

AORTIC ANEURYSM - A DIFFICULT CASE



UNIVERSITY OF
LIVERPOOL



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DISCLOSURES



Research grant, educational support, consultancy



Educational grant



Speaker's fees

CREDITS



JANUARY 2010

36 year old man with acute TBAD
Morbidly obese
Ischaemic left leg
Mesenteric ischaemia
Acute renal impairment

Floating viscera sign on angio
Good filling of CA, SMA and LRA
Poor filling of RRA



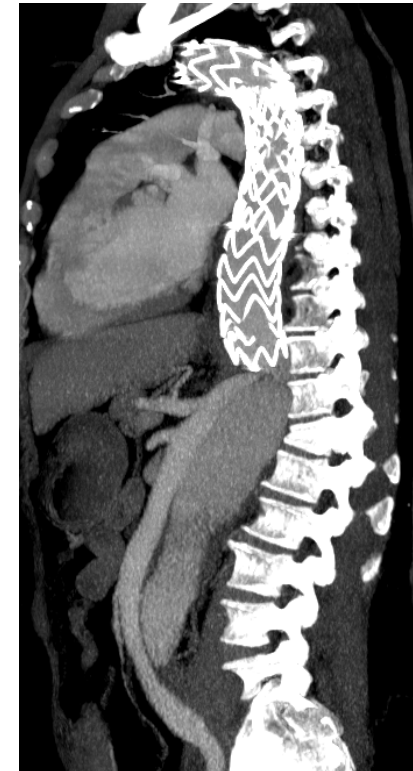
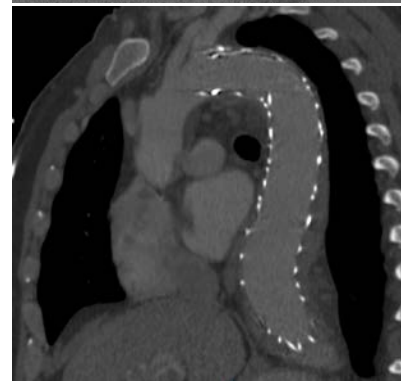
JANUARY 2010

TEVAR

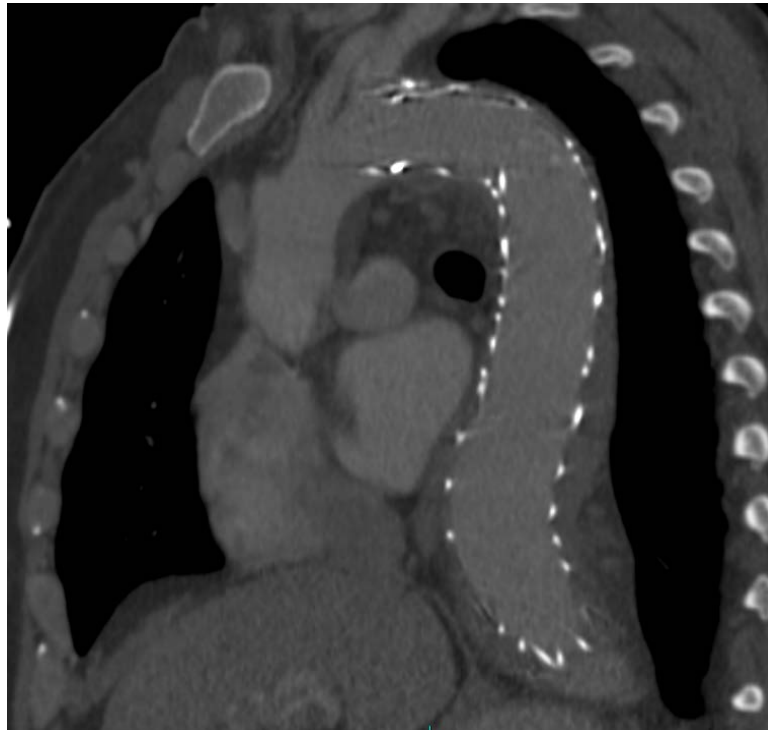
primary tear coverage

Complicated recovery

small bowel resection + ileostomy
renal failure
home parenteral nutrition



MAY 2011

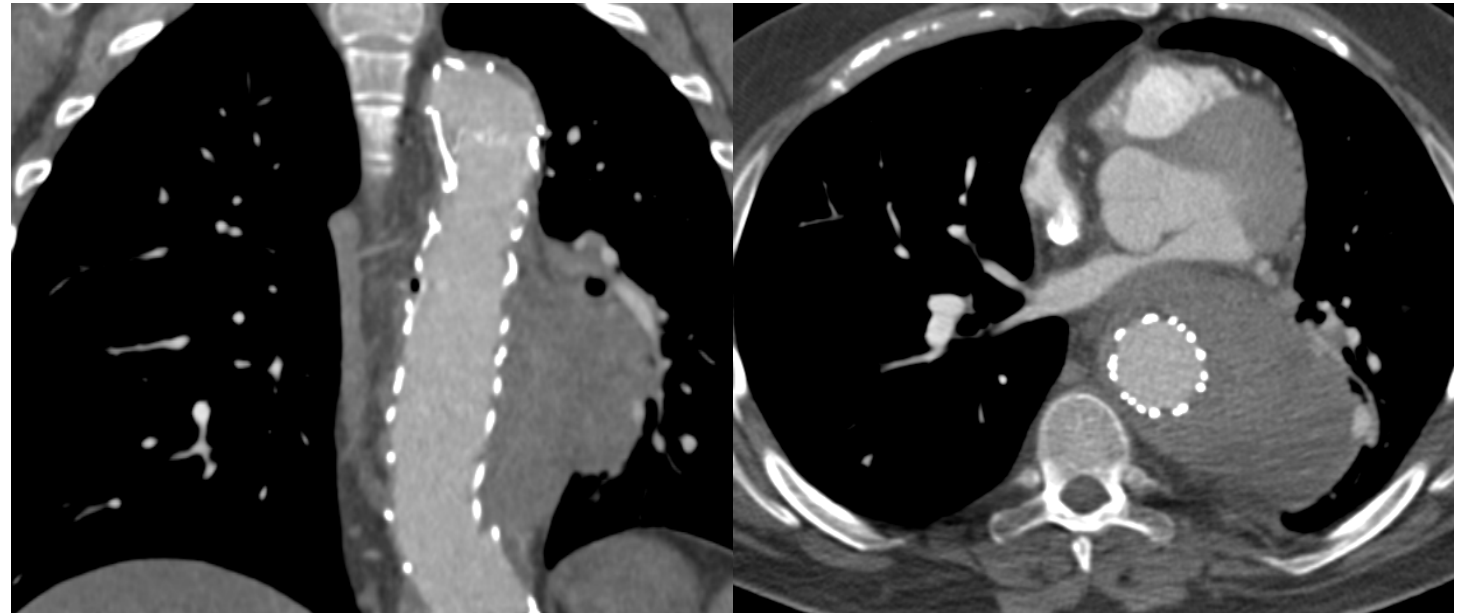


MARCH 2012

Unwell – line related sepsis

Admitted to hospital with chest pain

Diagnosed with fungal septicaemia



MARCH 2012

Graft explant

Extent II TAA repair

MEP

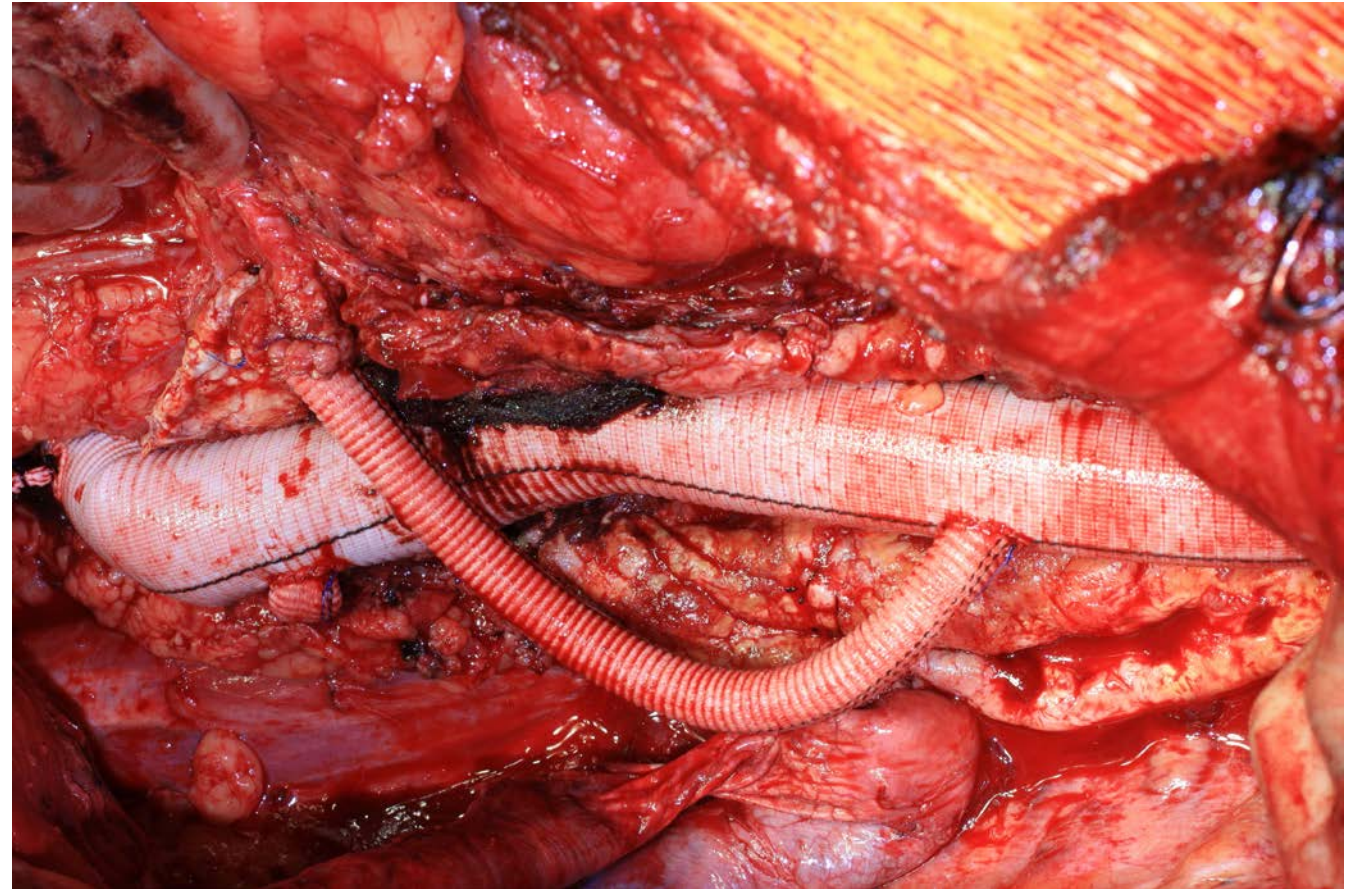
Spinal drain

Left heart bypass + circulatory arrest

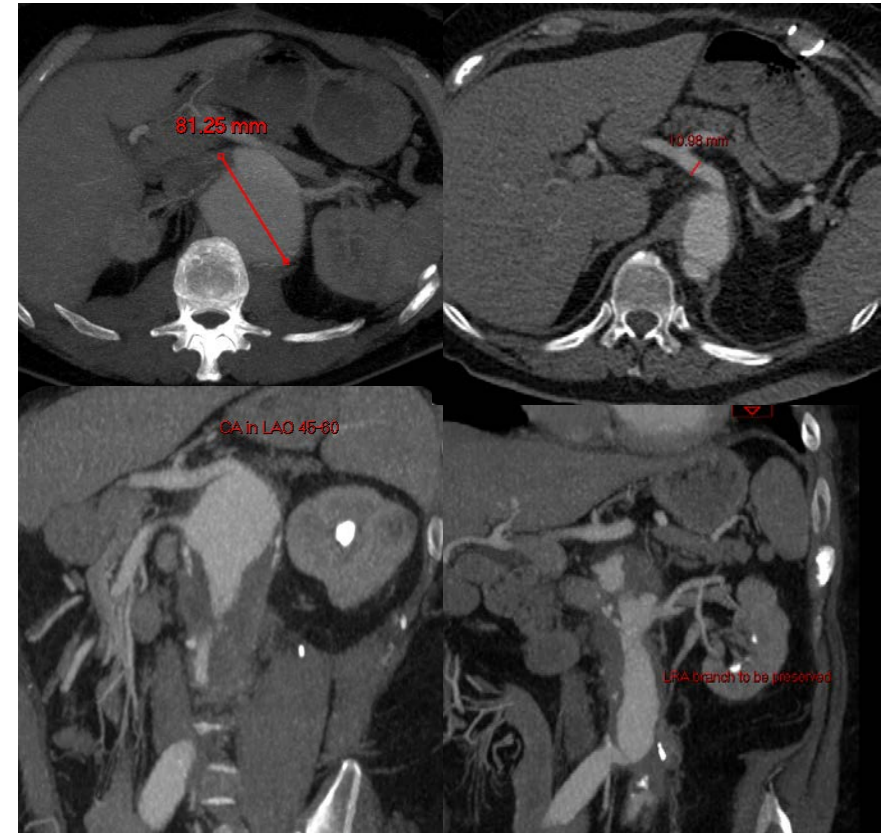
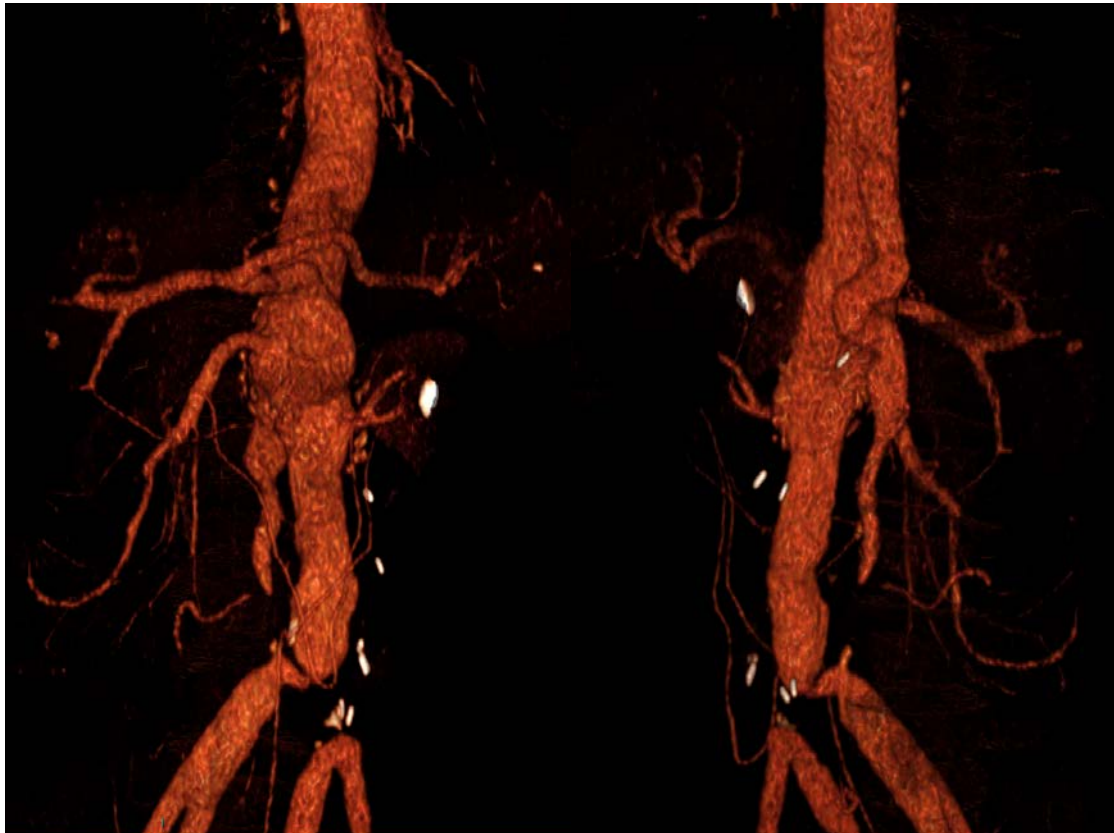
Intercostal graft

