Type D
A Disastrous Dissection

Pouncey AL & Bicknell C
Imperial College London

Patient permission kindly provided.
No conflicts of interest to declare.

EMERGENCY TRANSFER THURSDAY AT 18:00!

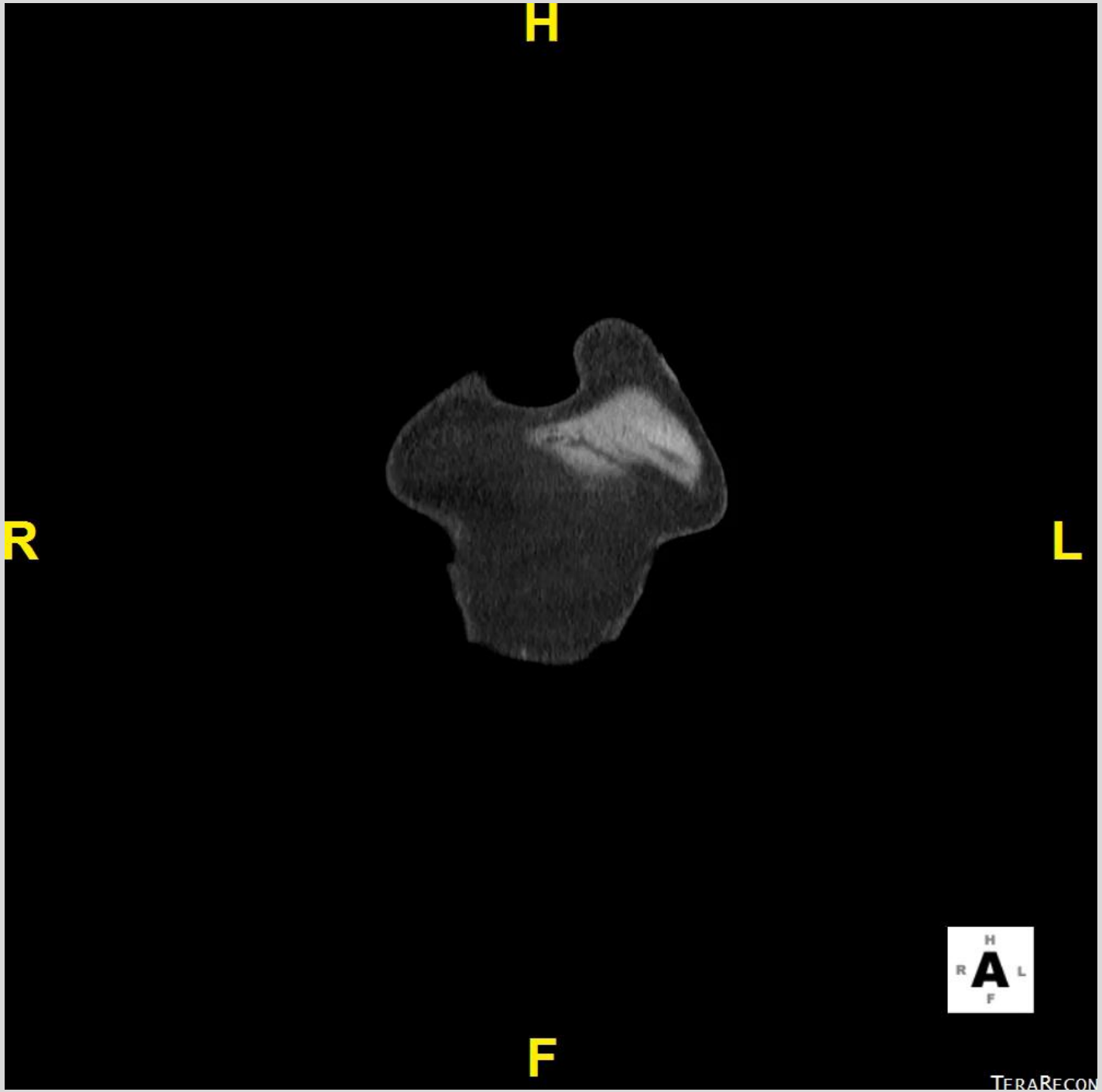
75M

2 days back pain 10/10
Falling Hb → 107
BP 127/98, HR 110, SpO2 >95%

PMH:
