

Juxtarenal AAA

Parti du mauvais pied?

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Disclosures

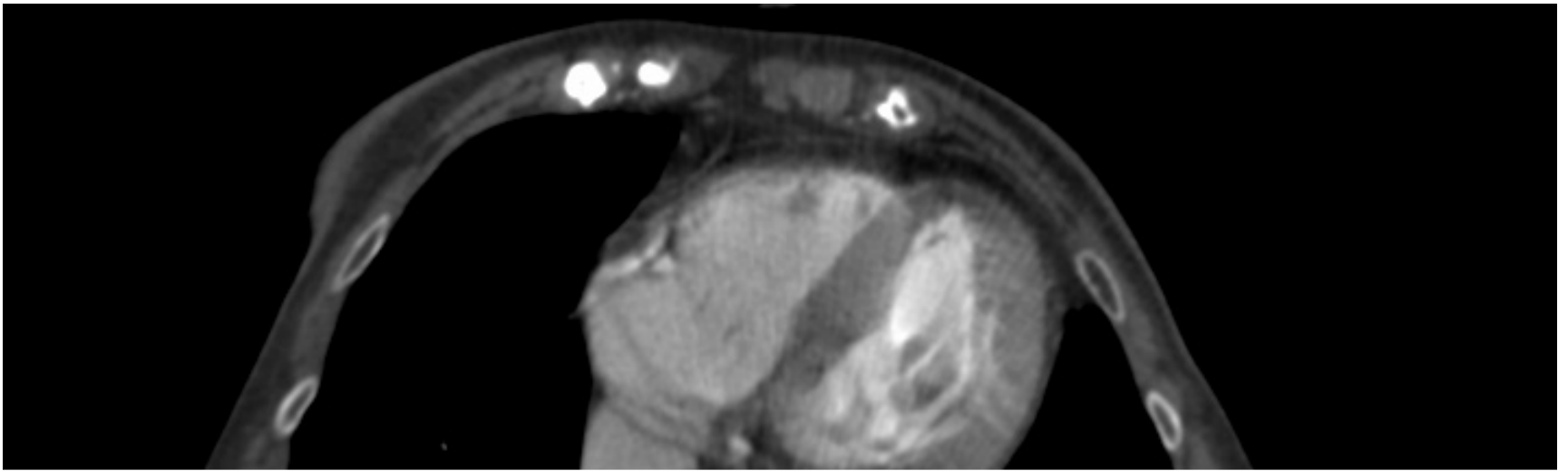
None

My most didactic moment

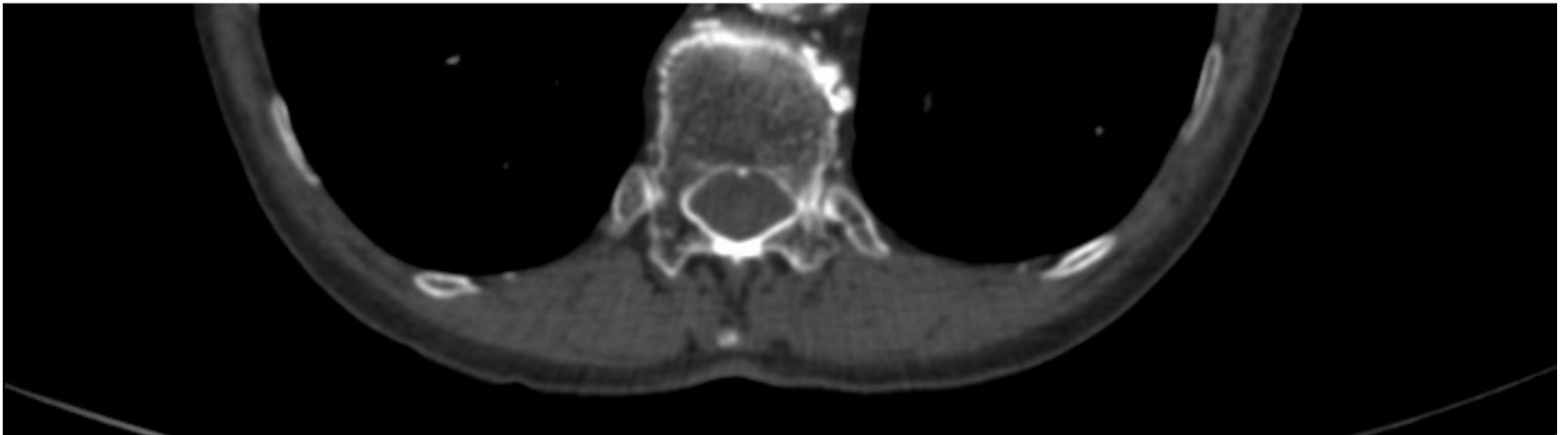


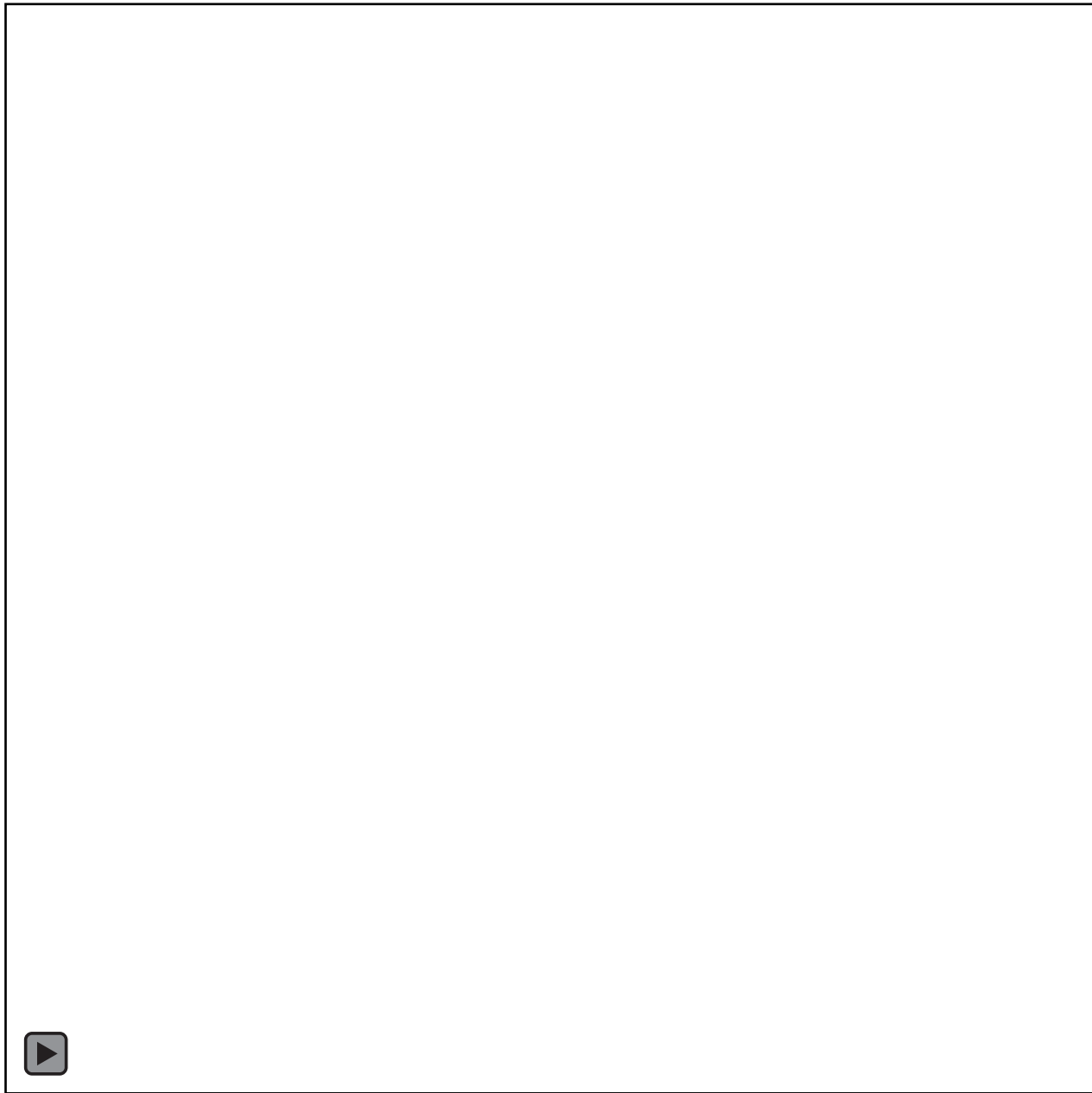
August 2014

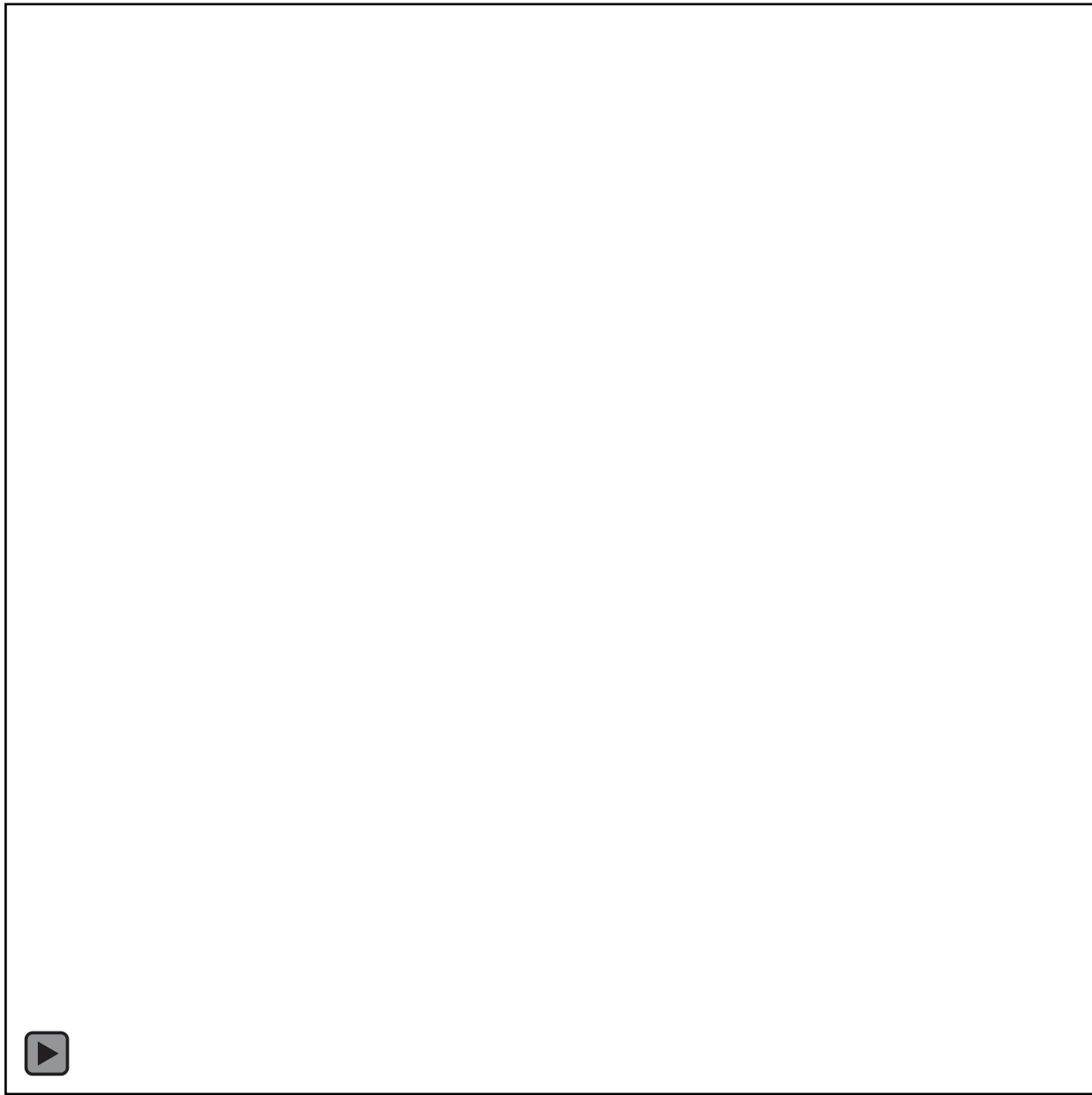