Slow recovery

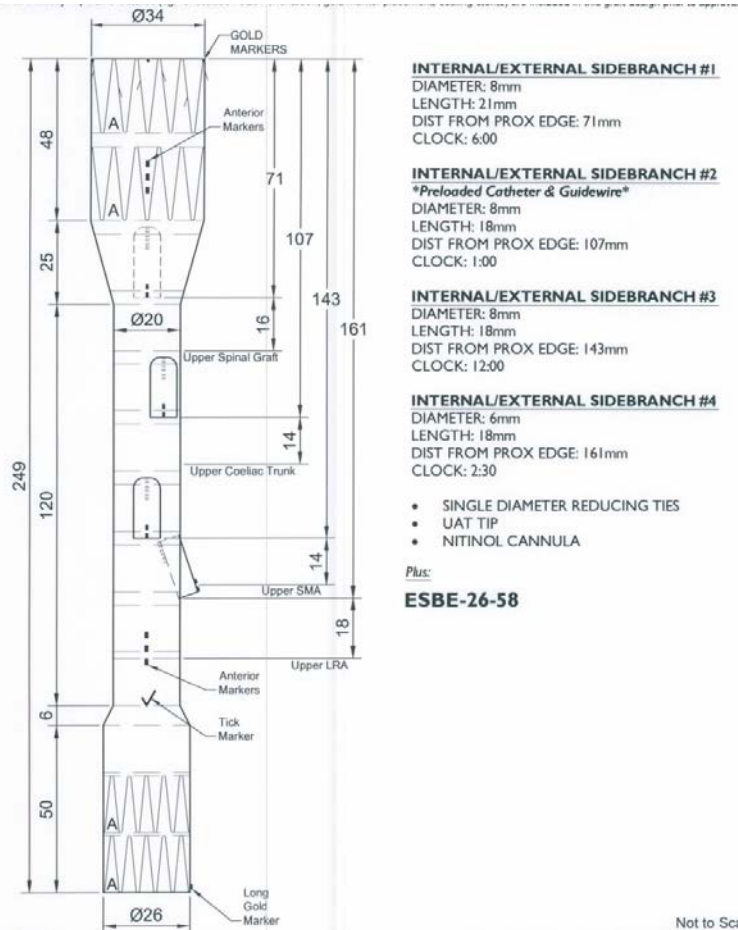
Recurrent fungal chest infections



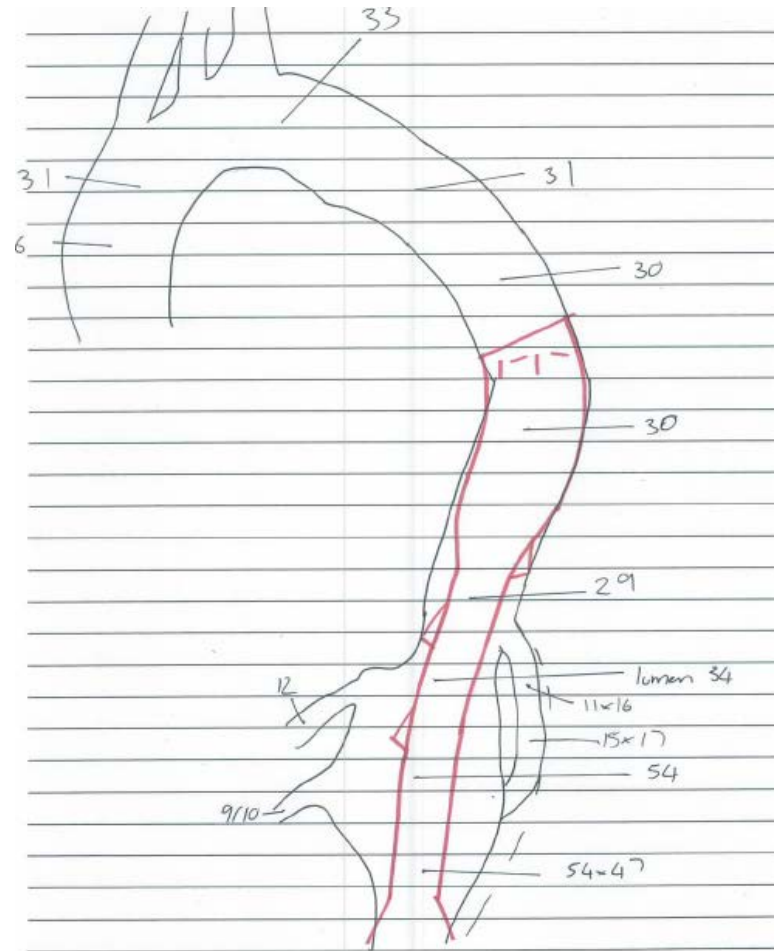
APRIL 2013



THE PLAN



Not to Scale



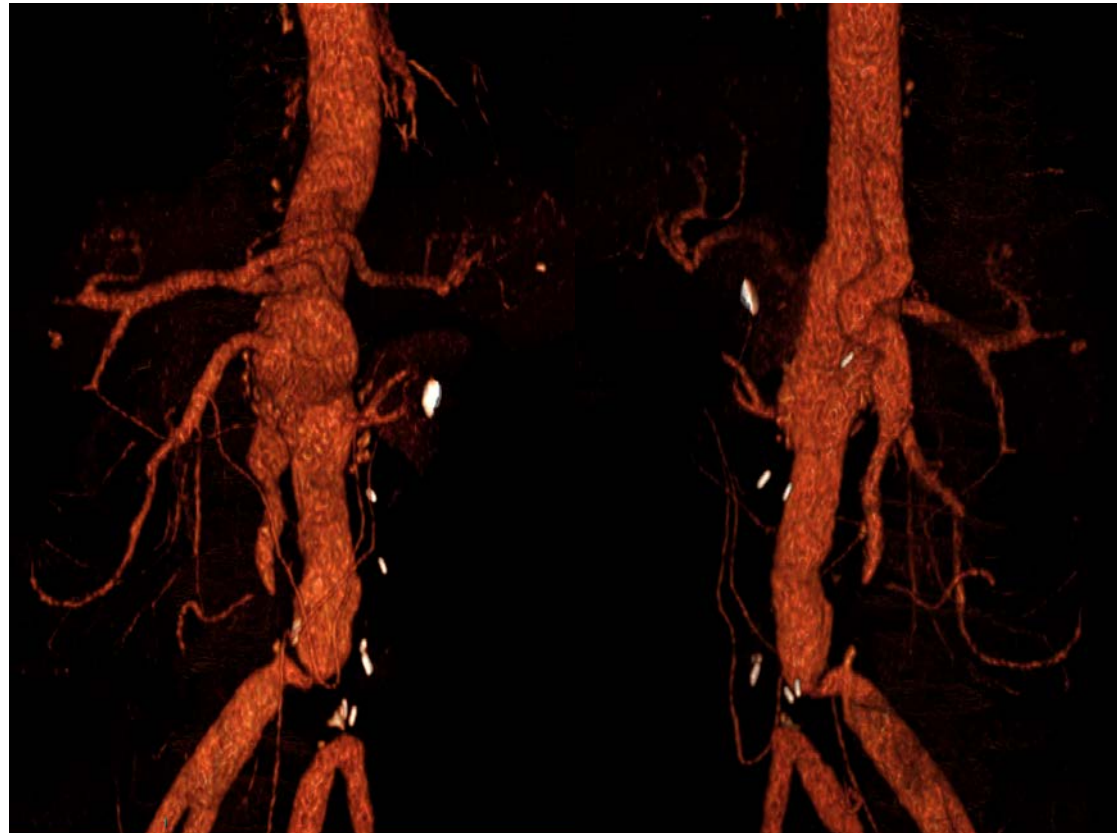
PROBLEMS

Right iliac stenosis

Left iliac occlusion

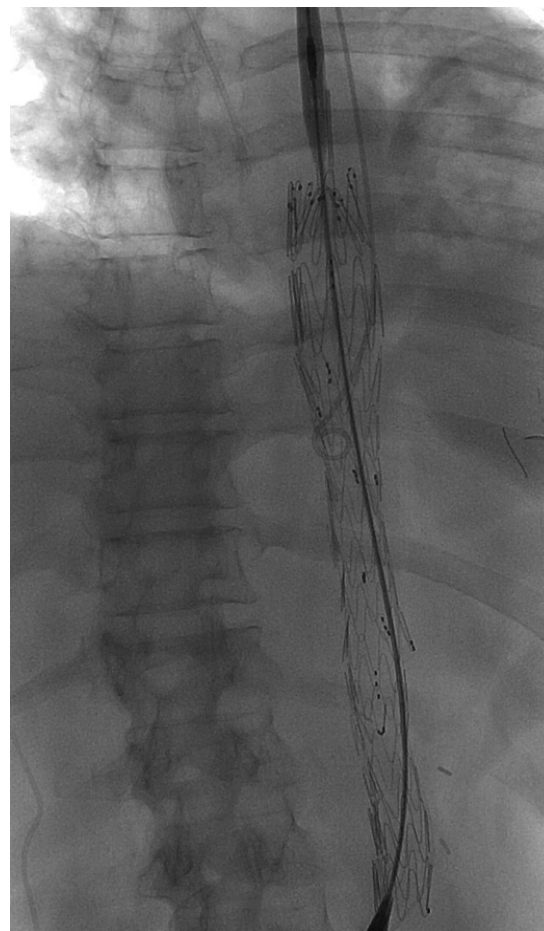
Early LRA branching

Large target vessel \varnothing

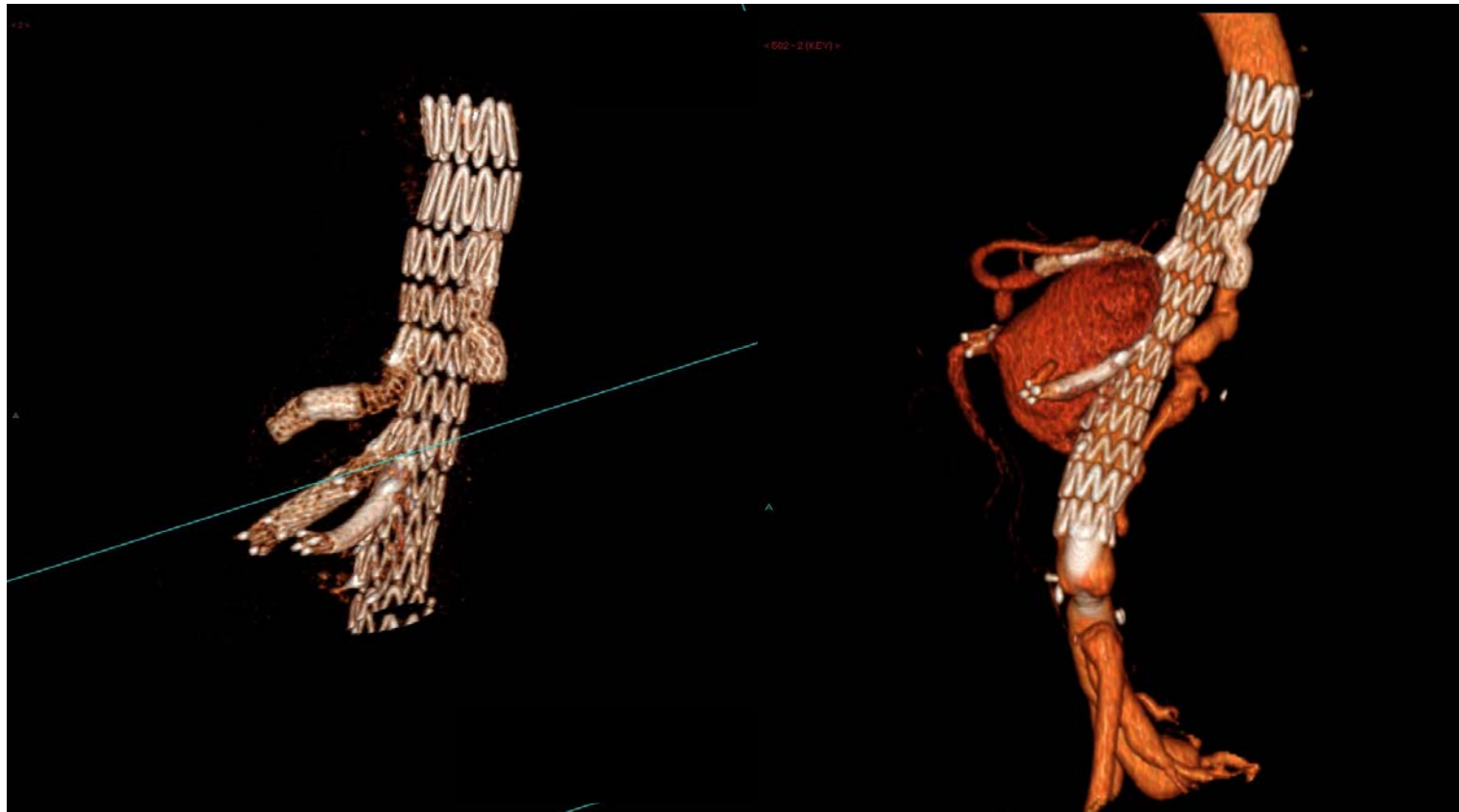


JULY 2013

- Right axillary and right femoral access
- Atrium x 2 to CA and intercostal graft
- Atrium x 1 to main left renal
large upper pole branch sacrificed
- Fluency x 2 to SMA
- 14 mm self-expanding stent to R CIA
- All branches patent on completion



