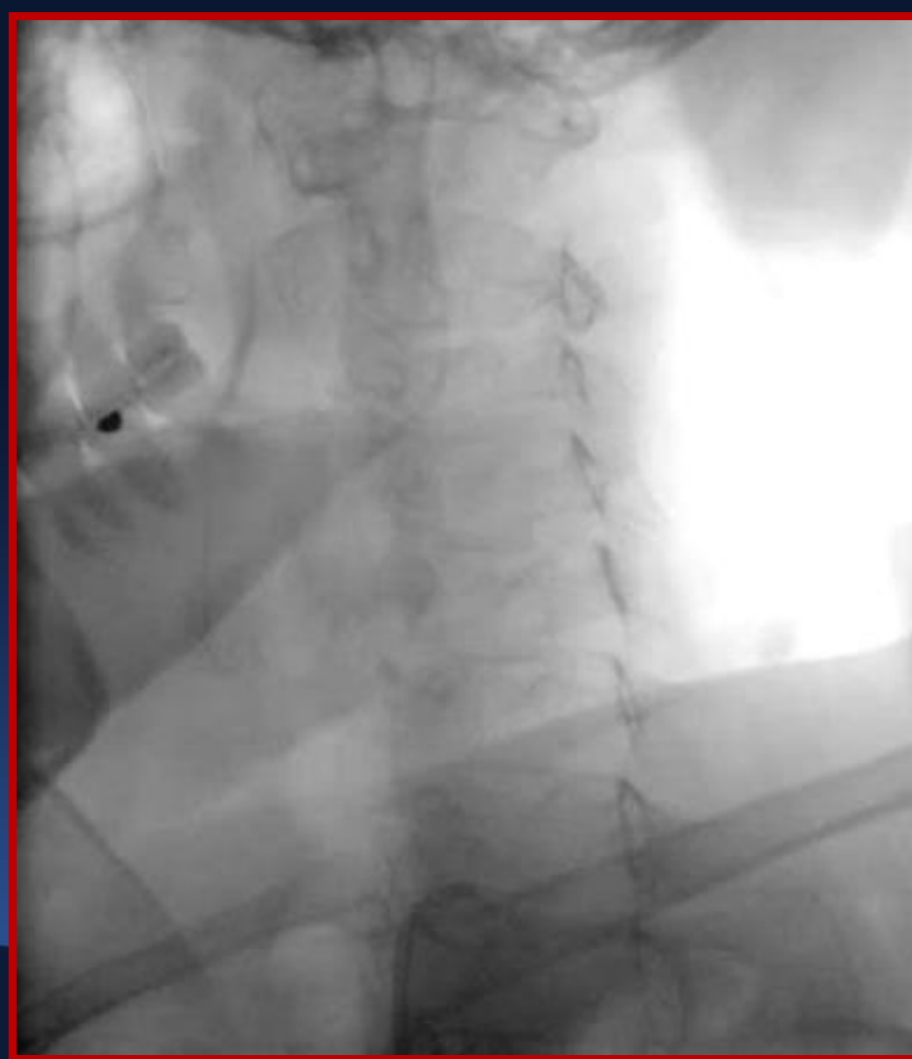
Sagittal

Axial

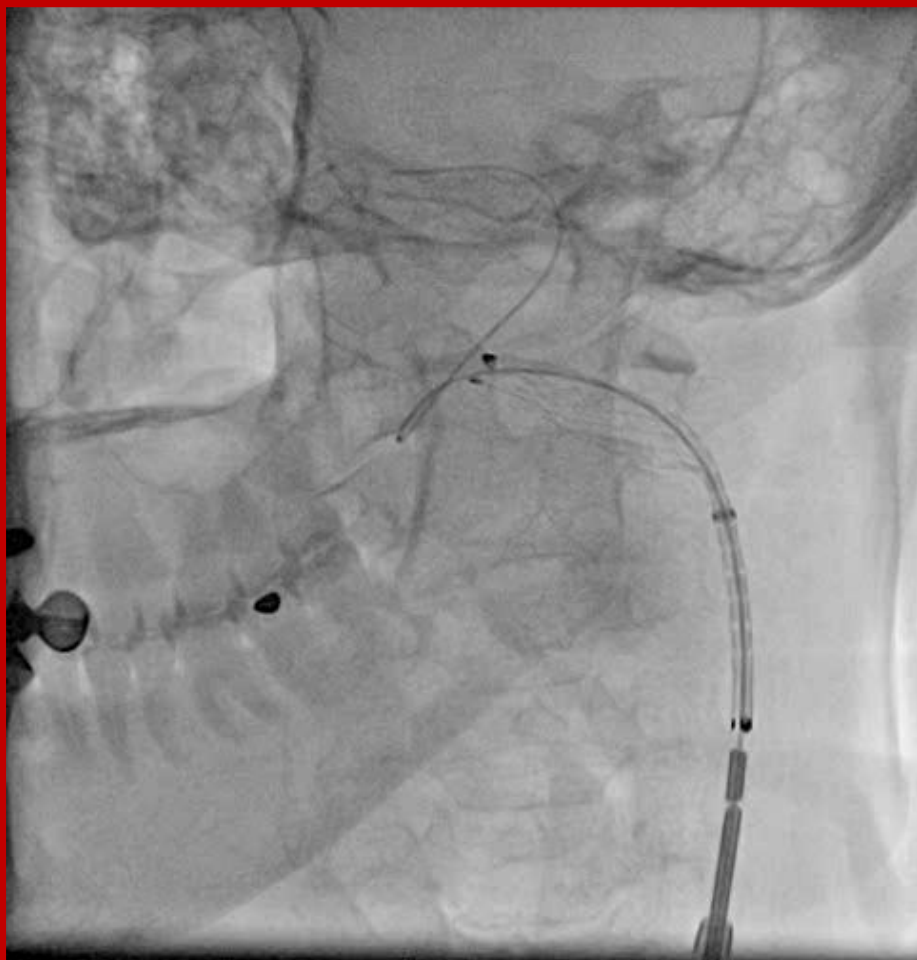


Location- ICA; ICA diameter- 6mm