- Woman
- 77 years
- Analysed by physician for loss of appetite and weight loss (BMI 17.5)
- Hypertension, Hypercholesterolemia
- COPD, smoker, decreased exercise tolerance
- US: Infrarenal AAA 65 mm
- Lab: GFR 50



CT-angiogram

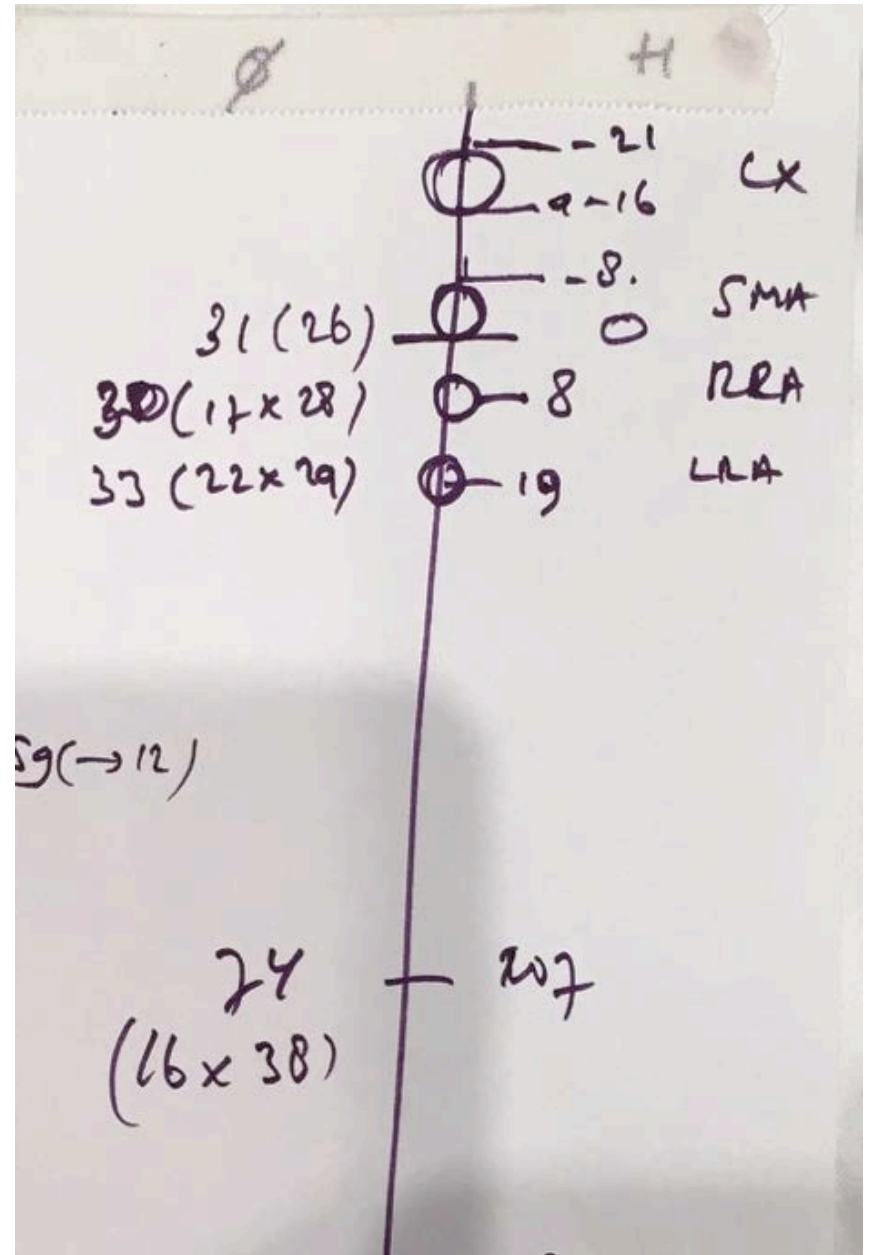
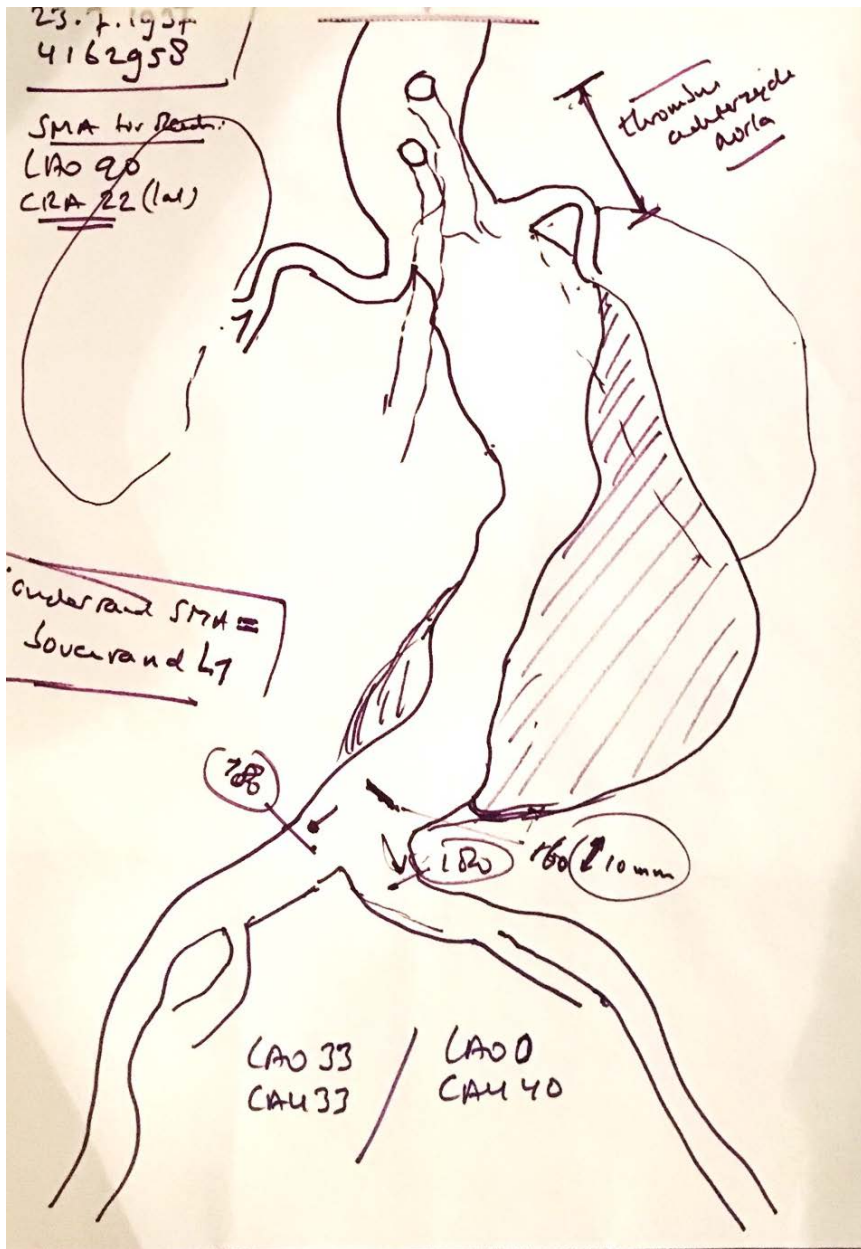