Symptomatic cardiac disease
HTN
Hyperlipidaemia

DH:
Aspirin, statin, ACEi, ISMN

SH:
Lives alone, independent
Sleeps with 2 pillows, can mobilise ½ mile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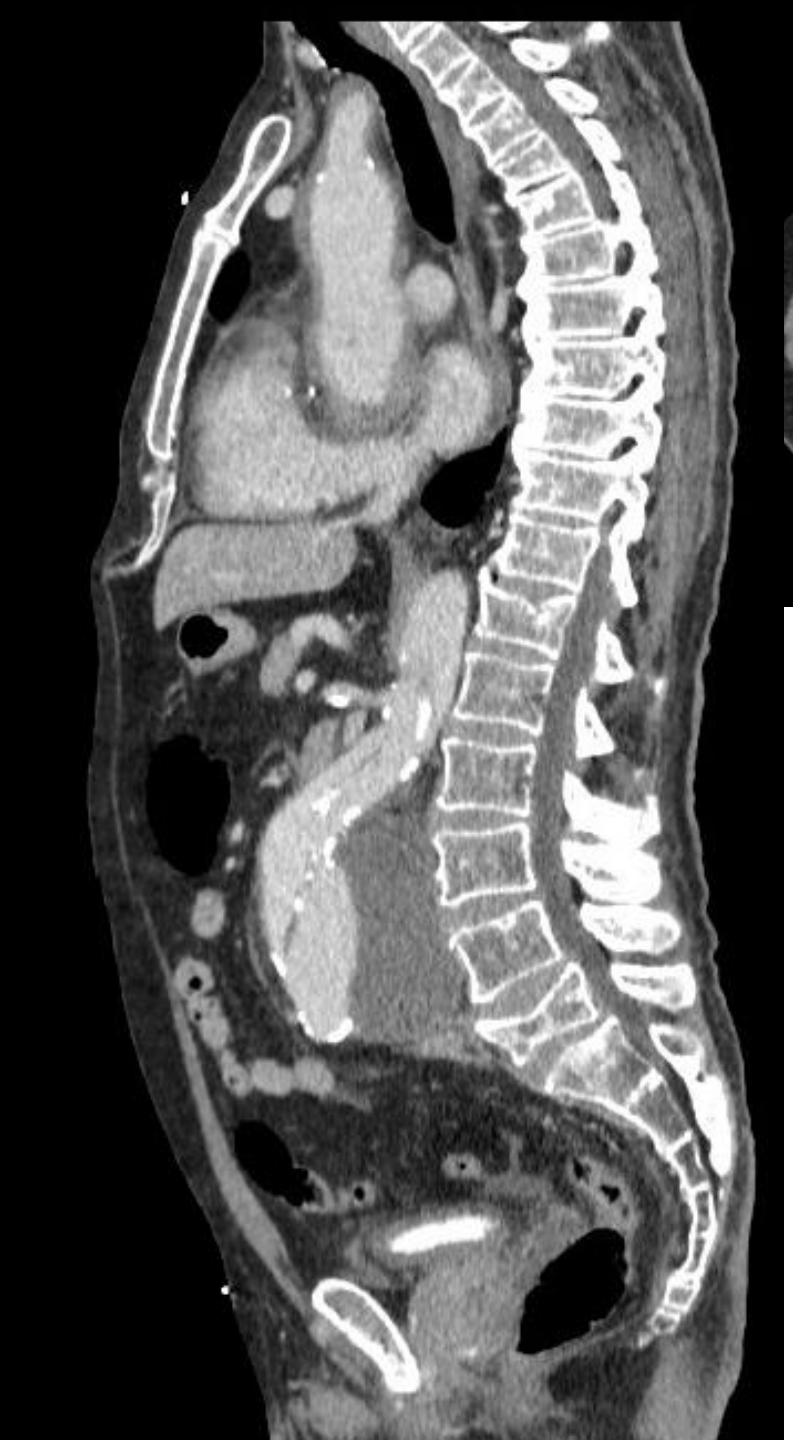
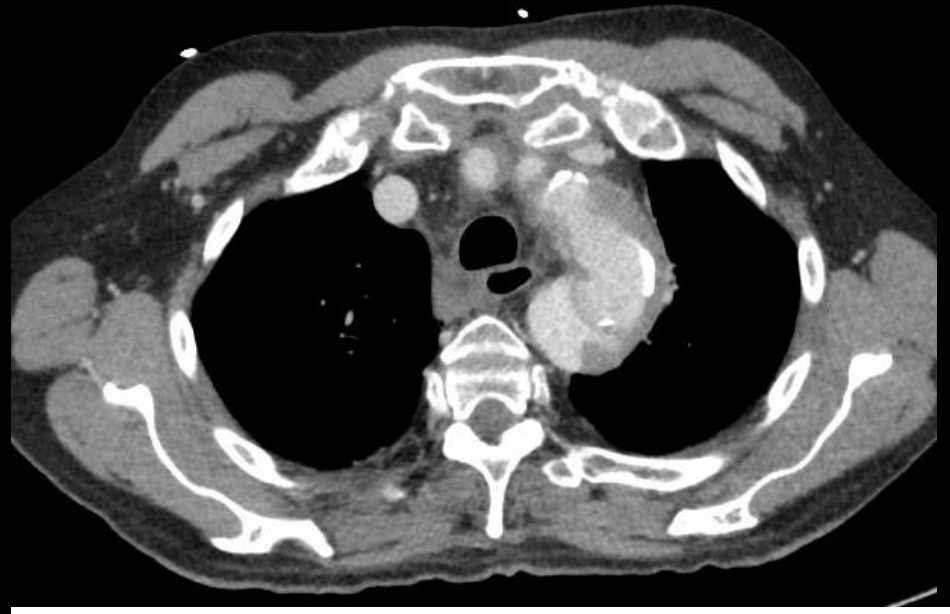
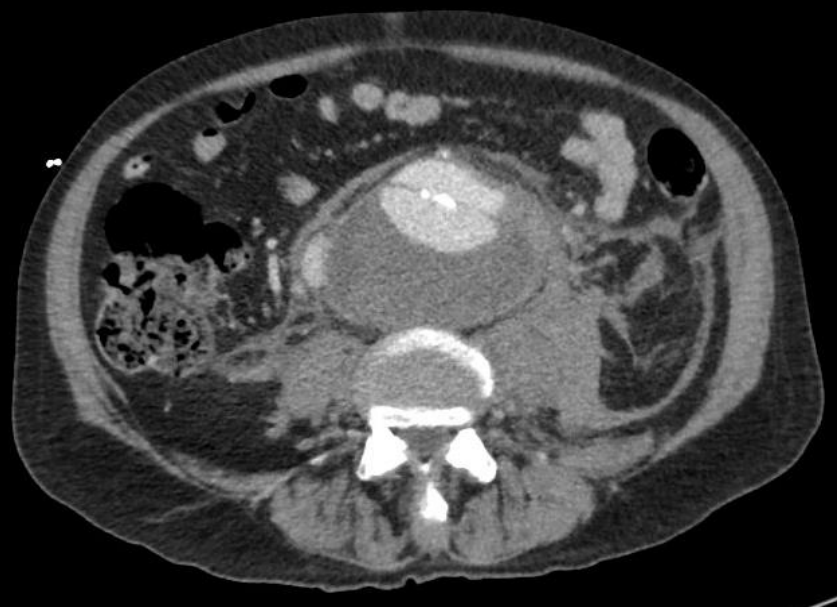