POSTOPERATIVE CT

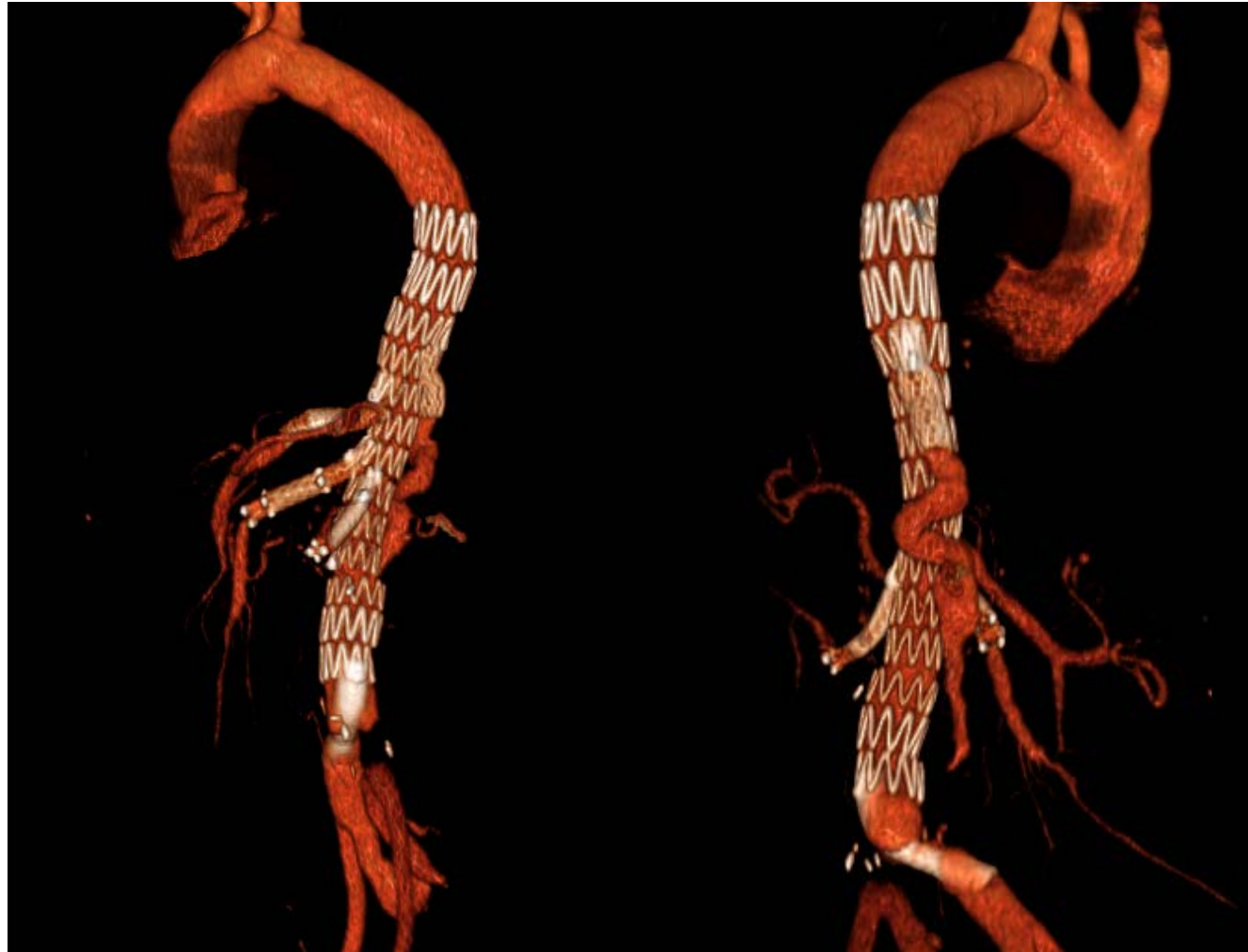


OCTOBER 2014

AAA \varnothing = 57 x 64 mm

No endoleak

All branches patent



MAY 2015

AAA \varnothing = 58 x 64 mm

No endoleak

All branches patent



MAY 2016

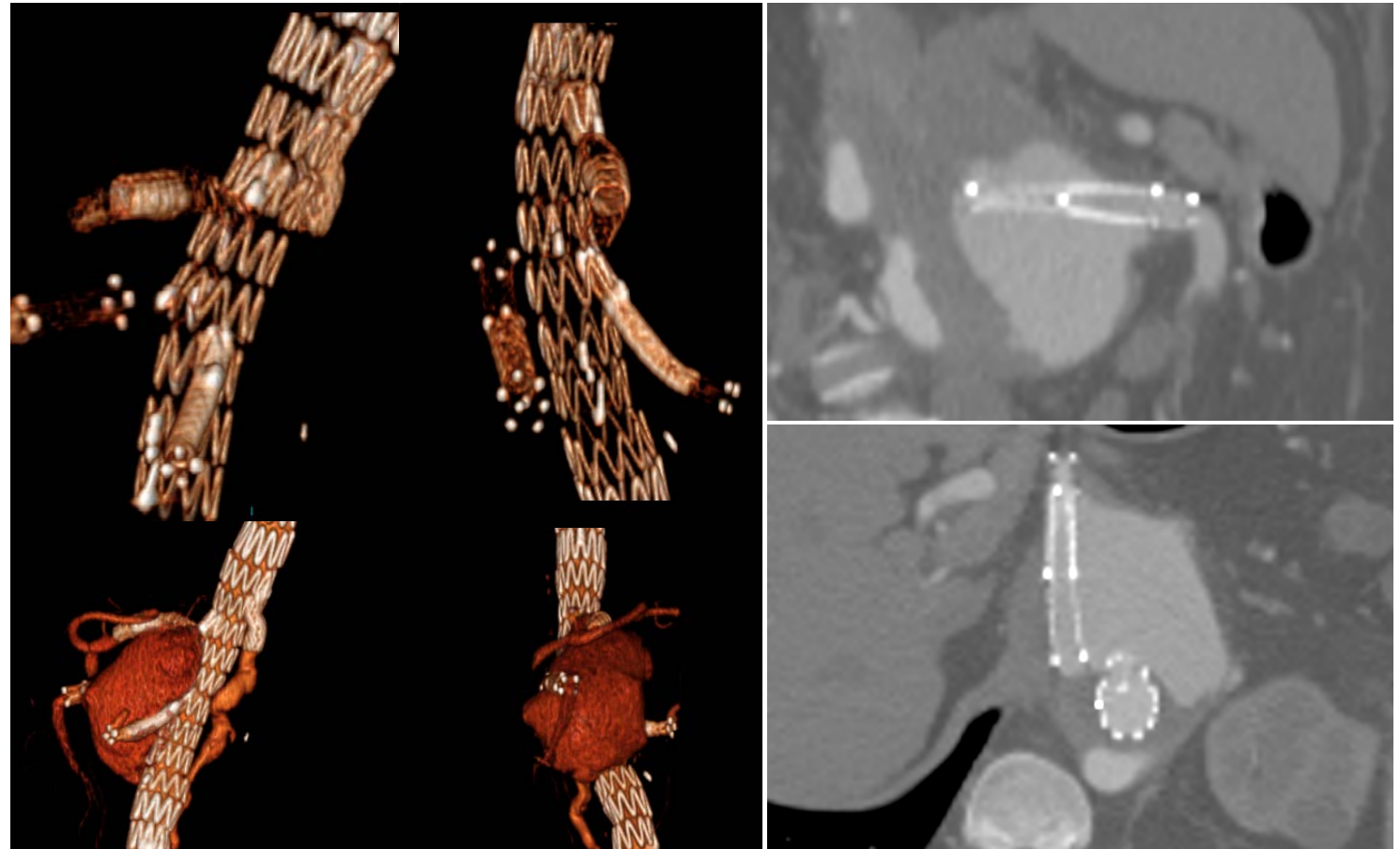
AAA \varnothing = 63 x 86 mm

Large endoleak

SMA branch disconnected

Why?

What next?

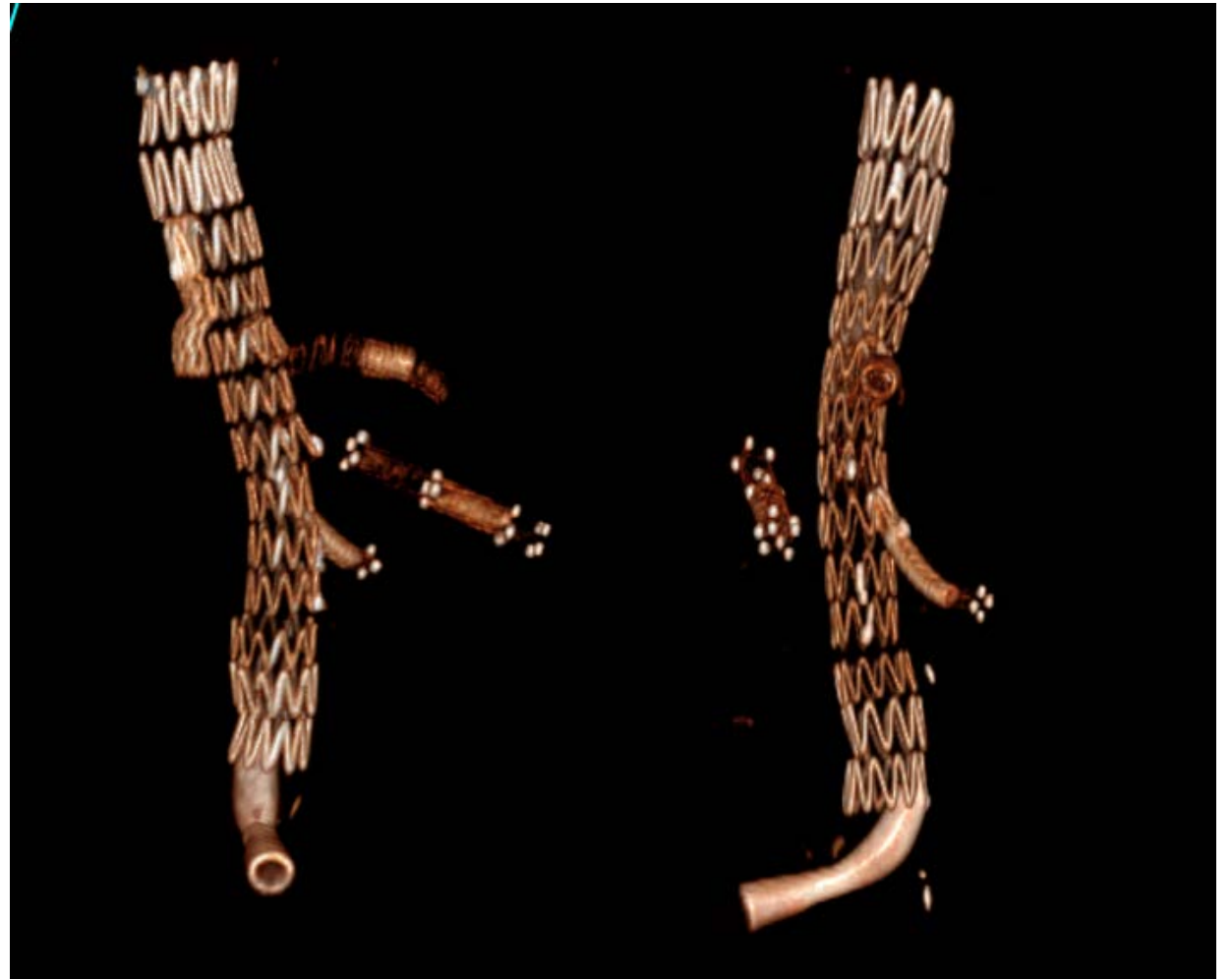


AUGUST 2016 – WHILE WE ARE THINKING...