AAA Characteristics

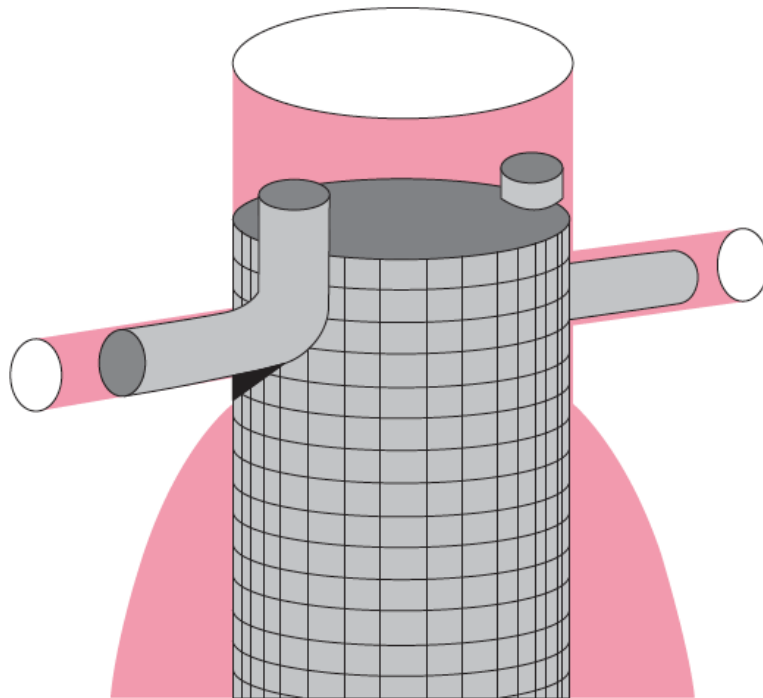
- Juxtarenal AAA 70 mm
- No infrarenal neck (4mm, conical-shaped)
- Mild angulation
- Calcified origins of renal arteries
- Significant thrombus in juxtarenal aorta
- Calcified iliacs, maximal diameter 6 mm



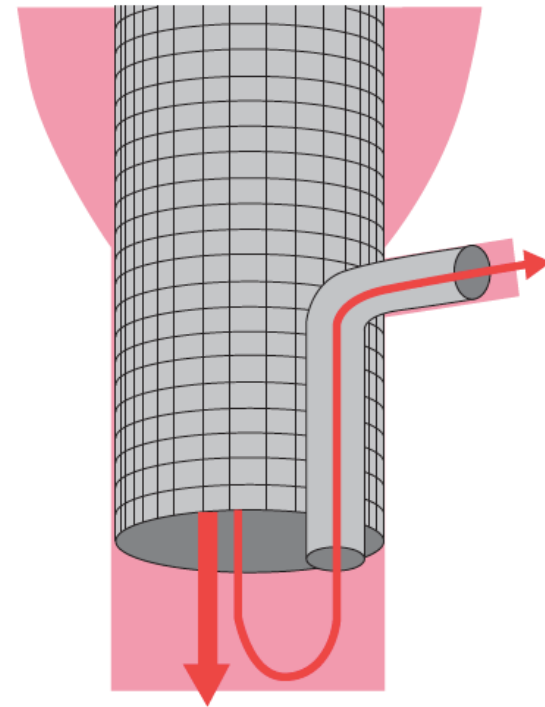
Our treatment considerations

- Unsuitable for standard EVAR (short neck)
- Not fit for open repair
- High risk for fenestrated EVAR (significant thrombus juxtarenal aorta and suboptimal access)
- Decided to offer chimney-EVAR/EVAS

Chimney, snorkel or periscope-EVAR



a Chimney/snorkel graft



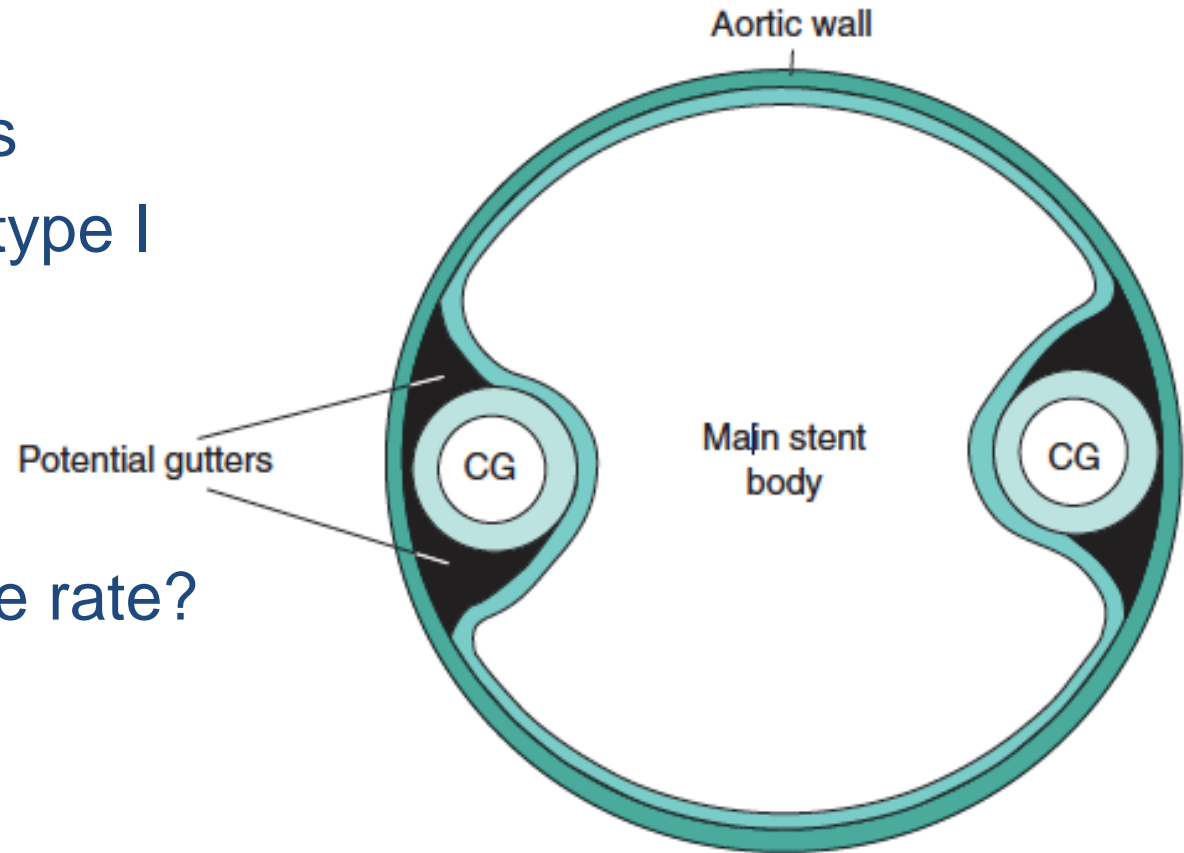
b Periscope stent

Advantages of ch-EVAR

- Combination with standard EVAR
- Use of standard stent
- Off the shelf
- Familiar endovascular techniques less challenging than f-EVAR

Disadvantages of ch-EVAR

- Proximal gutters
- High rate early type I endoleak (10%)
- Increased stroke rate? (3%)



Outcomes of ch-EVAR

- Technical success 98-100%
- 30-day mortality 0.8–5.0%
- Early type IA endoleak up to 30%
- Freedom from chimney related reintervention 93-97%
- 6-month target vessel patency 95-97%

Katsargyris A et al. J Endovasc Ther 2013; 20:159-169.