COMPLEX ACUTE AORTIC SYNDROME

- Type B Dissection - left subclavian to bifurcation
- Type A Retrograde Intramural Haematoma (arch & ascending)
- Ruptured 9.6cm IR AAA

WHAT, WHEN & HOW TO TREAT?

Ruptured IR AAA

- Open
- EVAR

Type A Retro-IMH

→ 12-26% in hospital , IRAD advise repair

- Open repair
- TEVAR
- ? Medical > 43% need surgery

Type B Dissection

→ concurrent aneurysmal disease – repair advised

- TEVAR
- ? Medical

OUR CHOICE:

1. TEVAR

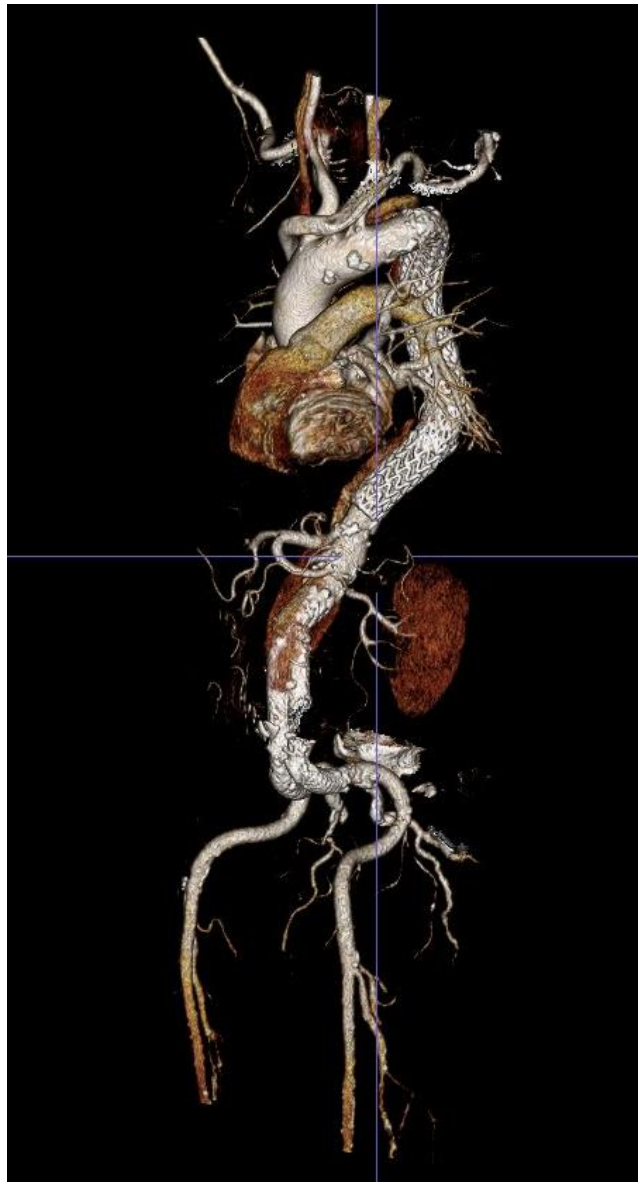
- Prevent type A retro-IMH progression
- Reduce false lumen flow distally