AAA \varnothing = 78 x 90 mm

Large endoleak

SMA branch disconnected

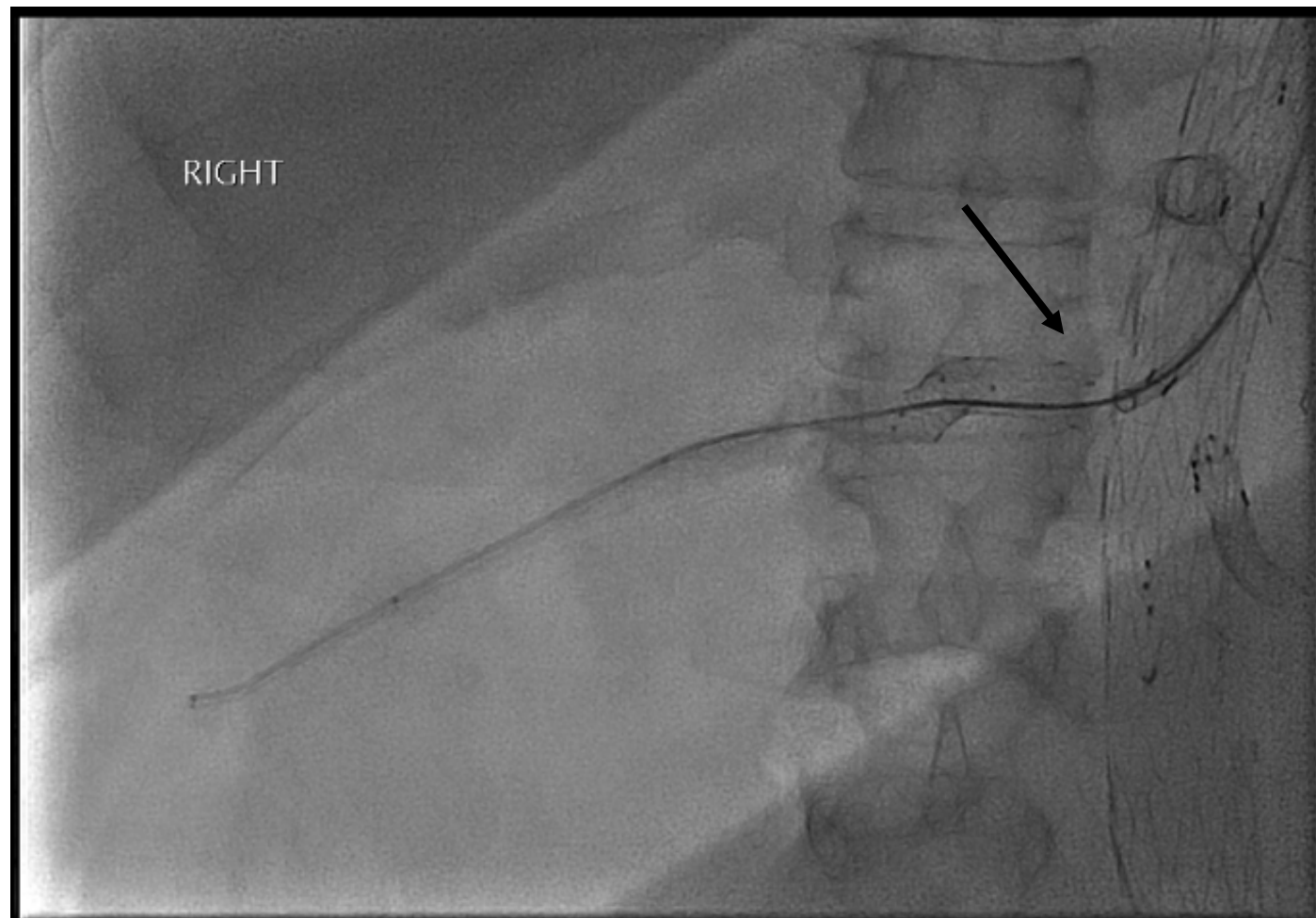


SEPTEMBER 2016

Access to SMA with Sidewinder 1

Then Terumo, Navicross

Covered stent x 2

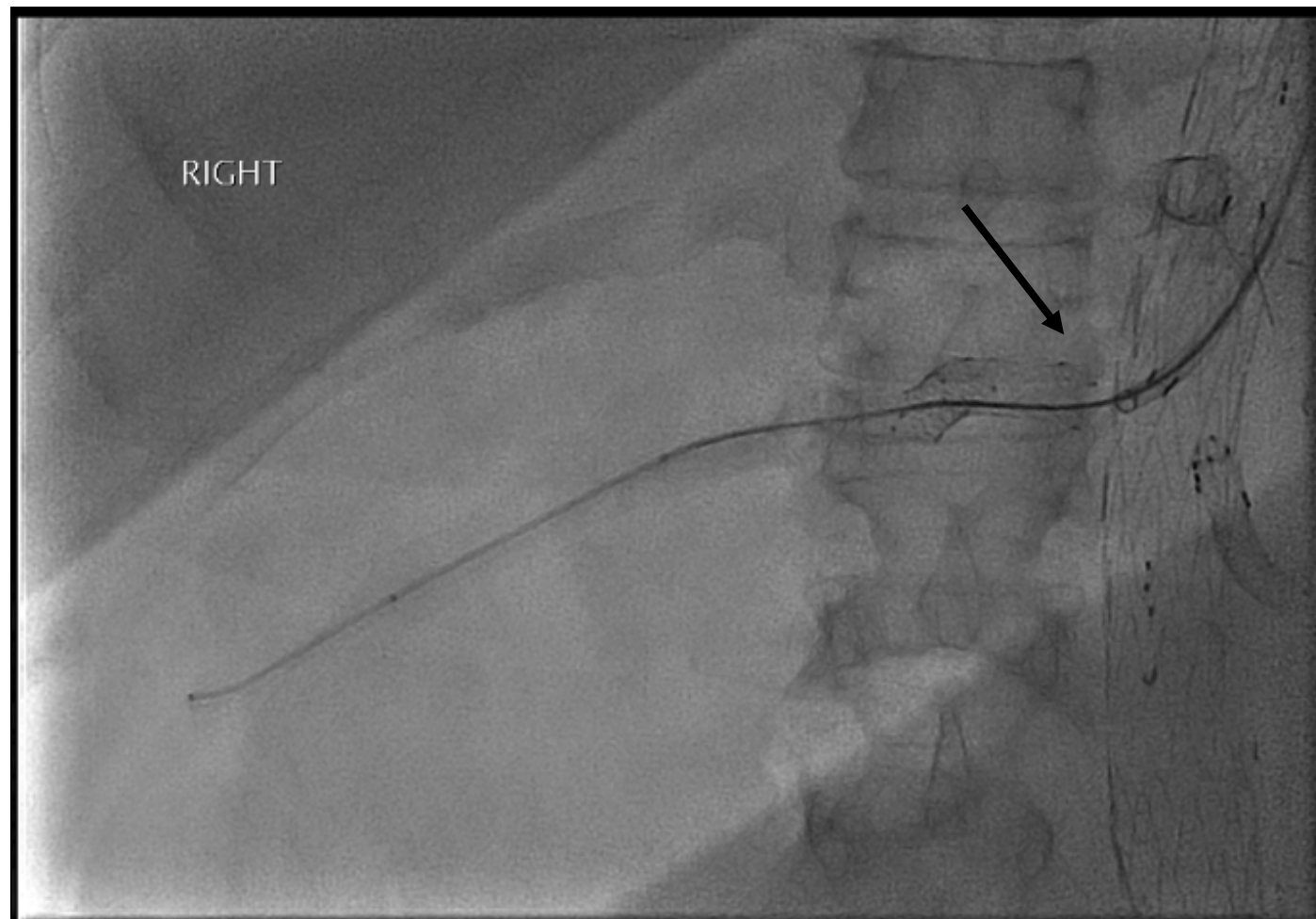


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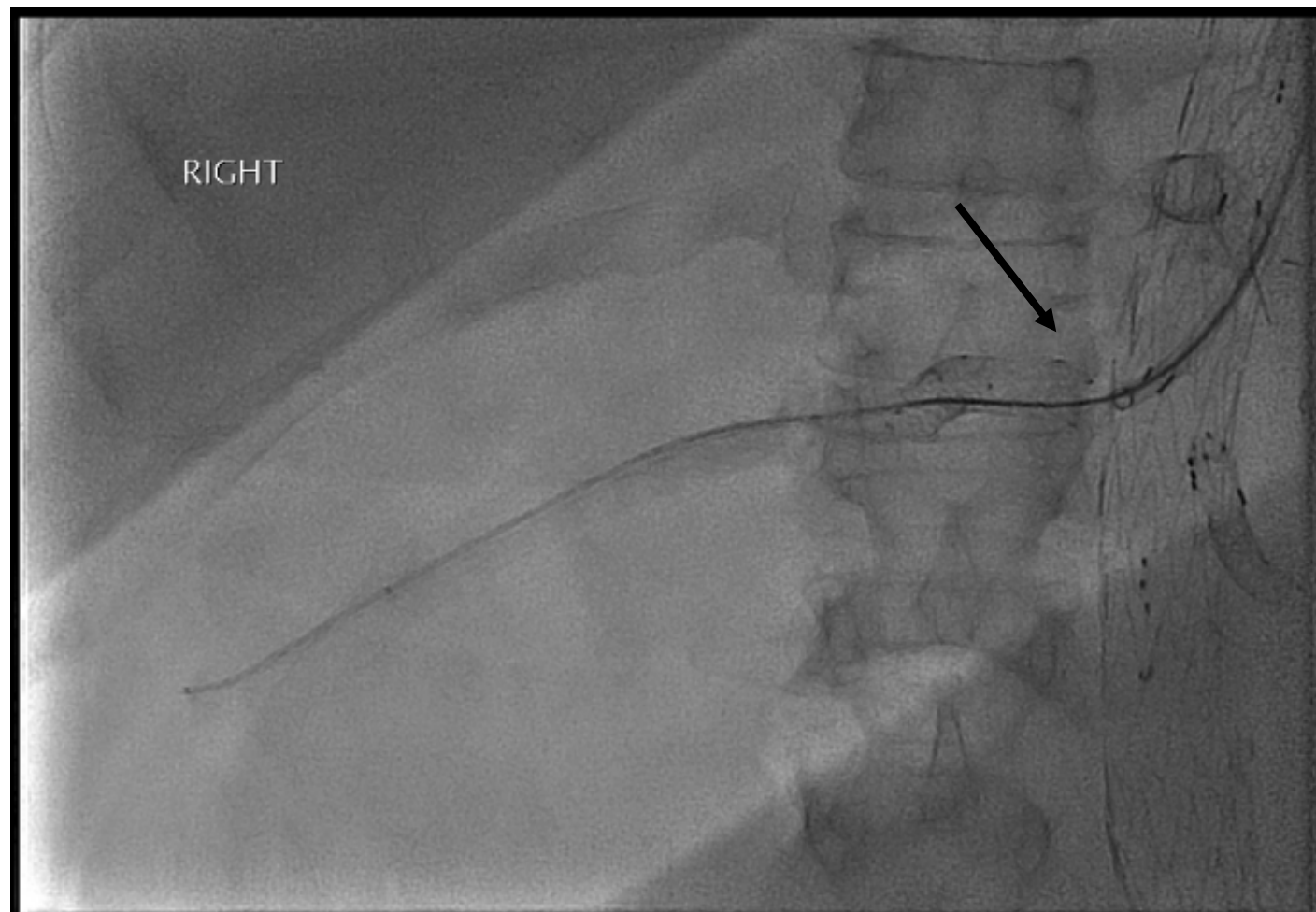


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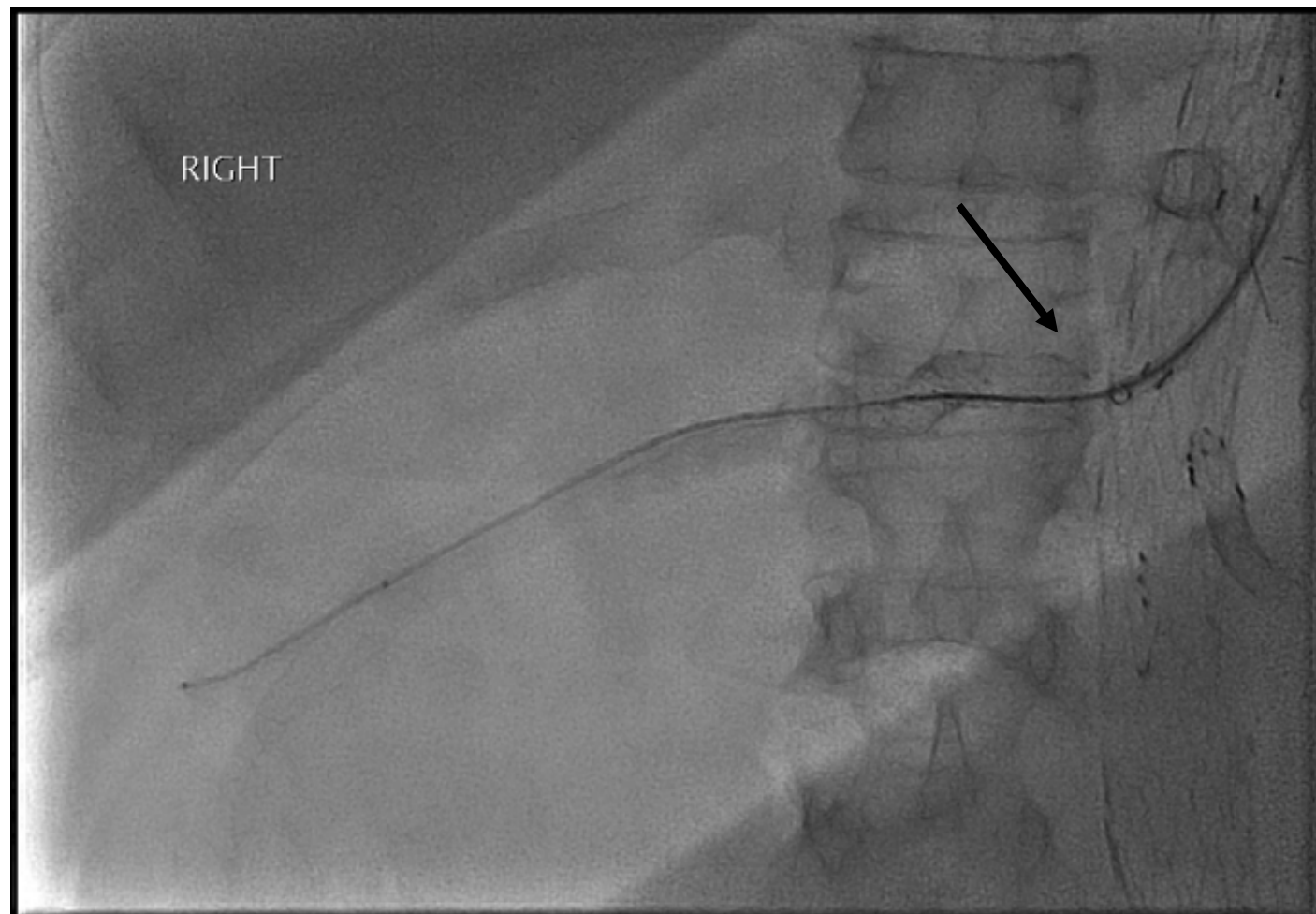


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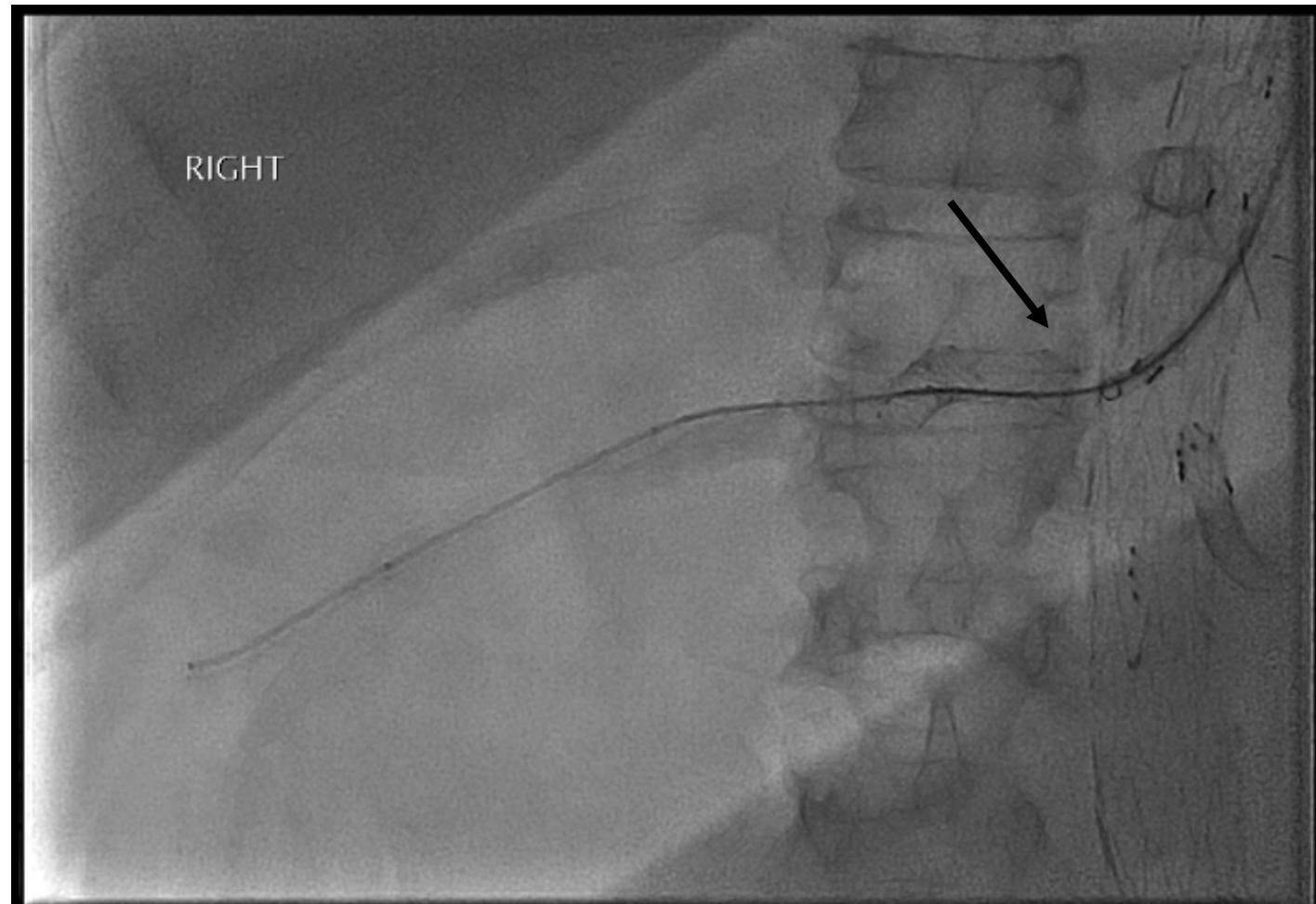