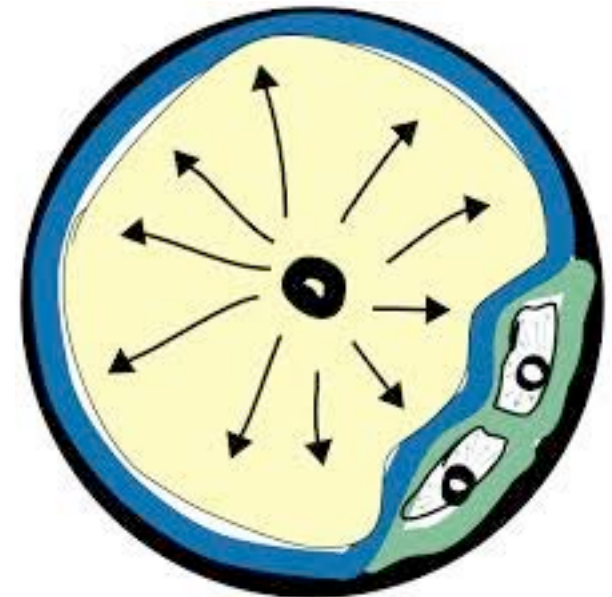
Wilson A et al. Br J Surg 2013; 100:1557-1564.

Donas K et al. J Vasc Surg 2016, 63: 1-7

Ullery B et al. J Vasc Surg 2017, 65: 981-990

Chimney-EVAS

- Combination of chimney grafts with Nellix (polymer bag) stent grafts
- Advantage: no gutter formation



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Treatment of a Juxtarenal Aneurysm With the Nellix Endovascular Aneurysm Sealing System and Chimney Stent

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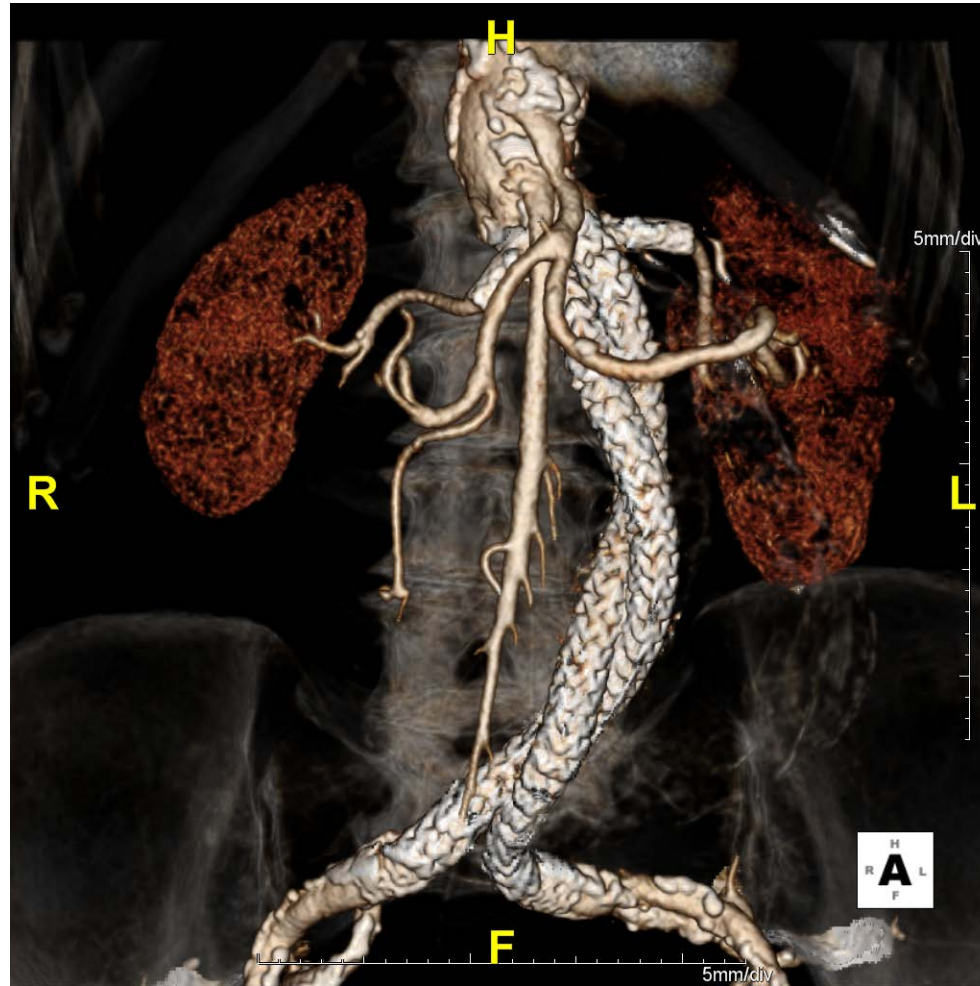
Endovascular Aneurysm Sealing for Juxtarenal Aneurysm Using the Nellix Device and Chimney Covered Stents

Chimney Stent Graft for Endovascular Sealing of A Pararenal Aortic Aneurysm

[Martin Rouer](#), [Salma El Batti](#), [Pierre Julia](#), [Romain de Blic](#), [Jean-Noël Fabiani](#), [Jean-Marc Alsac](#)  

Department of Cardiac and Vascular Surgery, Hôpital Européen Georges Pompidou, APHP, Faculté de Médecine Paris-Descartes, Paris 5, Paris, France

October 2014

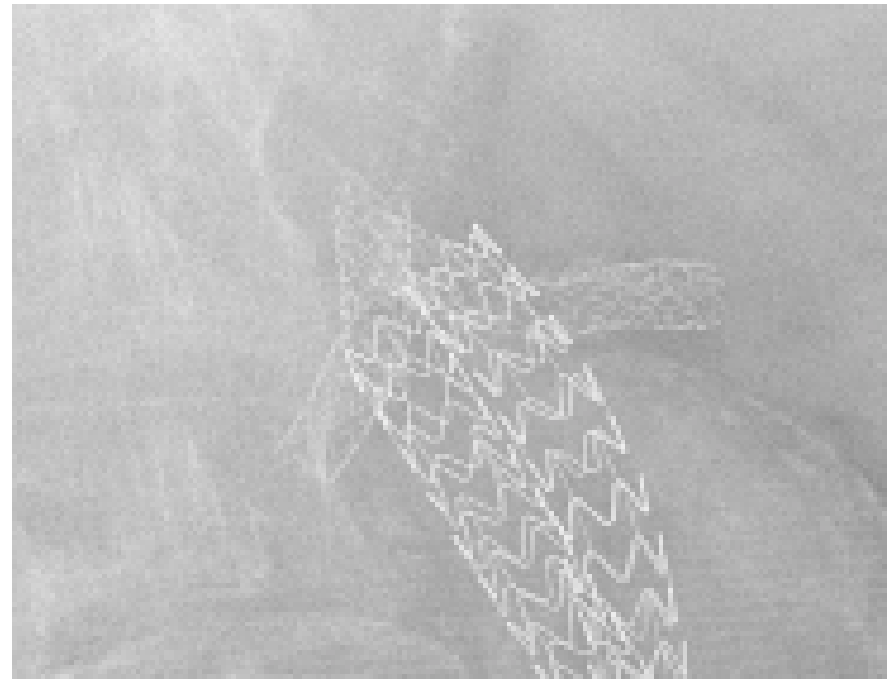
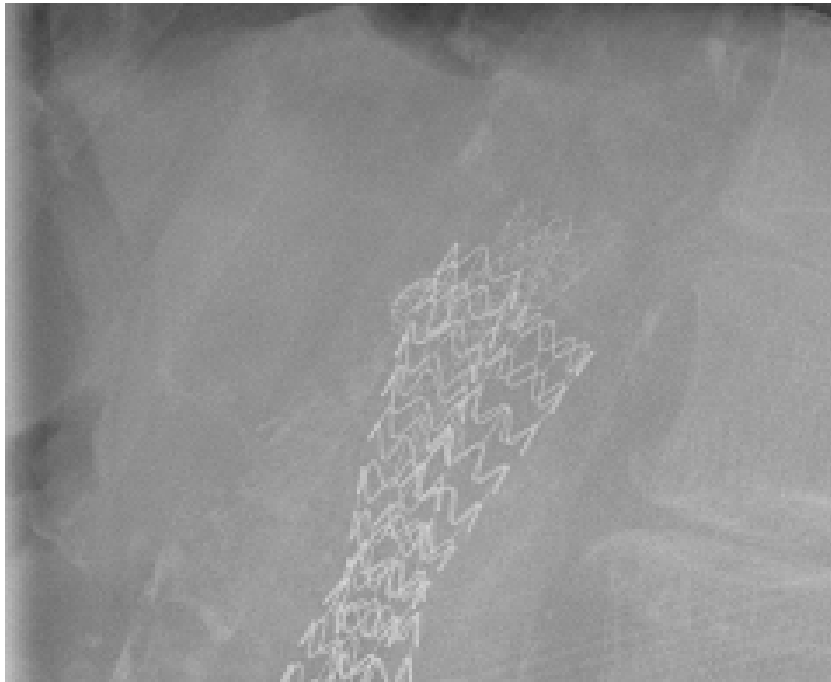