2. EVAR

- First attempt for sealing ruptured AAA

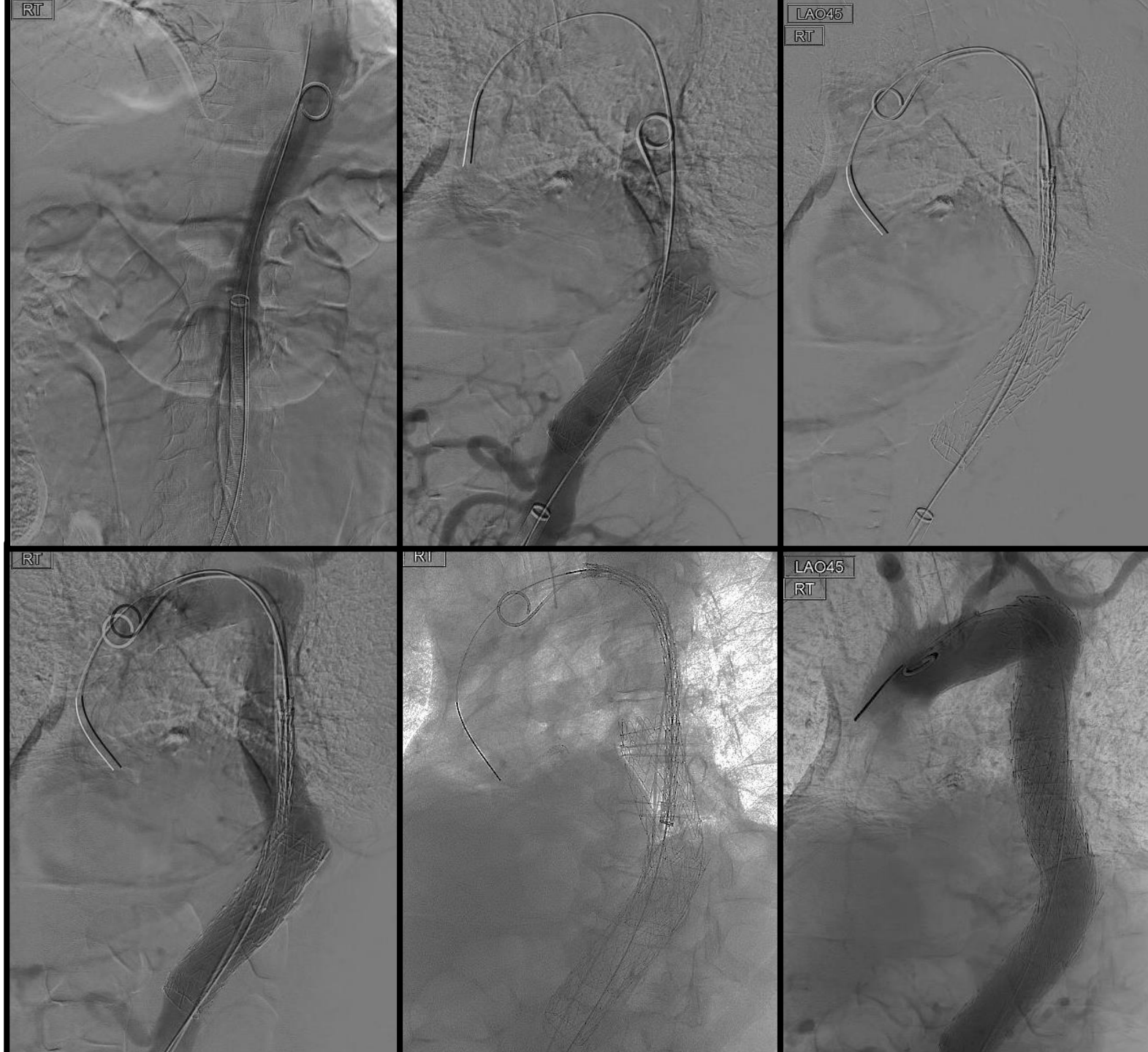
3. BACK UP

- Chimney graft
- True lumen narrow
- 3-4 chimneys can be challenging
- Risk spinal cord ischemia



1. TEVAR

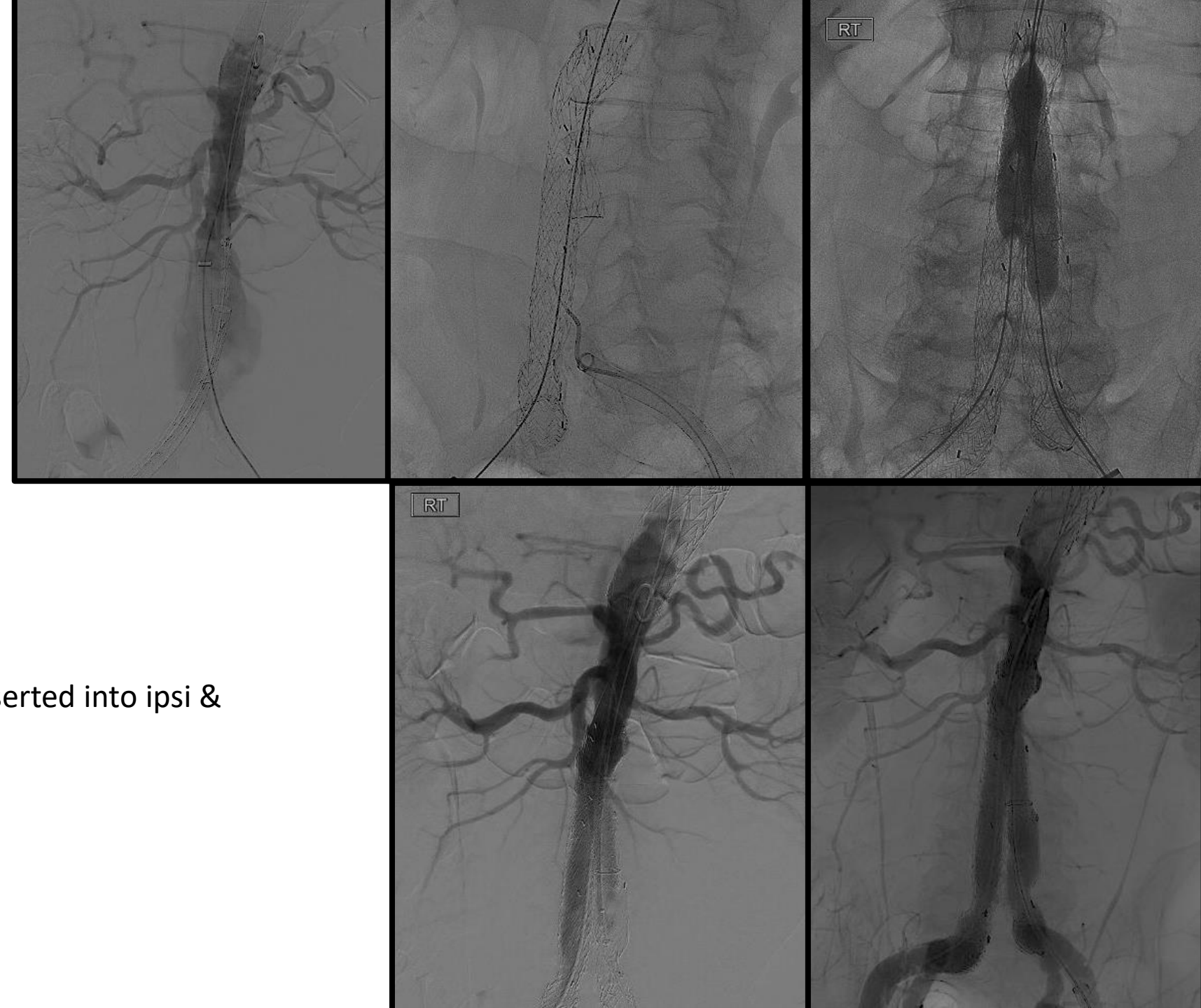
- Treat TBAD/retro-IMH , & decompress false lumen
- Demonstrate within true lumen for visceral, mid and upper thorax
- Stent retrograde, no oversizing, long covered stent, low radial force – Gore cTAG
- Proximal landing zone distal to the left subclavian
- Conservative placement due to retro-Type A IMH