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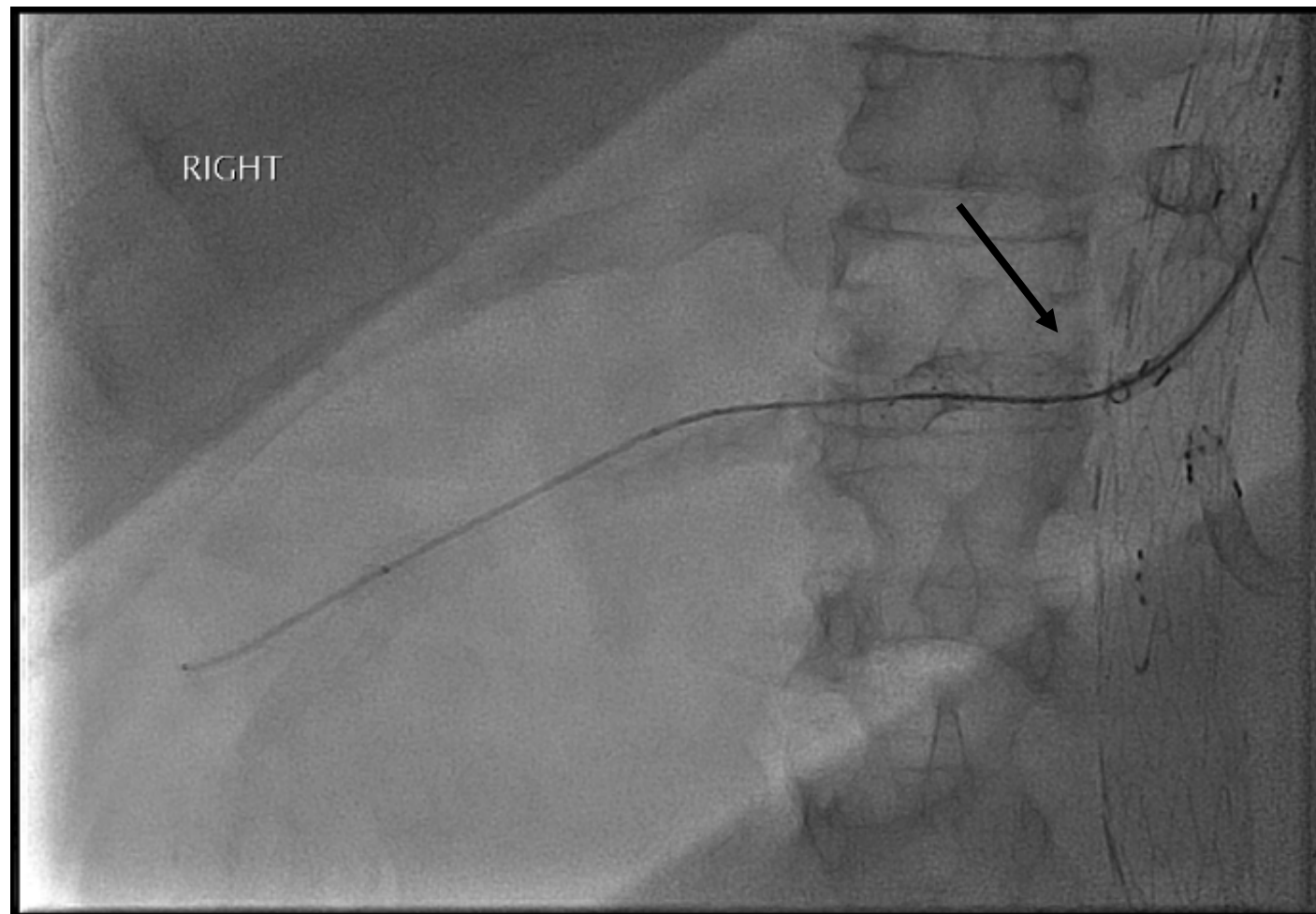


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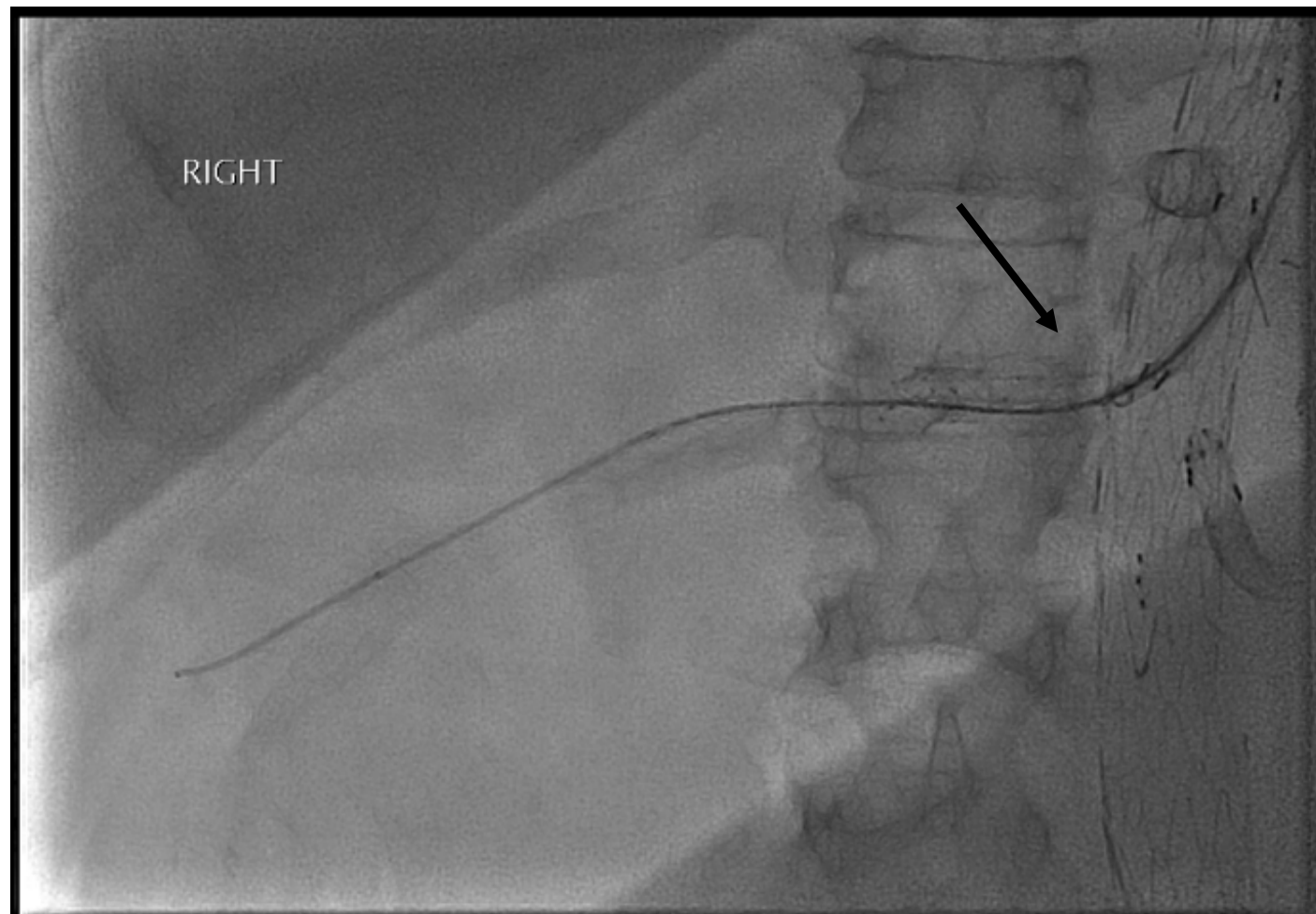


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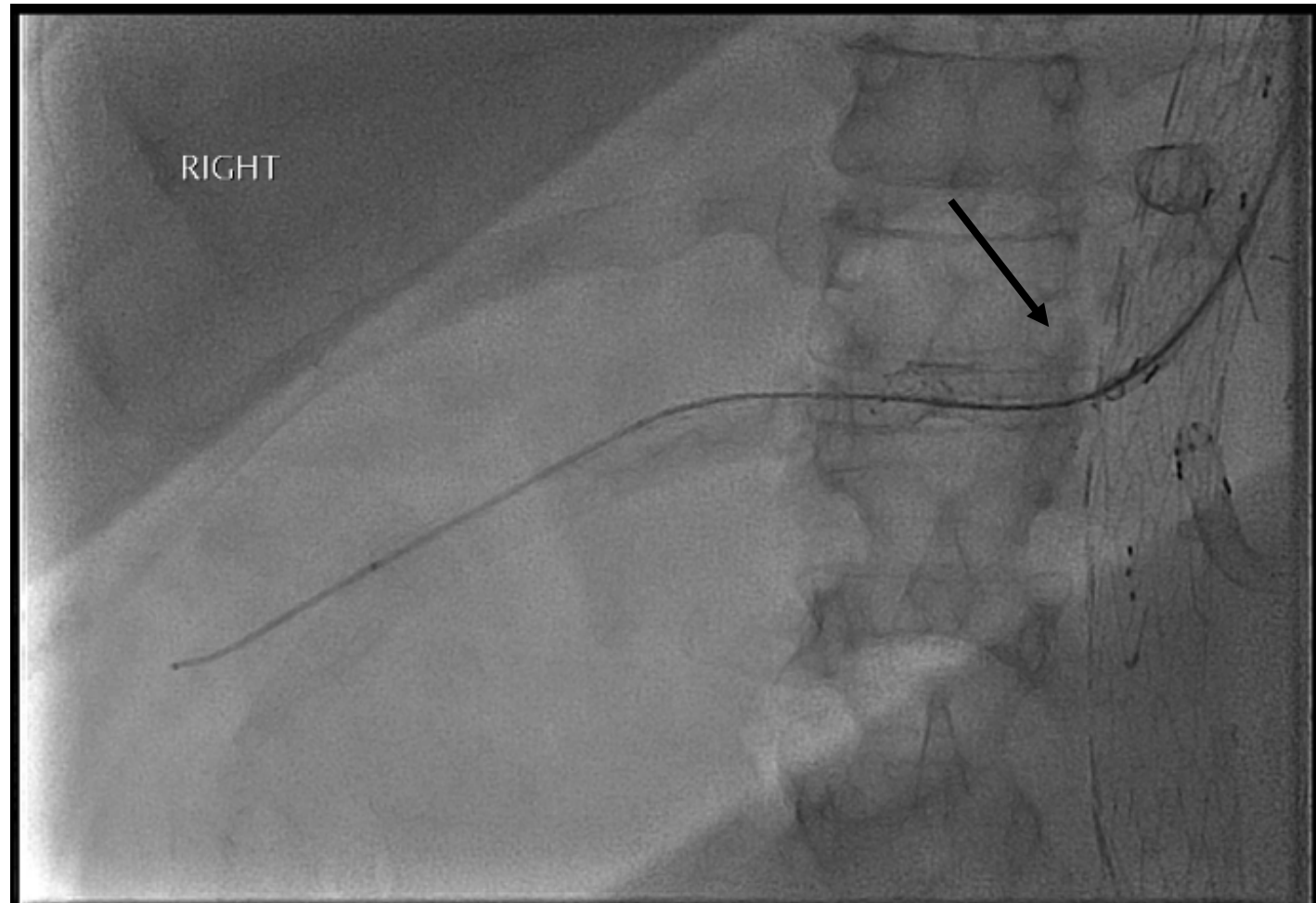


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Access to SMA with Sidewinder 1

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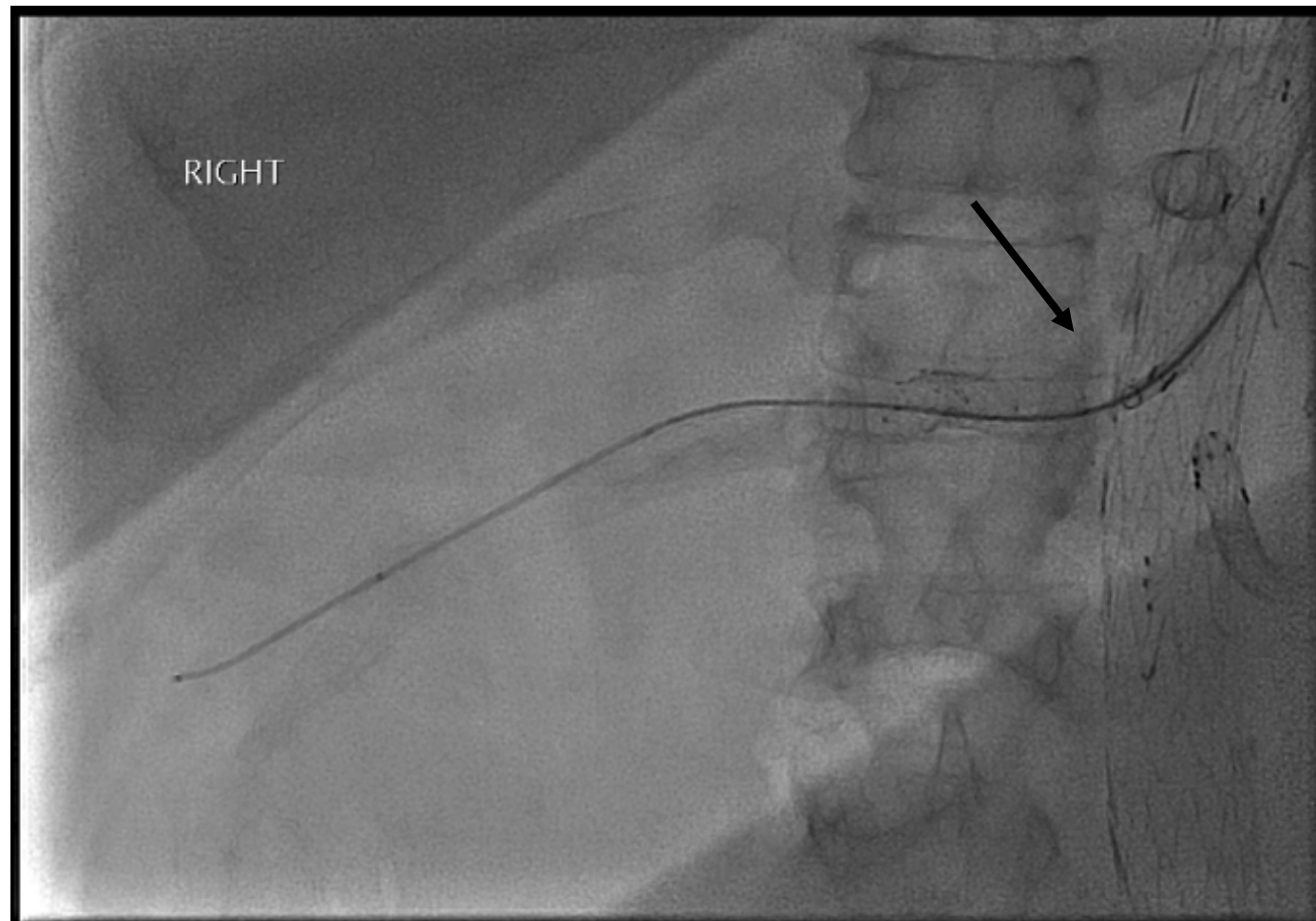