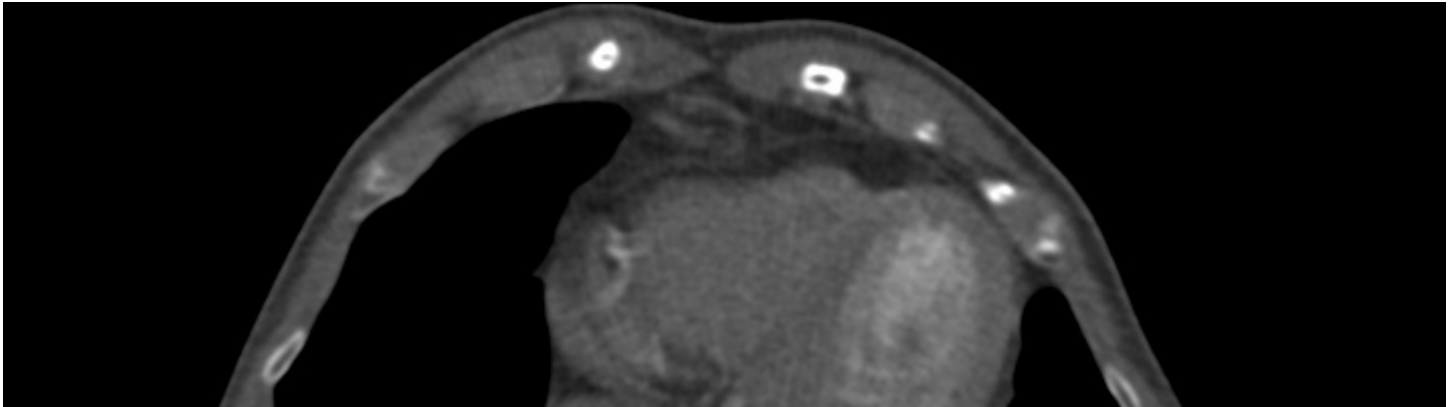
Postoperative
Abdominal XR



Postoperative

Abdominal XR





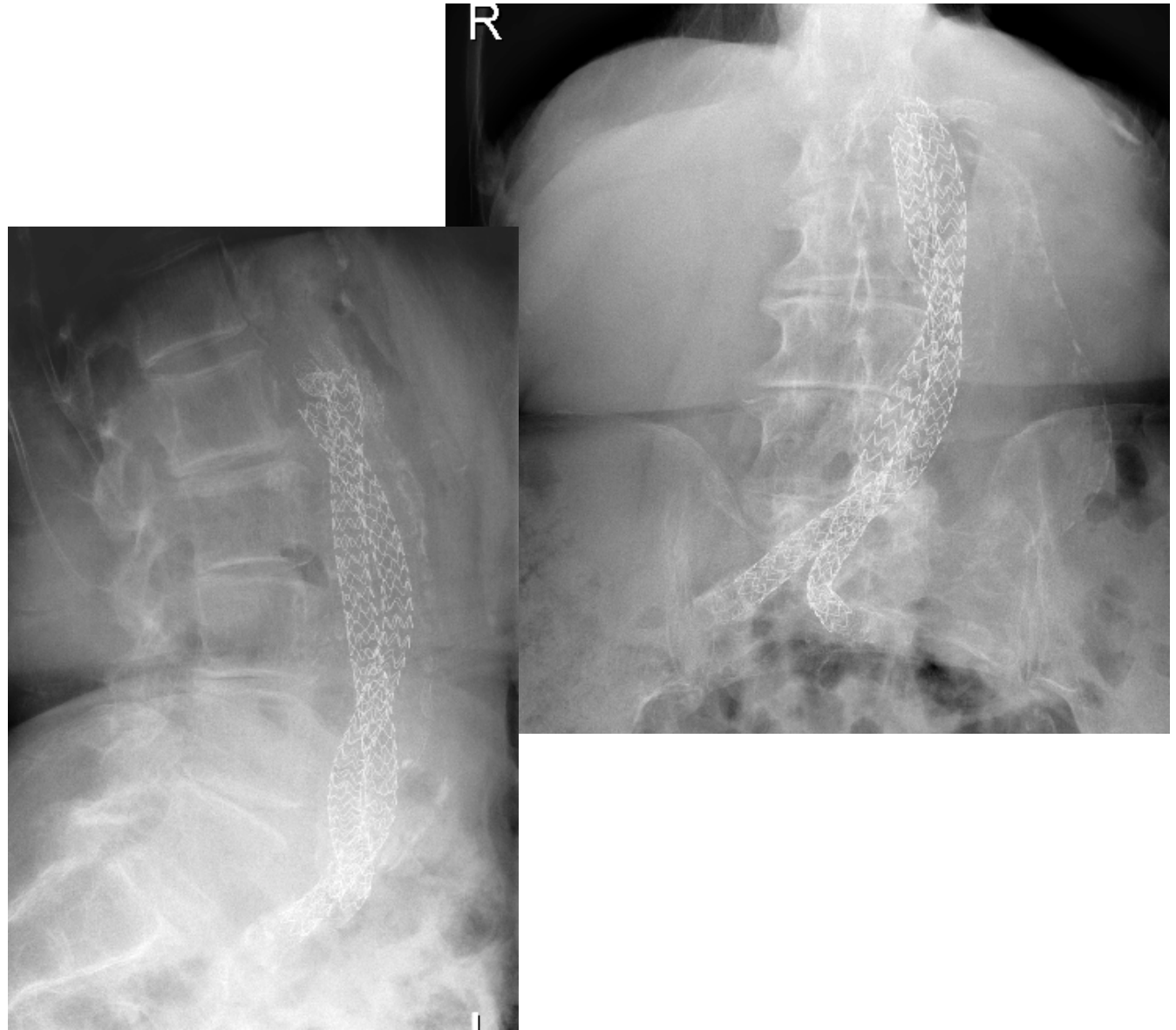
CT-angiogram 6 weeks