2. EVAR

26mm Gore C3
Distal limb: R 20mm, L 16mm

- Small true lumen
- Crushing of the left gate
- Traversed with difficulty
- Limbs completed
- 2 BeGraft (Bentley) 10mm stents inserted into ipsi & contralateral gates
- Deployed simultaneously



Stable patient!!!

Reasonable angiographic result

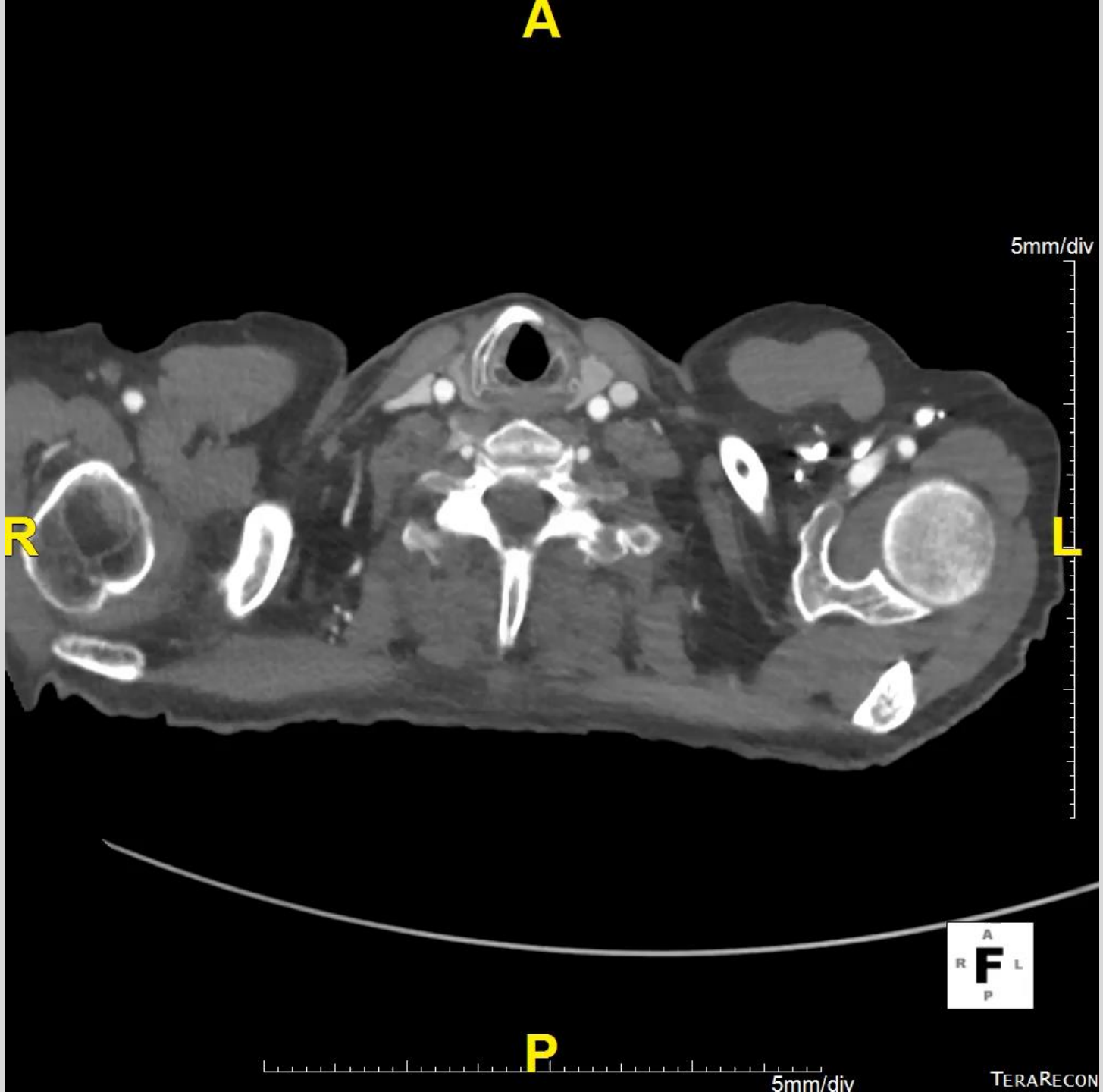
A HAPPY ENDING…?