SEPTEMBER 2016

Access to SMA with Sidewinder 1

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Covered stent x 2

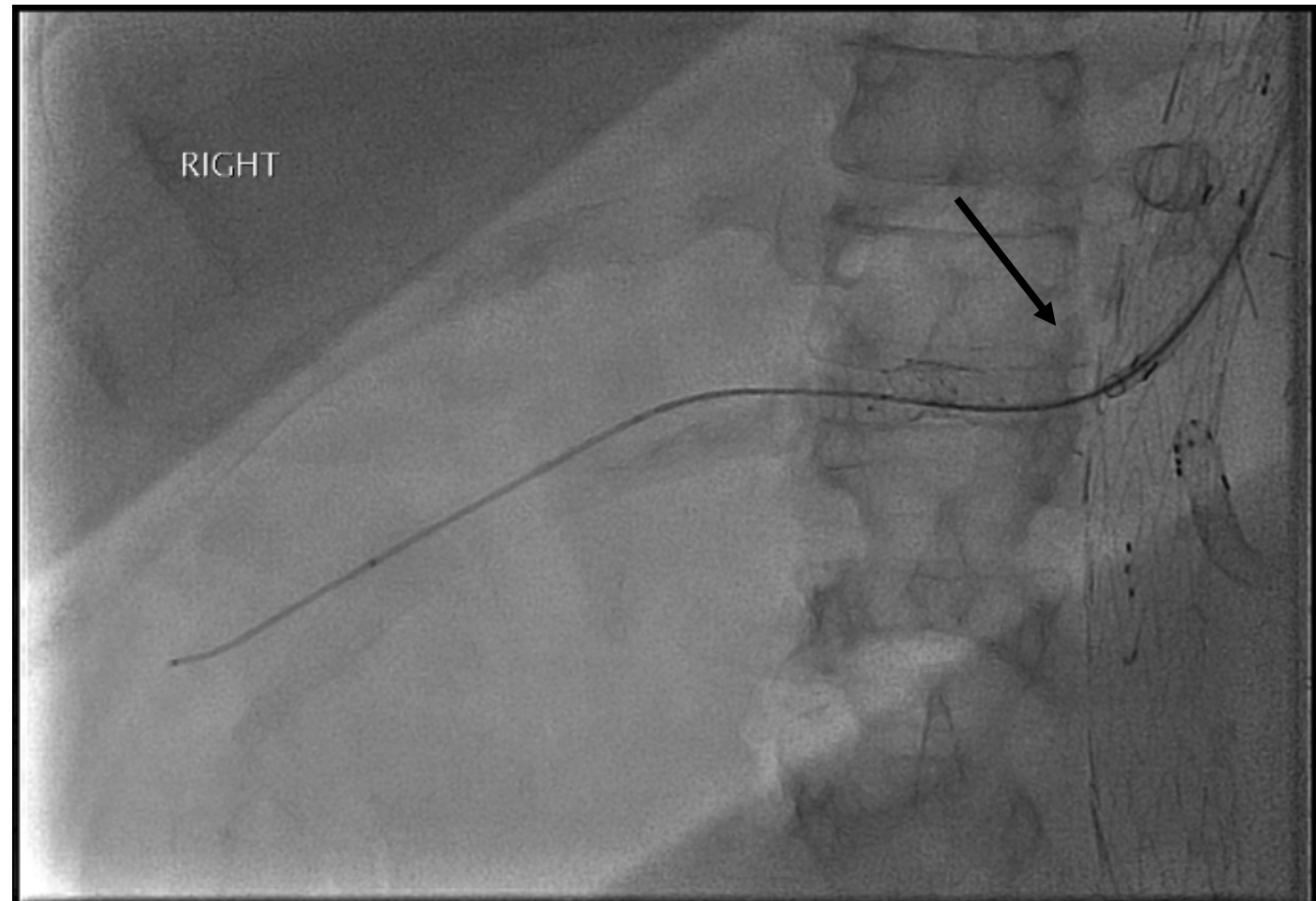


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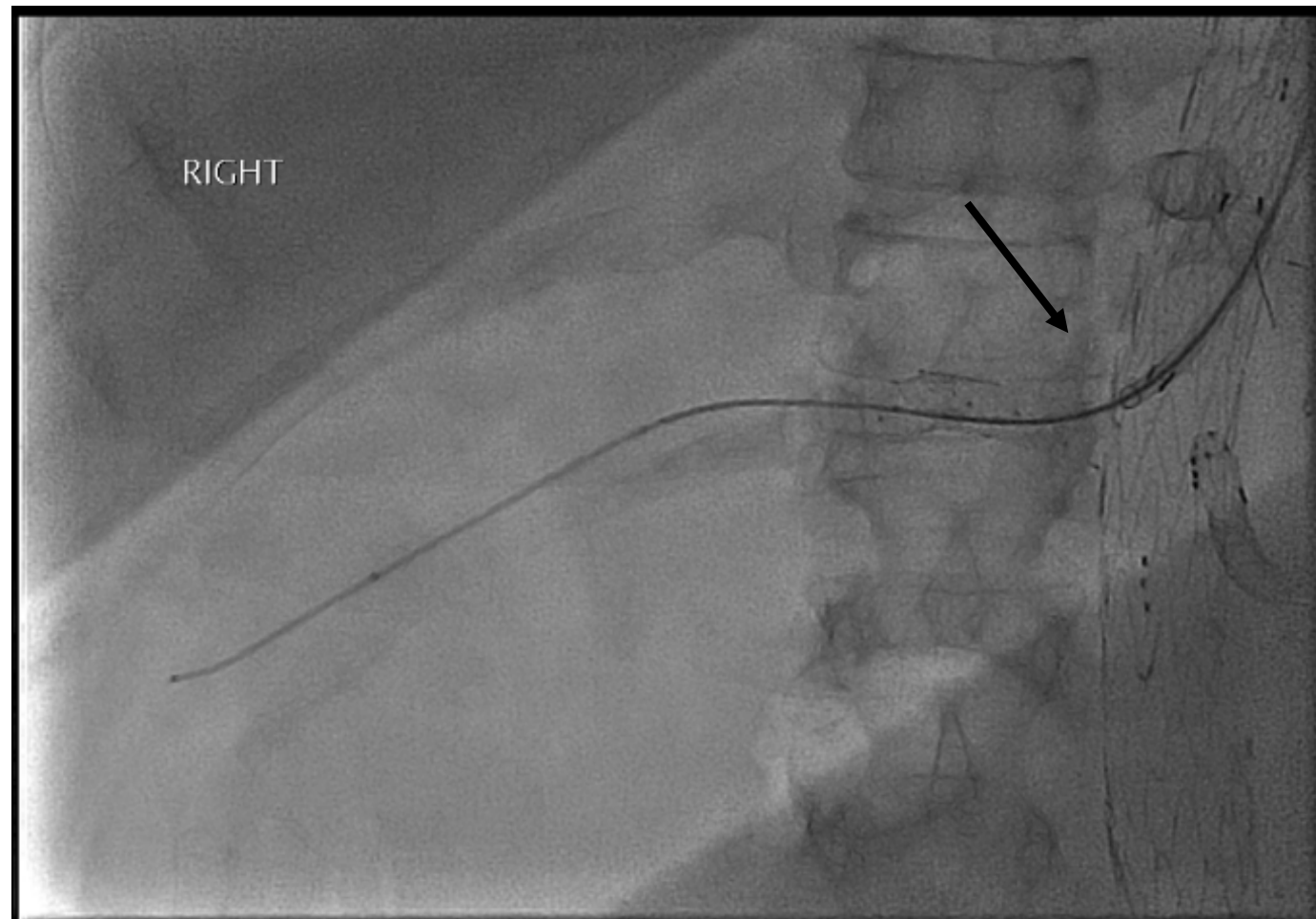


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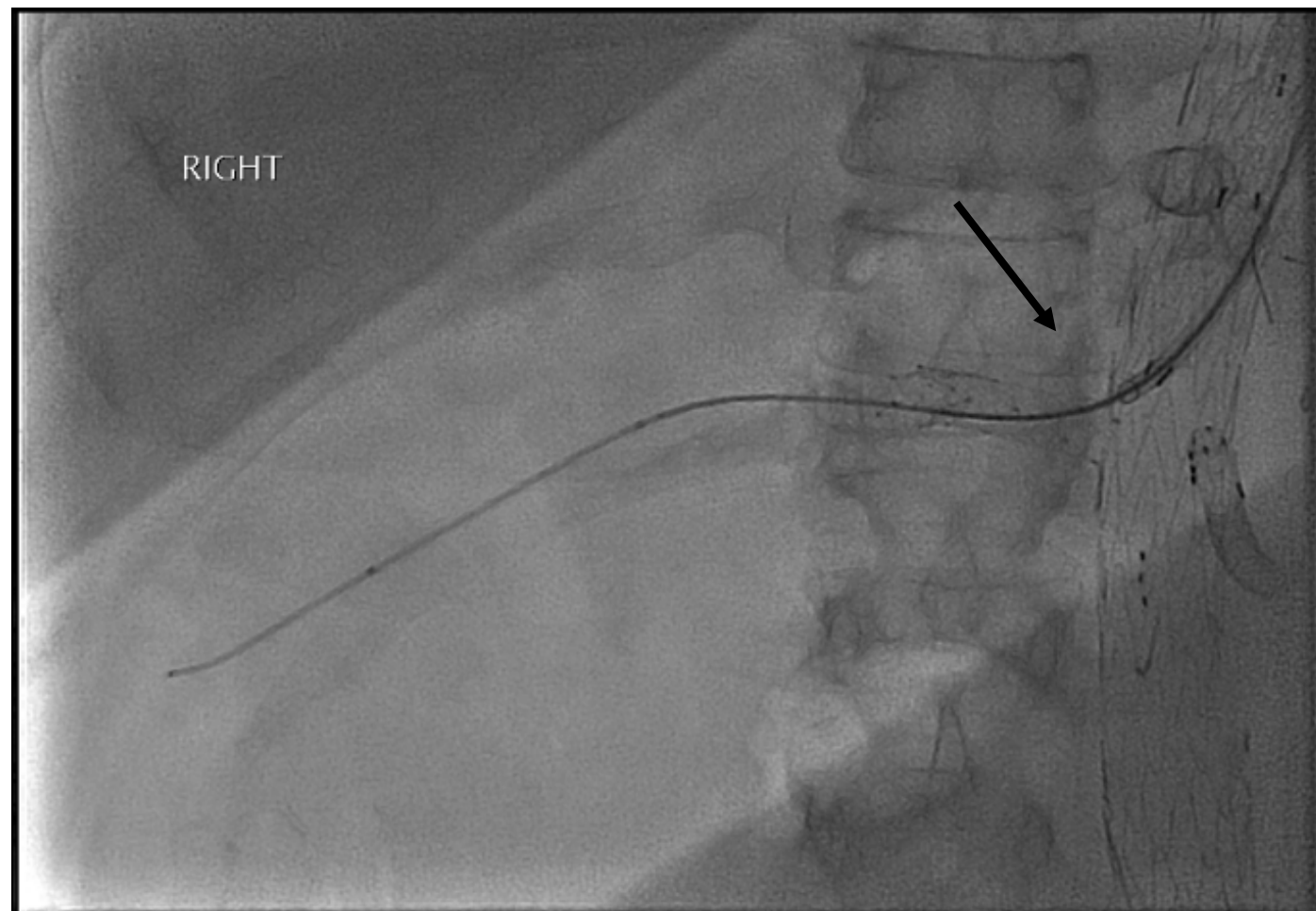


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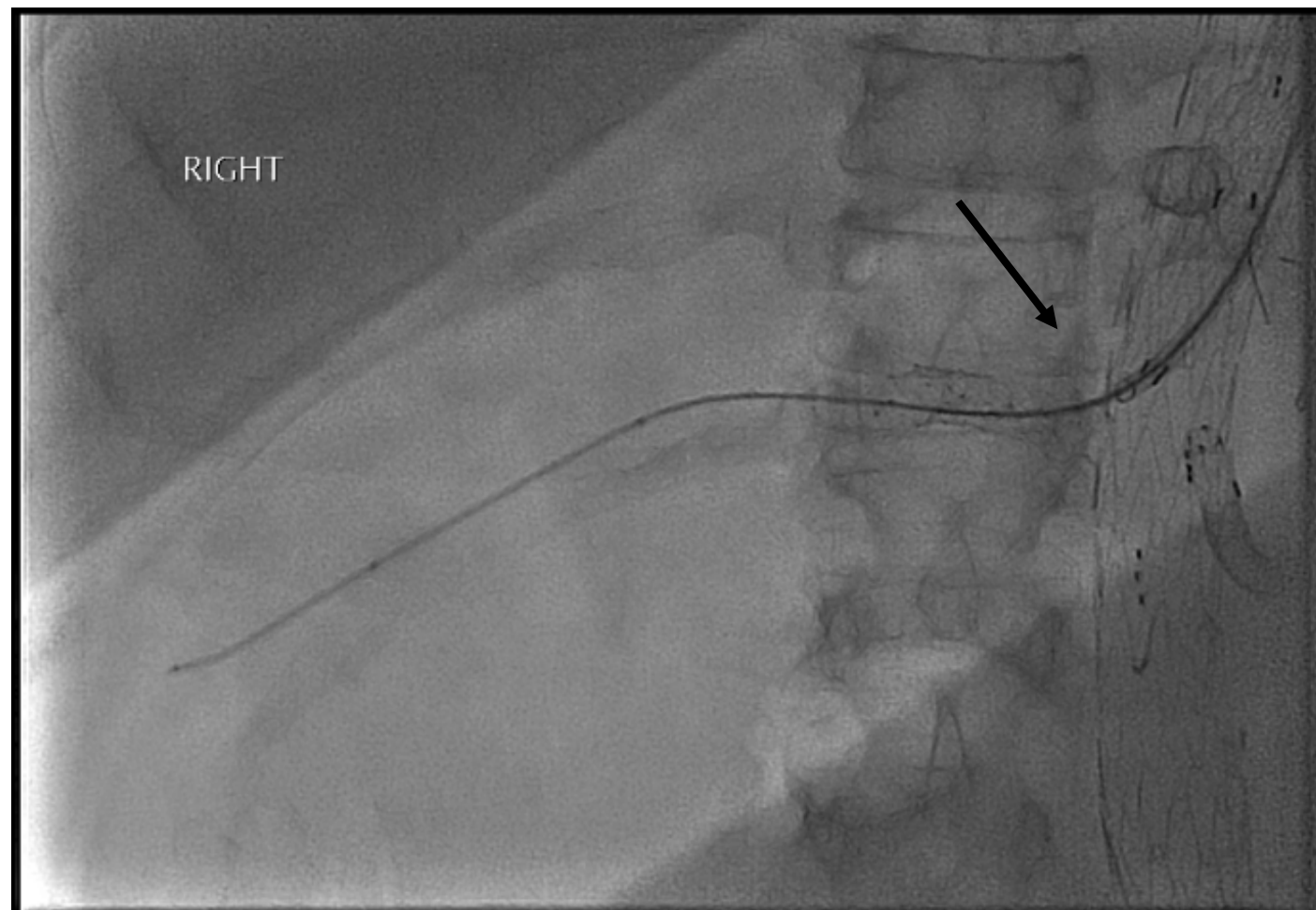