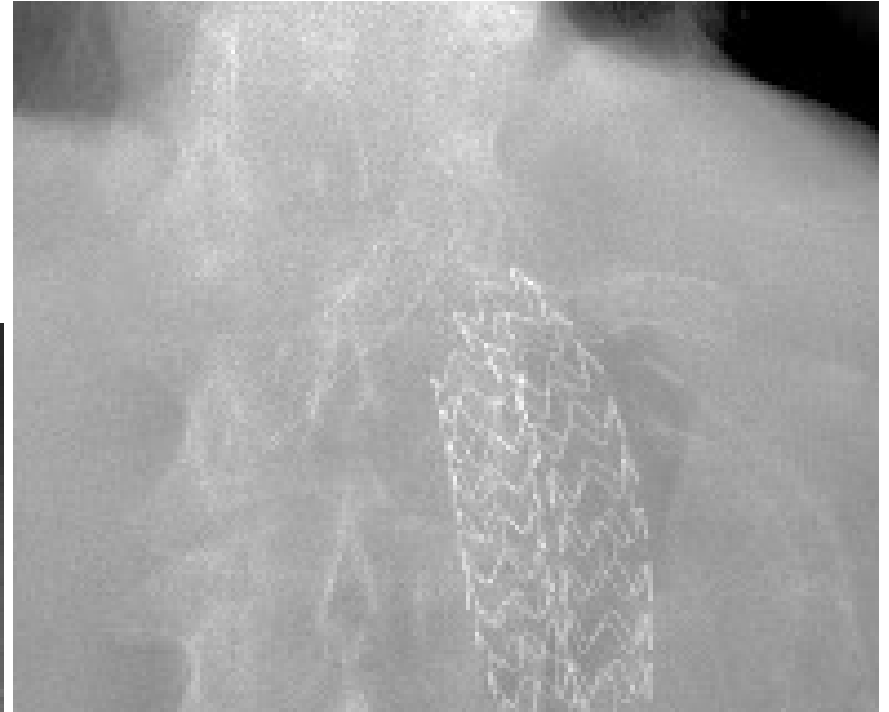
6 months

Abdominal XR



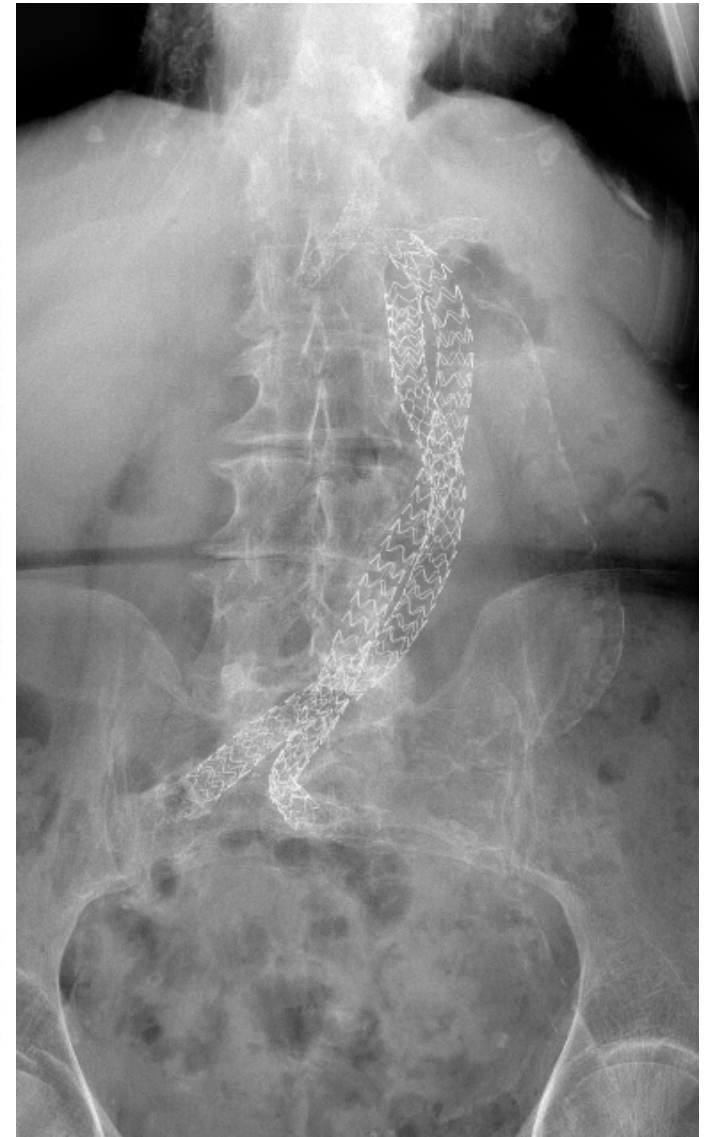
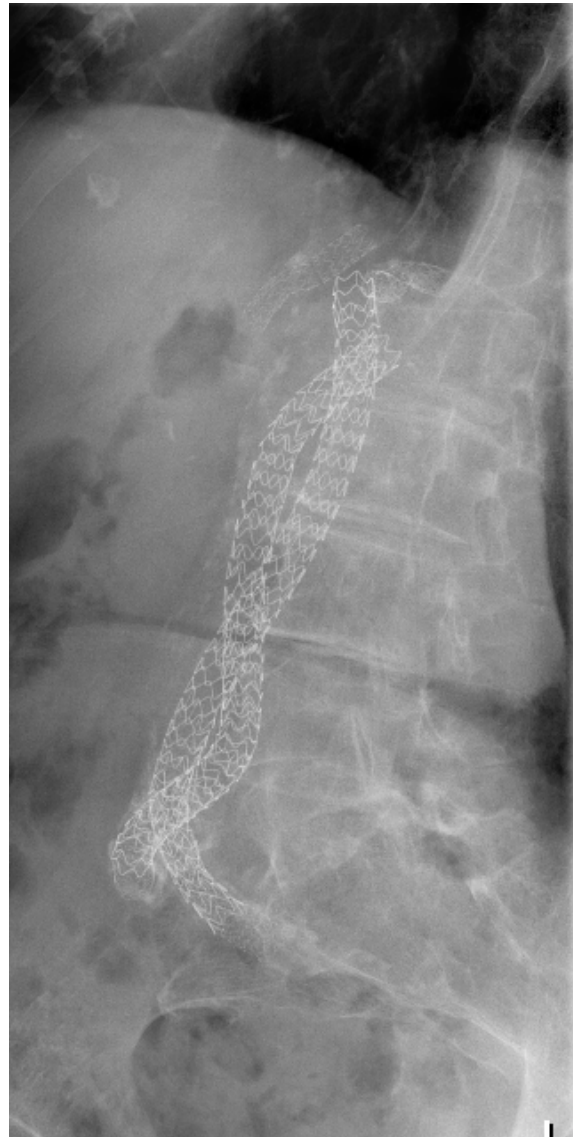
6 months