Spinal cord ischaemia
- B/L power 0/5
-> resolution with spinal drain & MAP >75

Atrial fibrillation & T2 myocardial infarction
Troponin 7000
-> Coronary angiogram – mild/mod disease
-> Echo good LVSF

COVID-19
-> operative risk increased for 6 weeks

& on further imaging…..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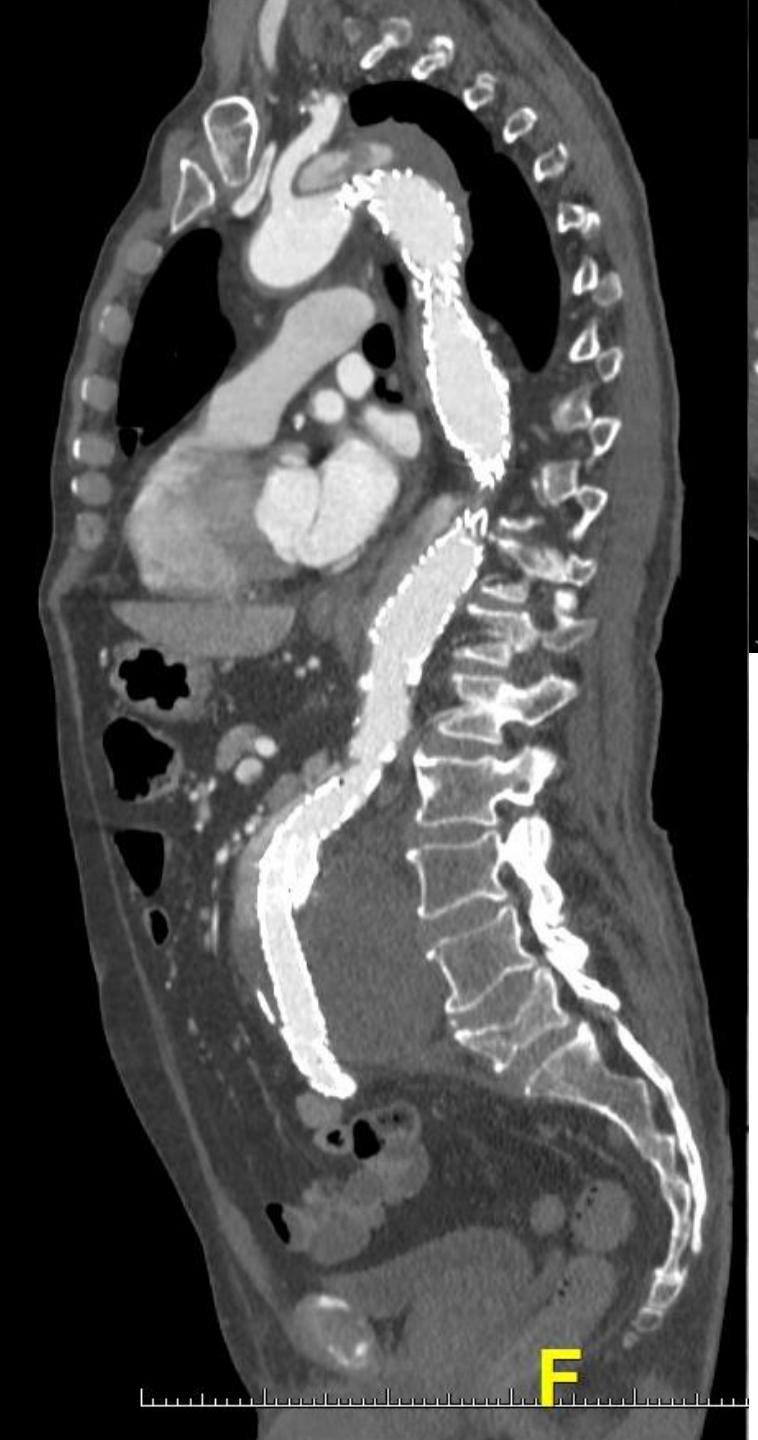