SEPTEMBER 2016

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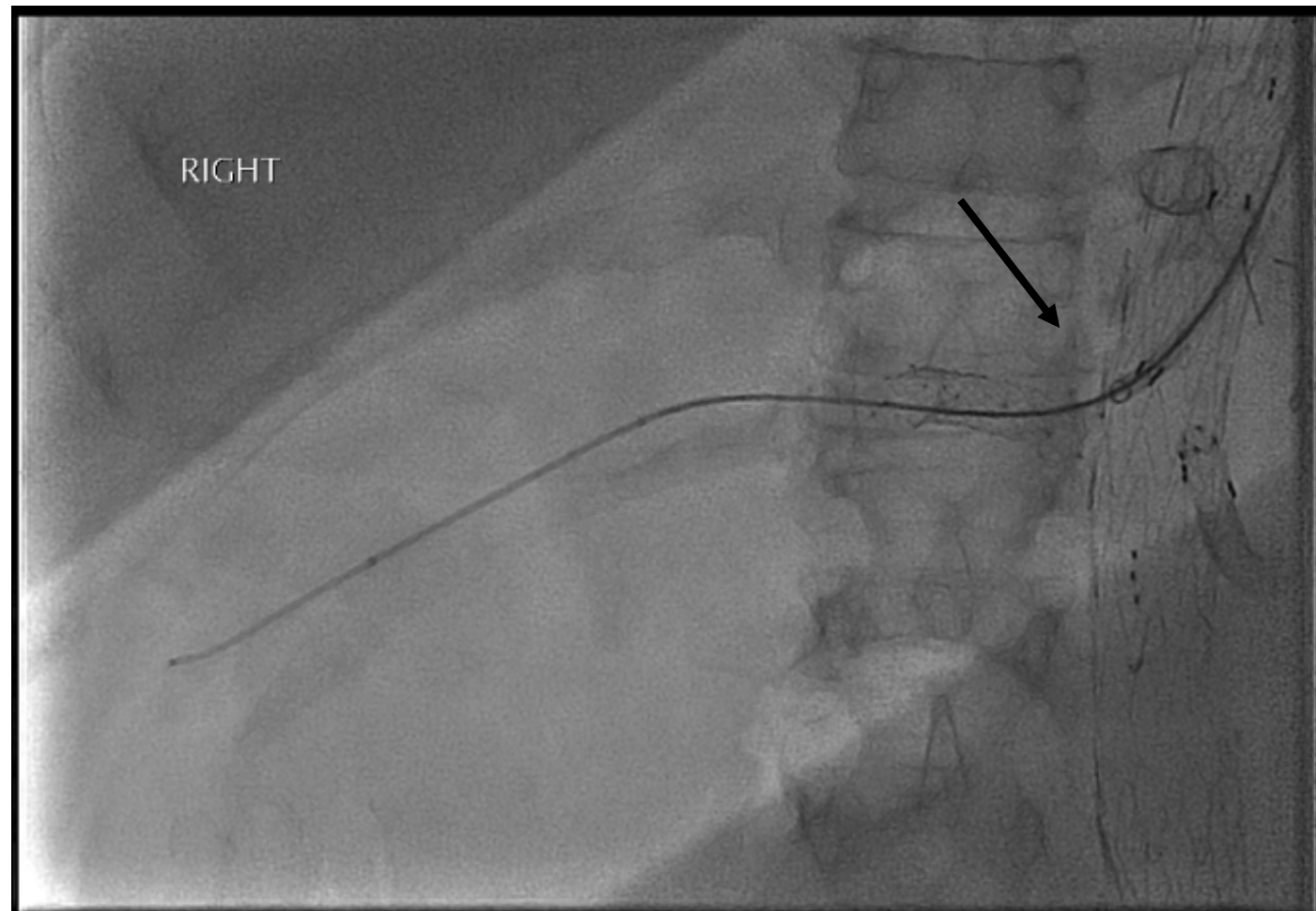


SEPTEMBER 2016

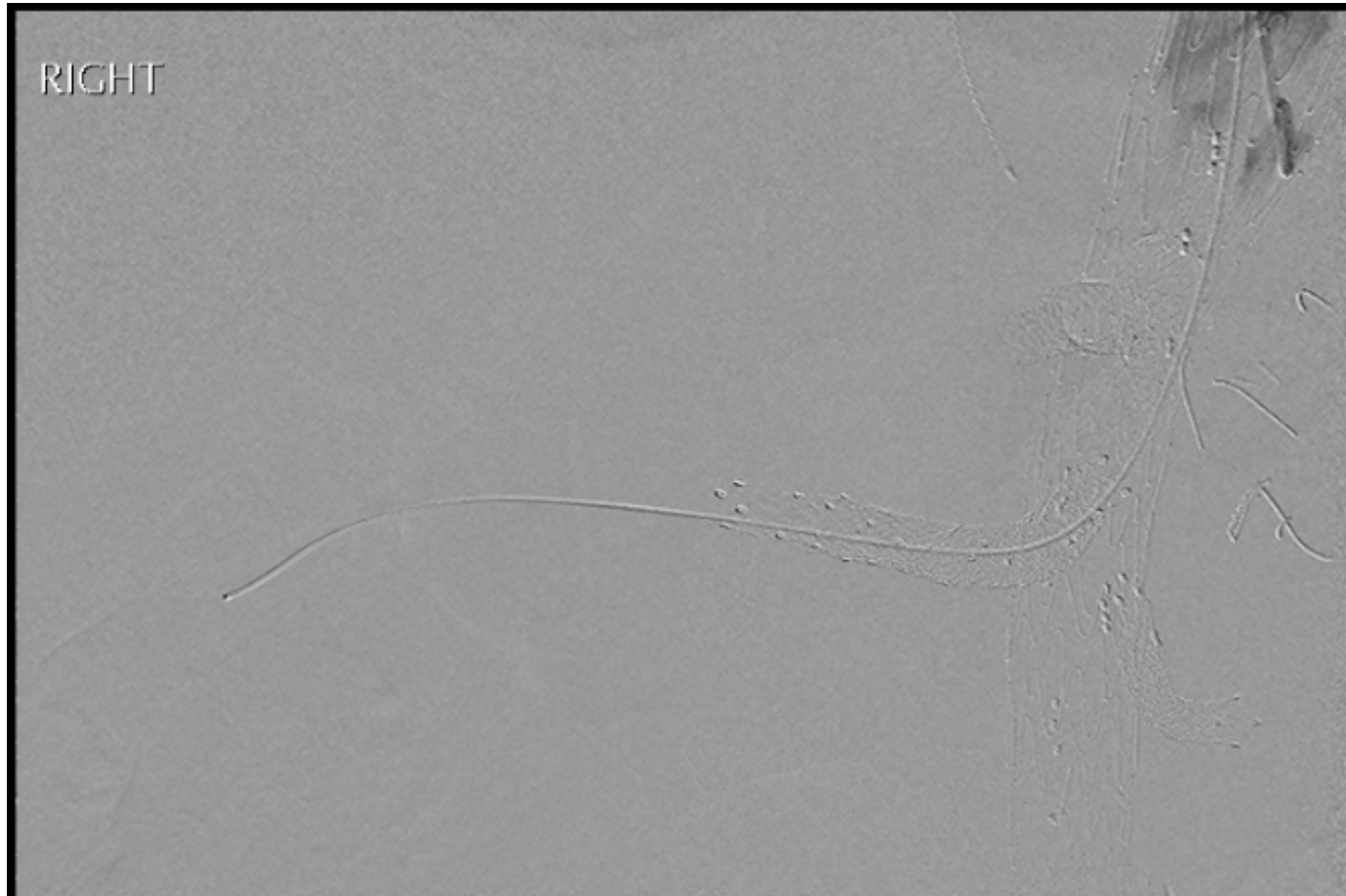
Access to SMA with Sidewinder 1

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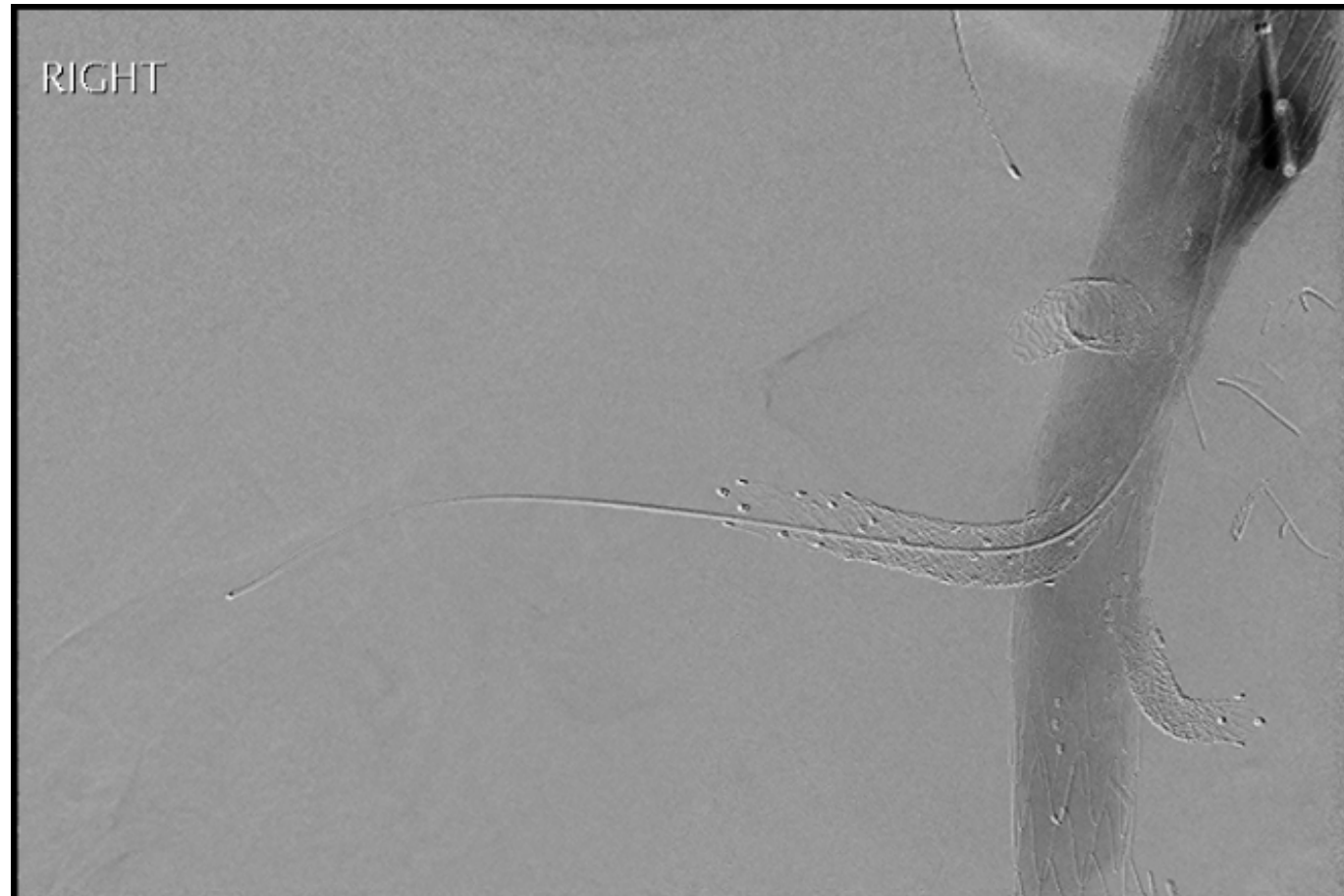
Fluency x 2