Aneurysm neck- 30 mm; Size- 36x24x25 mm



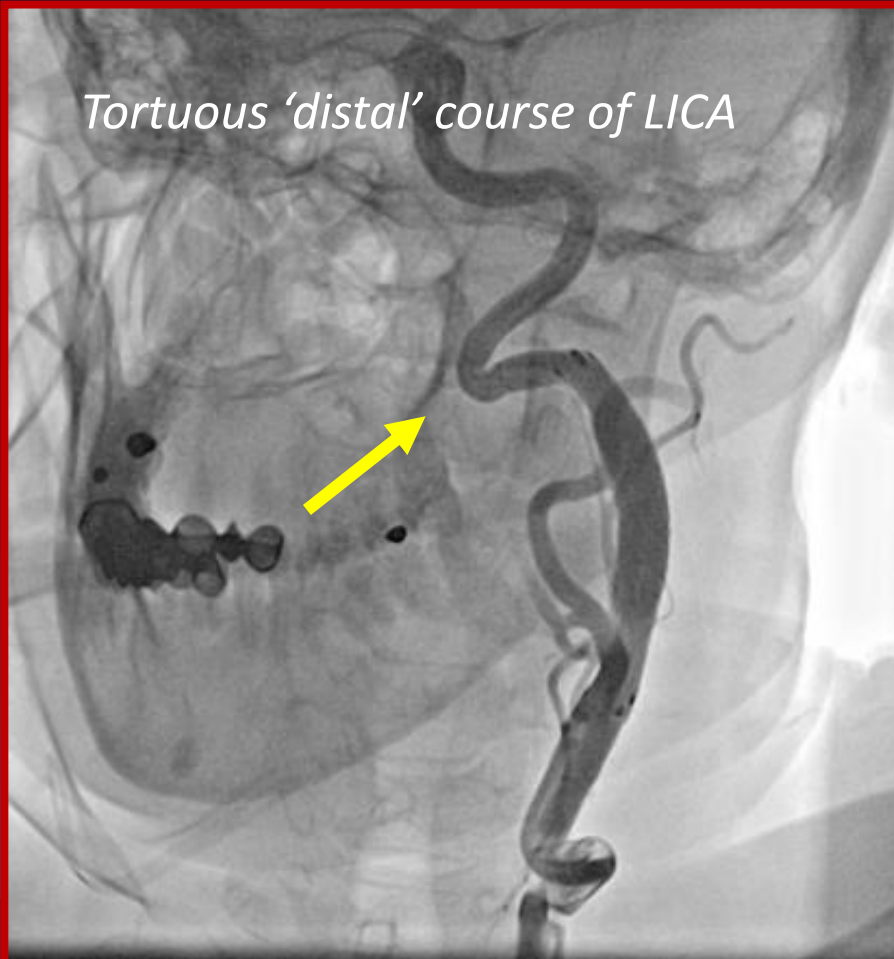
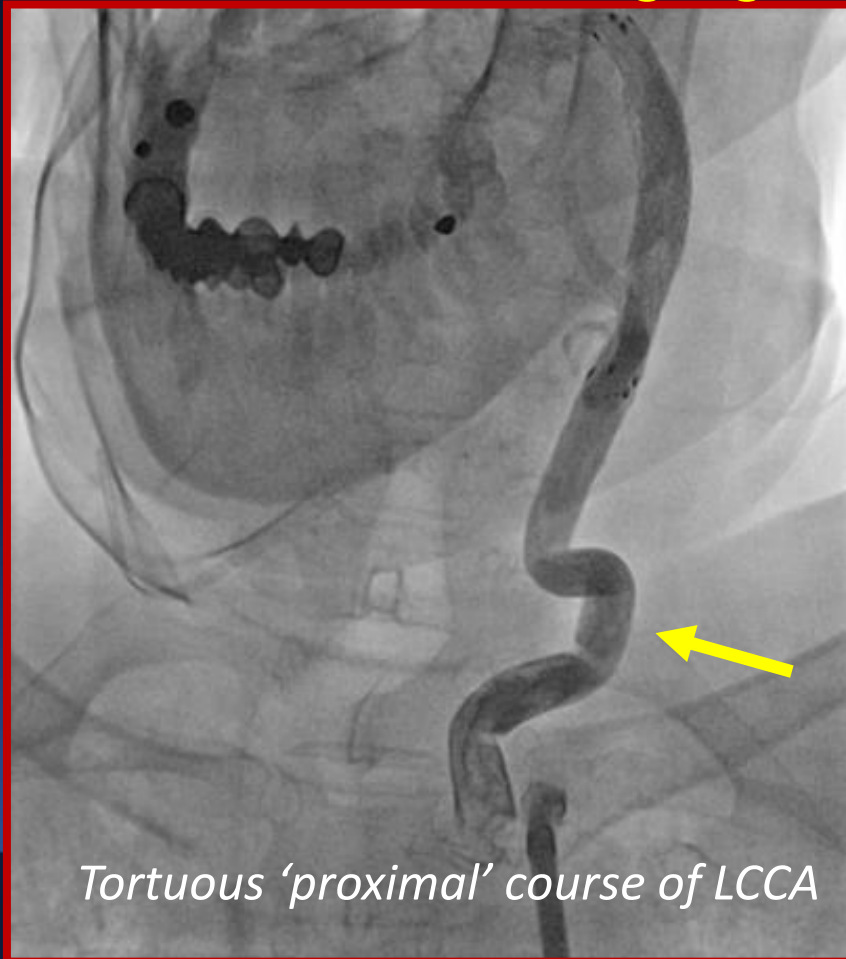
Self-expanding stent graft 8x60 mm



Reinforced with Self-expanding bare-metal stent 8x80 mm



Final angiograms- No endo-leaks



Procedure uneventful

Hemostasis:

Femoral: Proglide^R vascular closure device

Post-op: No neurological deficits

DAPT x 1 year

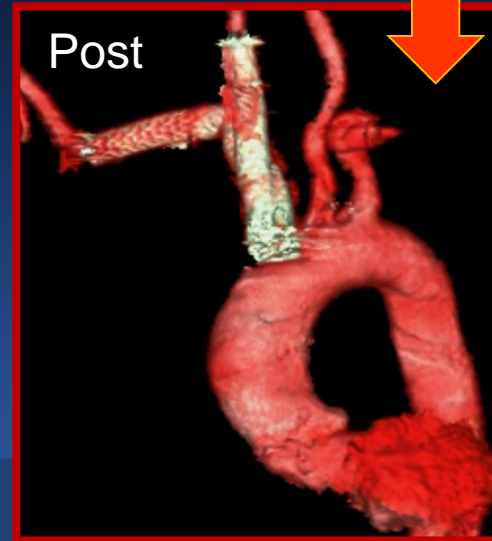
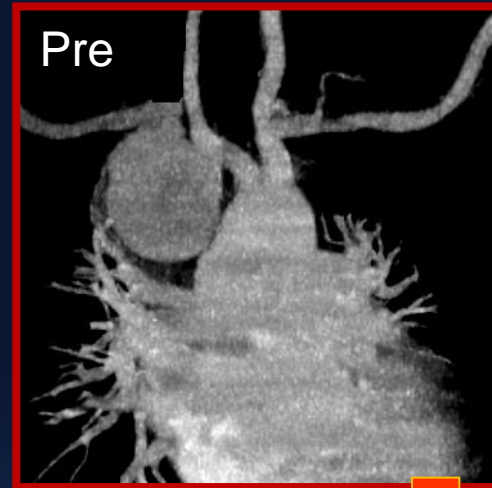


CT ANGIOGRAM 6 MONTHS AFTER PROCEDURE

- Patent stent graft
- No endo-leaks

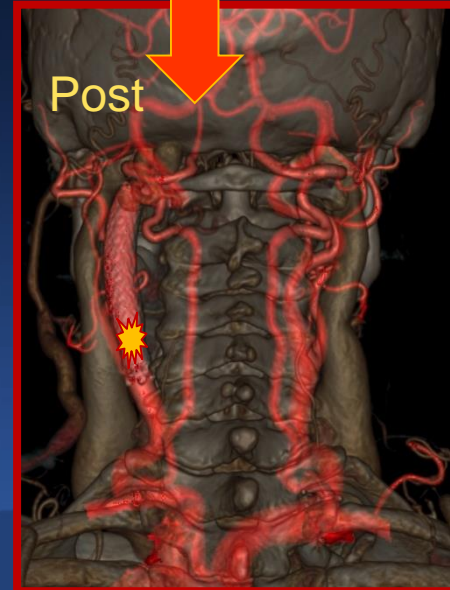
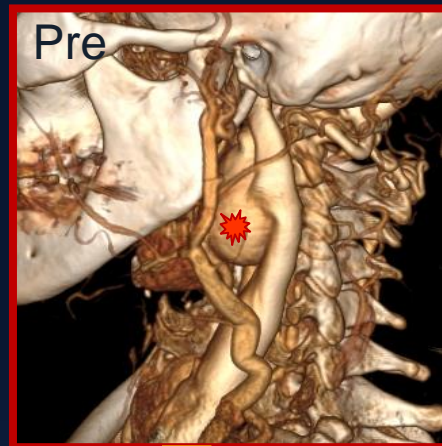
Challenges overcome: Case 1

- Bifurcation aneurysm with Carotid arising
 - ✓ Innovative techniques-
‘Kissing-Stent’
- Subclavian tortuosity
 - ✓ Exteriorized guidewire-
‘Rail-Road’



Challenges overcome: Case 2

- Carotid tortuosity
- Minimizing manipulations
 - ✓ 0.035" angled Terumo guide wire (260 cm) cut short 2-3 steps



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Janakiraman

Dr Jaishankar

Dr Ajit S Mallasari

Thank you

Team from:

The Madras Medical Mission, Chennai, India

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Challenges overcome

Case 1

- Bifurcation aneurysm with Carotid arising
 - Innovative techniques- 'Kissing-Stent'
- Subclavian tortuosity
 - Exteriorized guidewire- 'Rail-Road'

Case 2

- Carotid tortuosity
- Minimizing manipulations
 - 0.035" angled Terumo guide wire (260 cm) cut short 2-3 steps