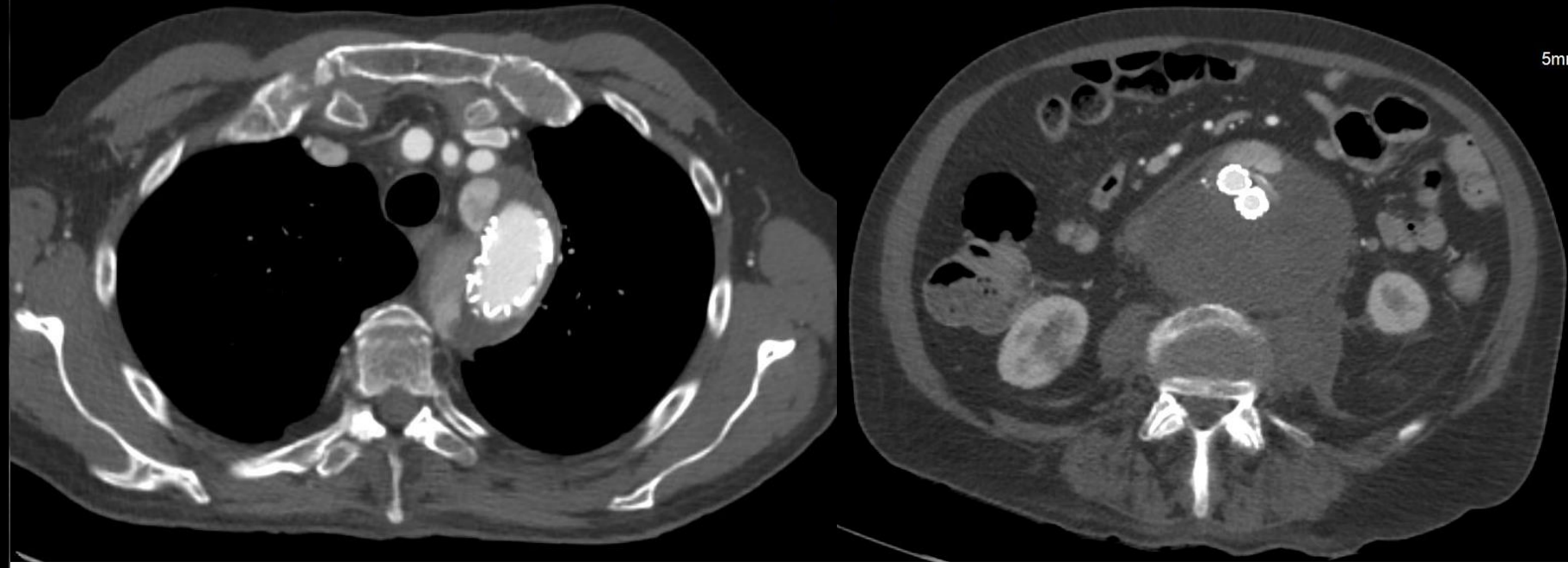

THE GOOD

- Improved Type A IMH & retroperitoneal haematoma
- No change in aortic diameters

THE BAD

- Dissection flap at L SCA -> **Patent false lumen**
- ? Distal stent injury -> **further perfusion of both the true and false lumen** from L1
- AAA not excluded – **perfusion of sac from false lumen**

THE SAGA CONTINUES, WHAT NEXT?