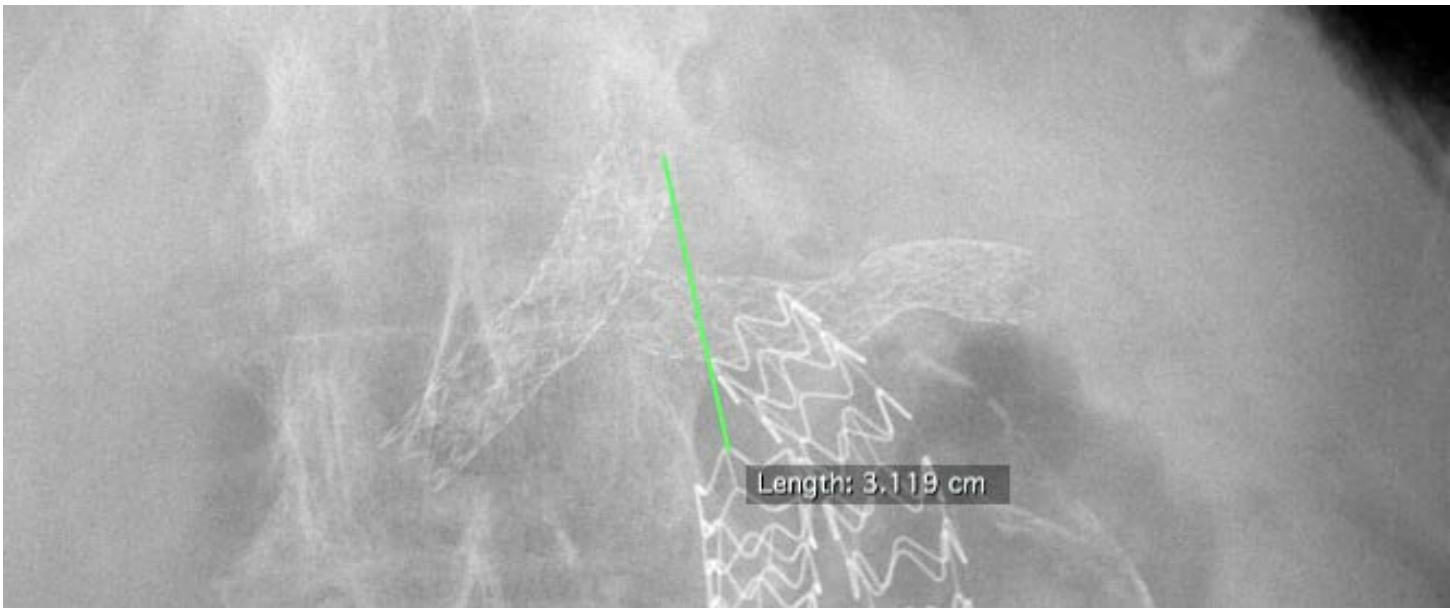
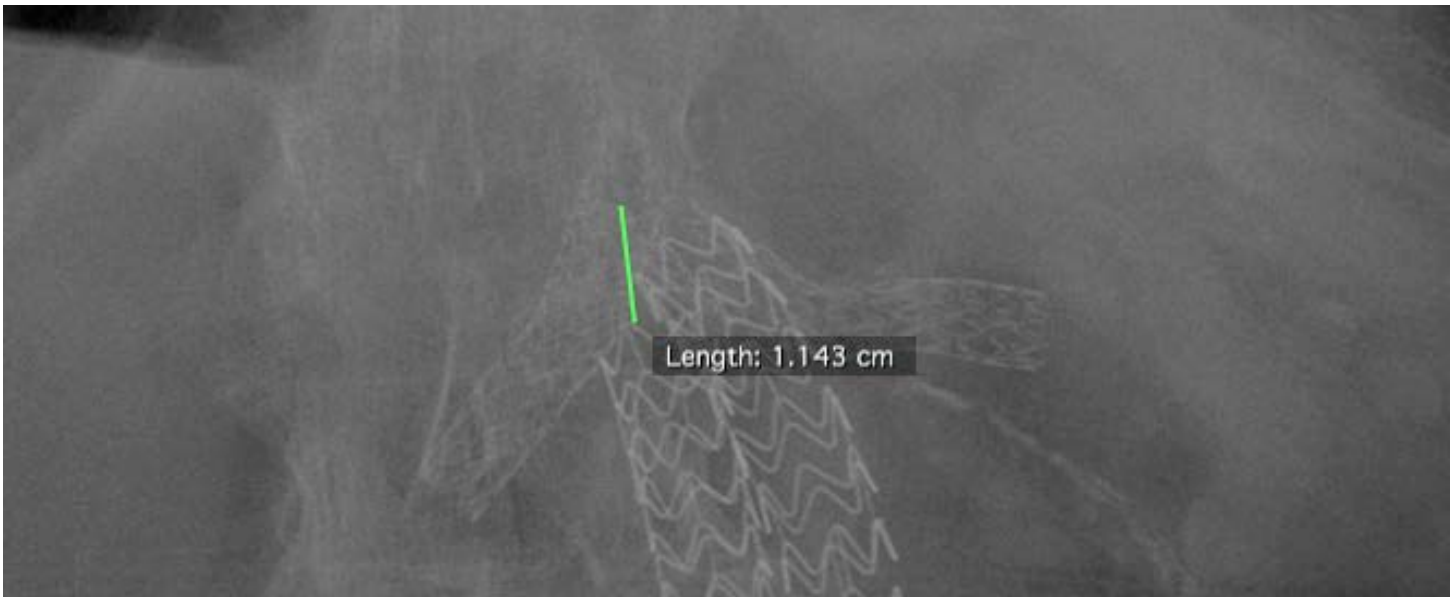
Abdominal XR

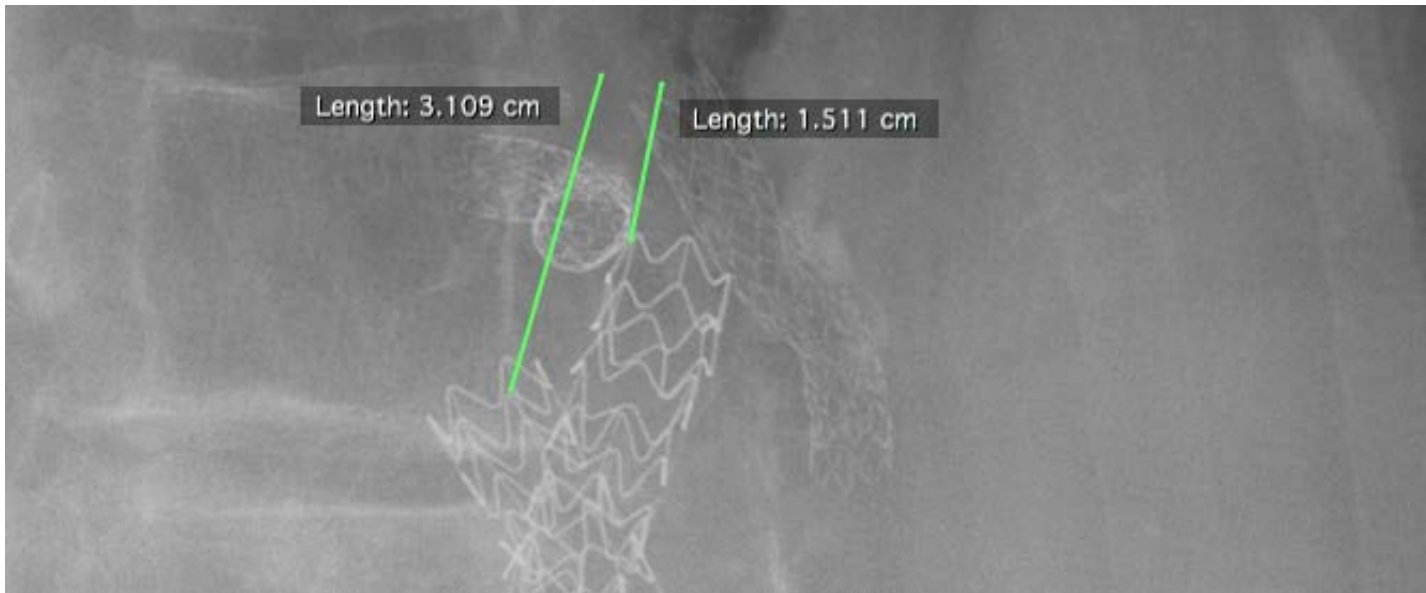
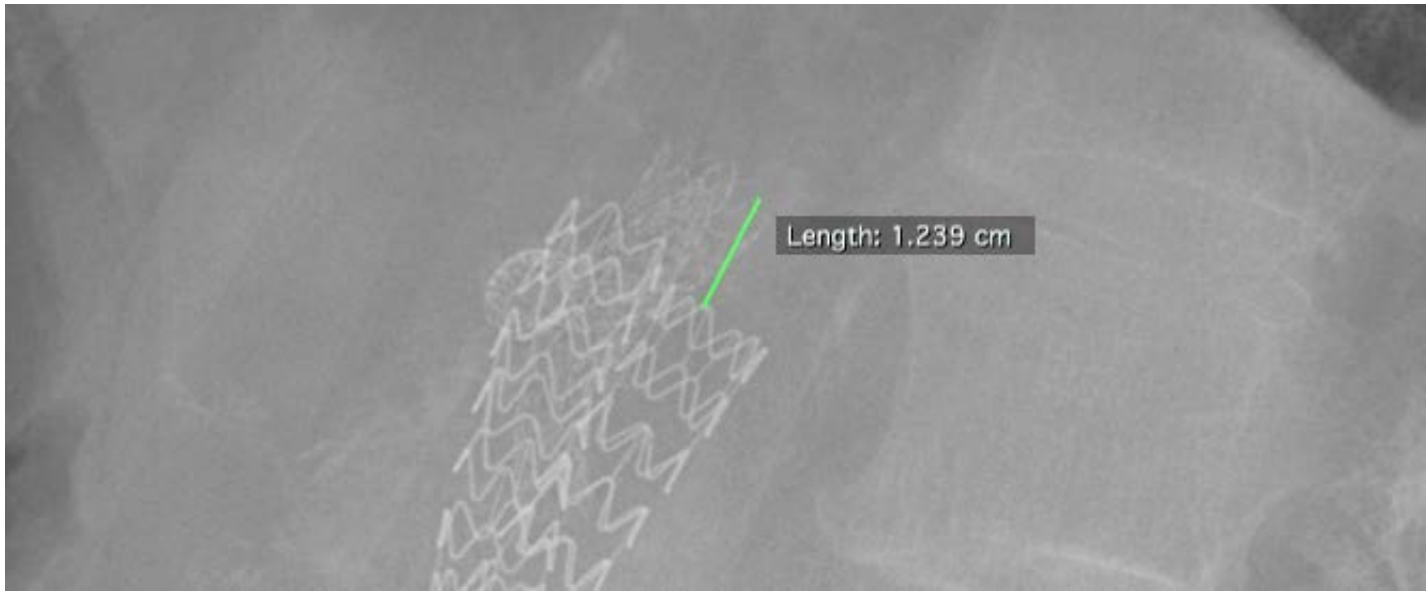