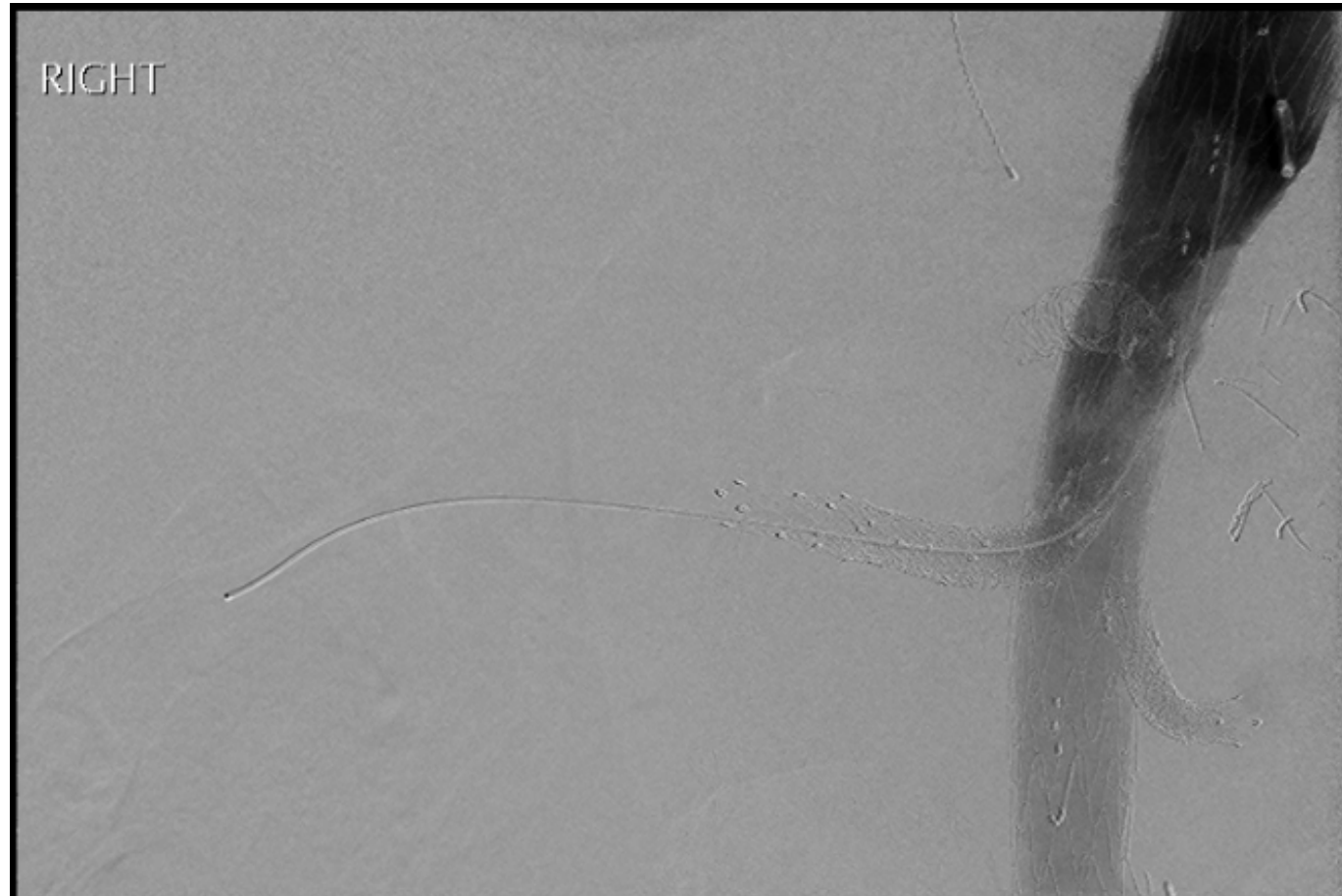
COMPLETION RUN



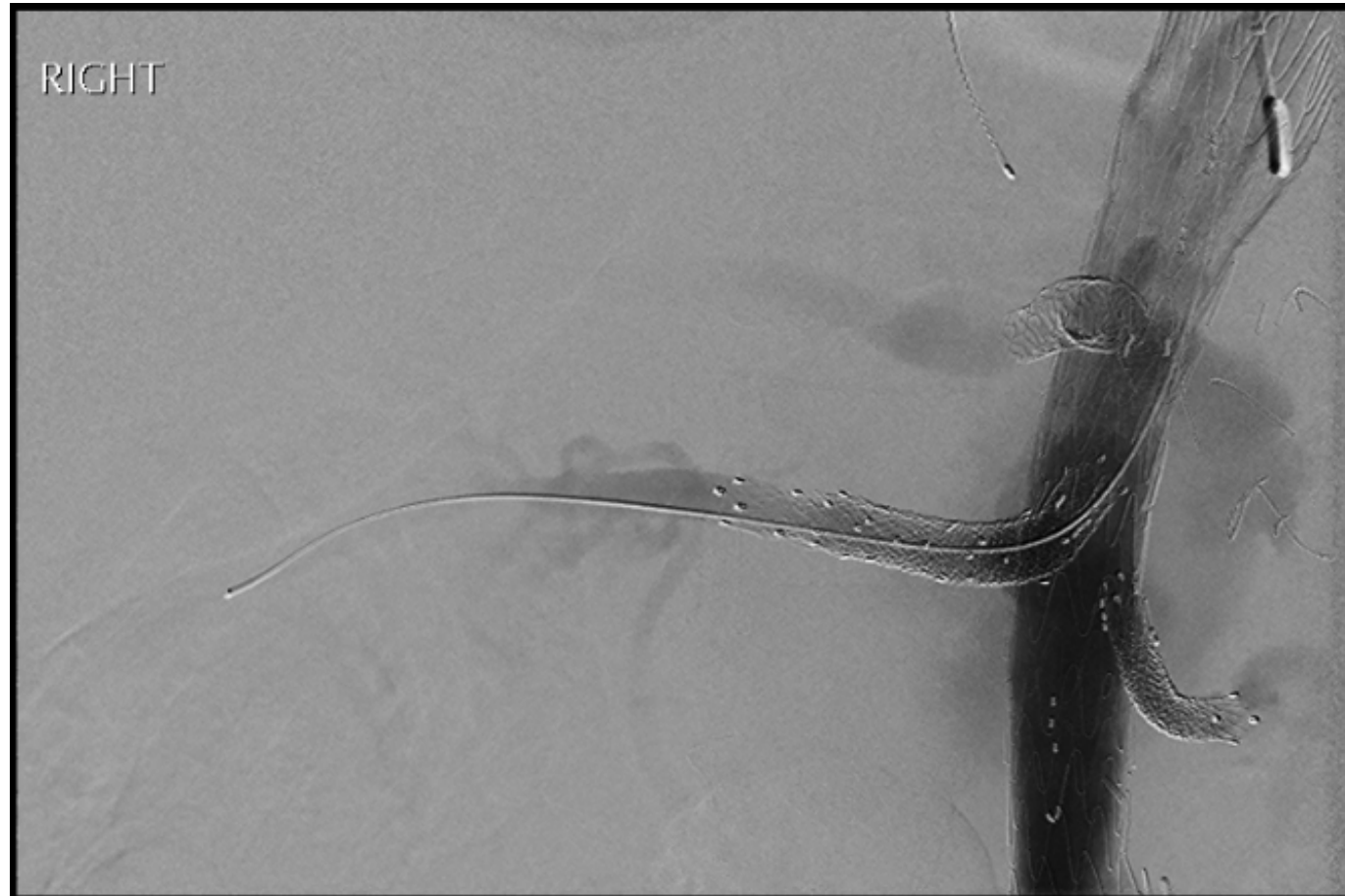
COMPLETION RUN



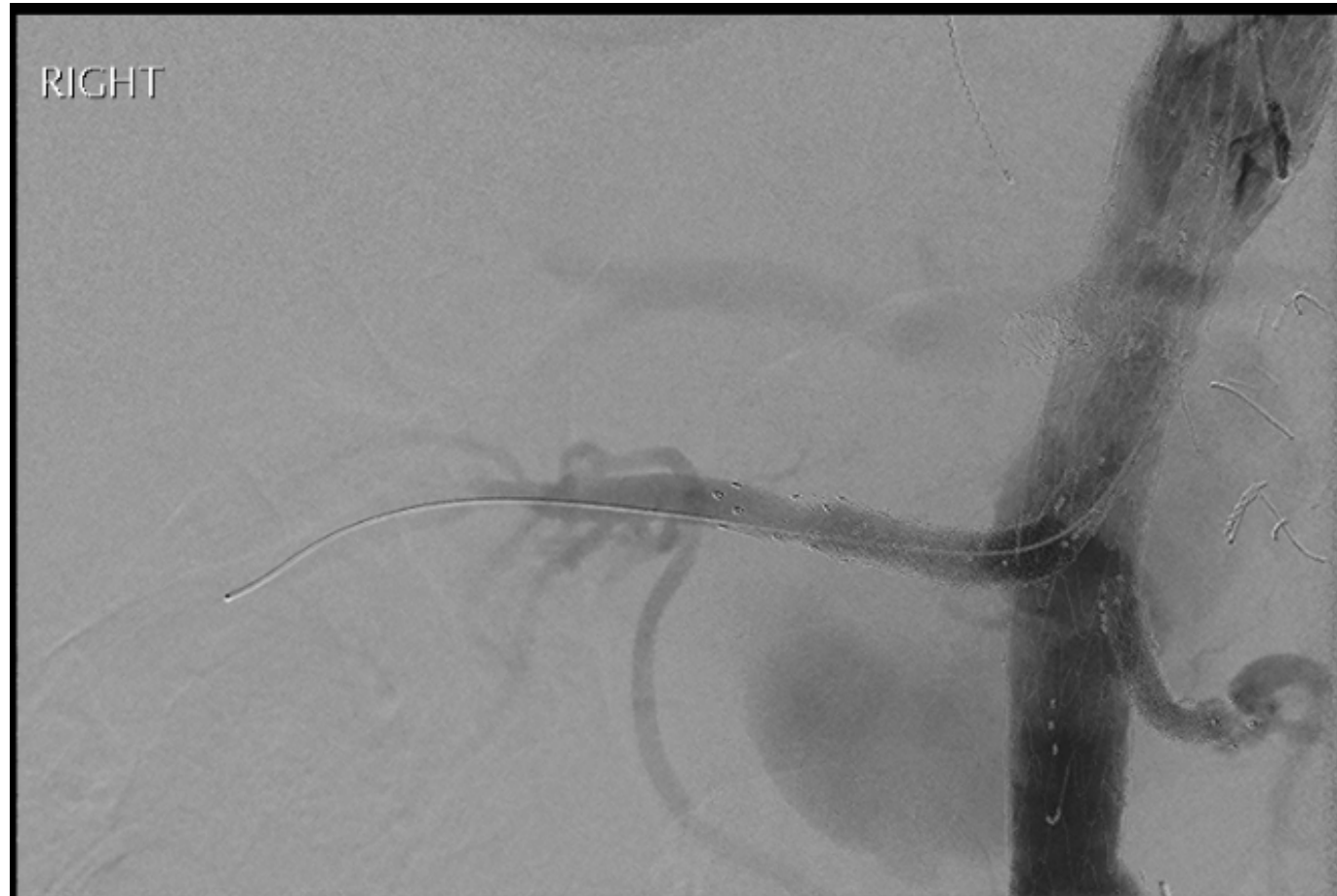
COMPLETION RUN



COMPLETION RUN



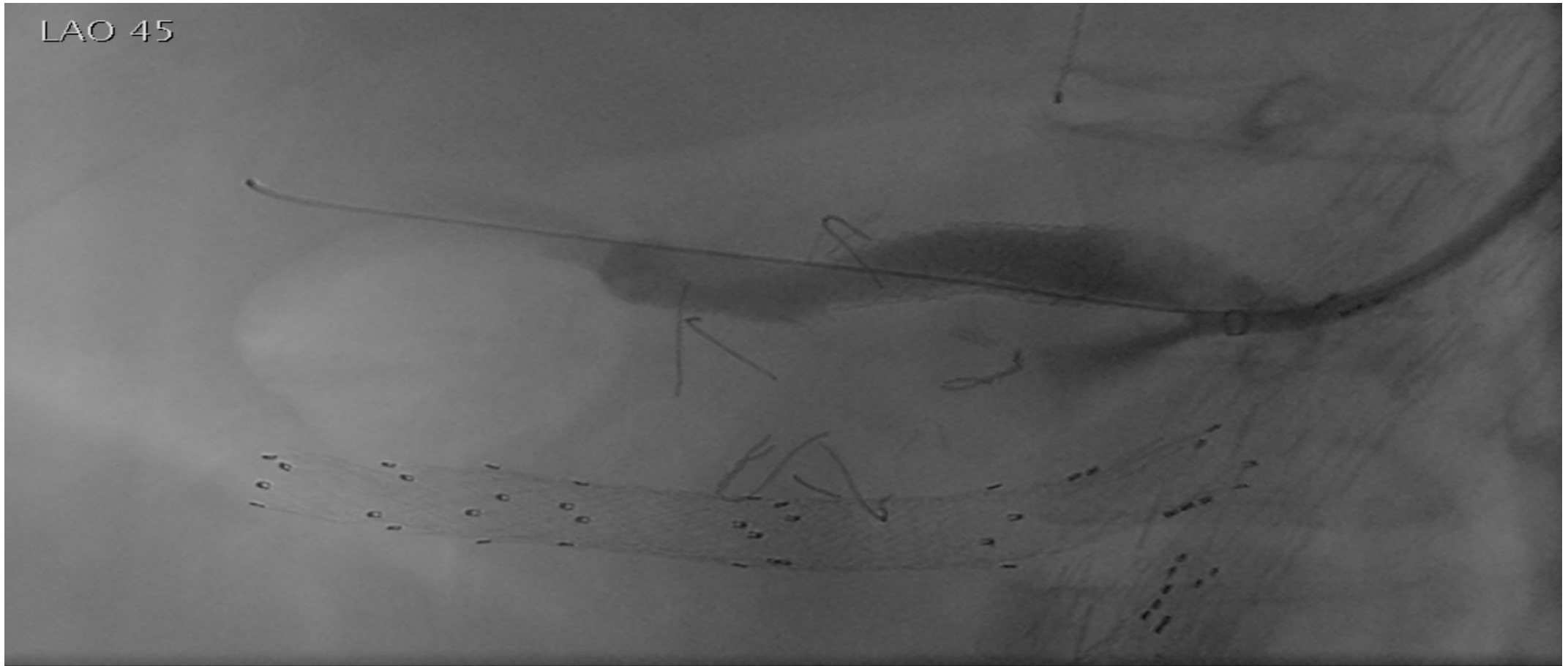
COMPLETION RUN



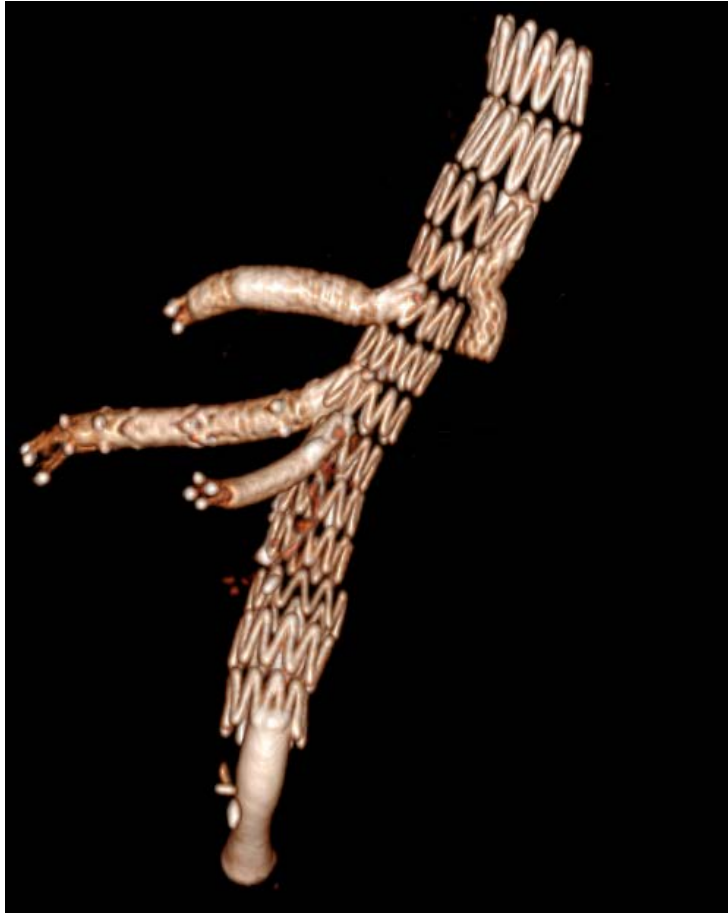
COMPLETION RUN



FABRIC HOLE IN CA STENT



POSTOPERATIVE CT



DISCUSSION POINTS

New treatments are imperfect

they can save life

they can cause new complications

Visceral patch vs multi-branched grafts

for open TAAA repair

Fabric holes in balloon-expandable stents

Diameter discrepancy

between branches and target vessels