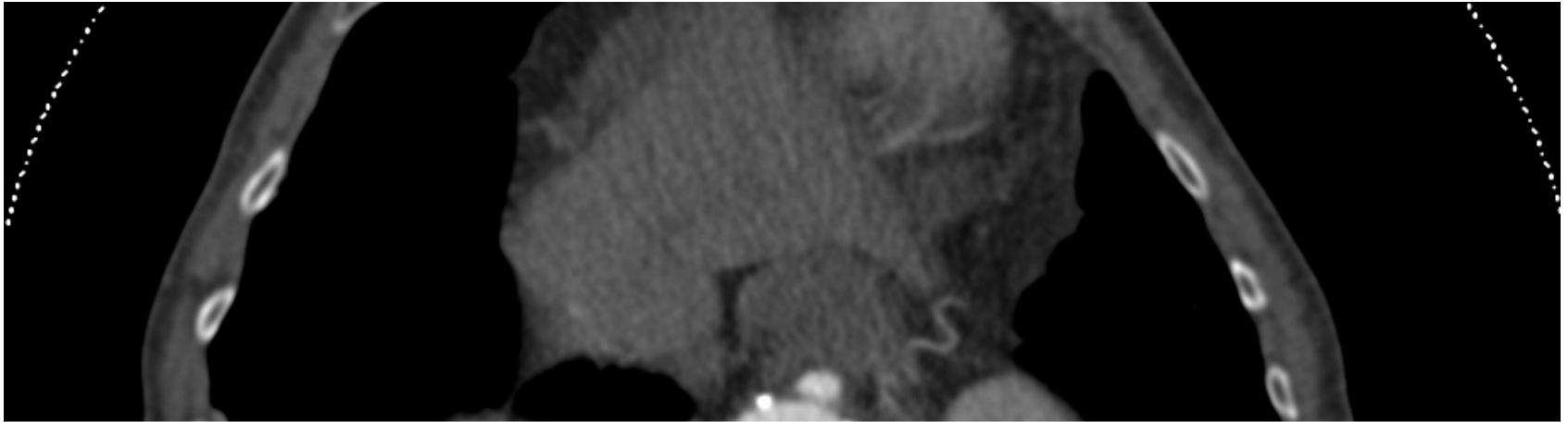
1 year

Abdominal XR

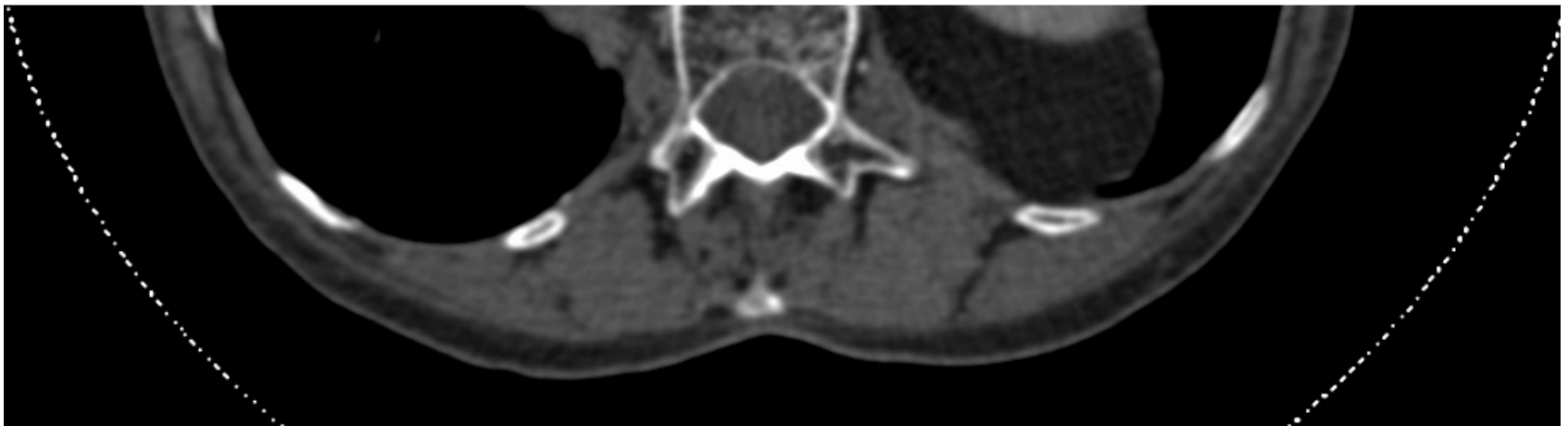








CT-Angiogram October 2015



Conclusion

- Migrating Nellix after ch-EVAS
- Now: unfit 79 ^{vs}
 - ASA ""
 - Gold II
 - GFR 45

HELP !

Symposium on Aneurysm

08.30 Case Discussions

Chairmen: [F. Verzini](#), [J. Savlovskis](#)

Moderators: [P. Szopinski](#), [P. Julia](#)

- Treatment of iliac artery aneurysm in an Asian patient, [T. T. Chong](#)
- Chimney EVAS as a strategy for the urgent treatment of a type 1 endoleak, [P. Fiorucci](#)
- Migration of Nellix stentgrafts after EVAS with chimney repair of abdominal aortic aneurysm, [B. Mees](#)
- Late type 1a endoleak in EVAR treated by chimneyed endovascular re-lining & sealing (Ch EVARS), [I. Roy](#)
- Suprarenal « EVAS in EVAS » system and chimney technique: challenging treatment of pararenal aortic aneurysm, [N. Stella](#)
- Treatment of type 1a endoleak following distal migration of both limbs of an endovascular aneurysm sealing device, [C. Fenner](#)
- Practice makes perfect: double EVAS procedure to save one EVAR, [P. Szopinski](#)



Treatment Options

- Nellix in Nellix
- Chimney in Chimney, plus Chimney SMA
- Atrium stents relining Nellix
- Open conversion
- Wait and see

Treatment Options

- Nellix in Nellix
- Chimney in Chimney, plus Chimney SMA

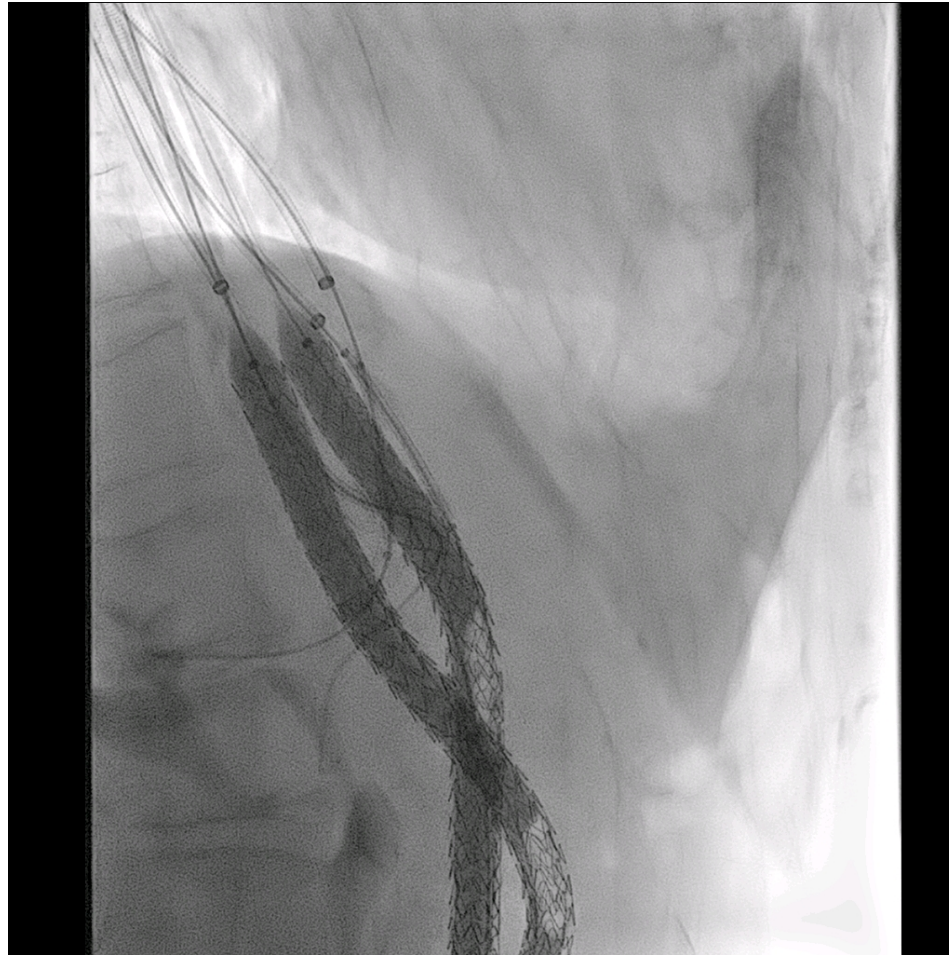
Nellix in Nellix, Chimney in Chimney



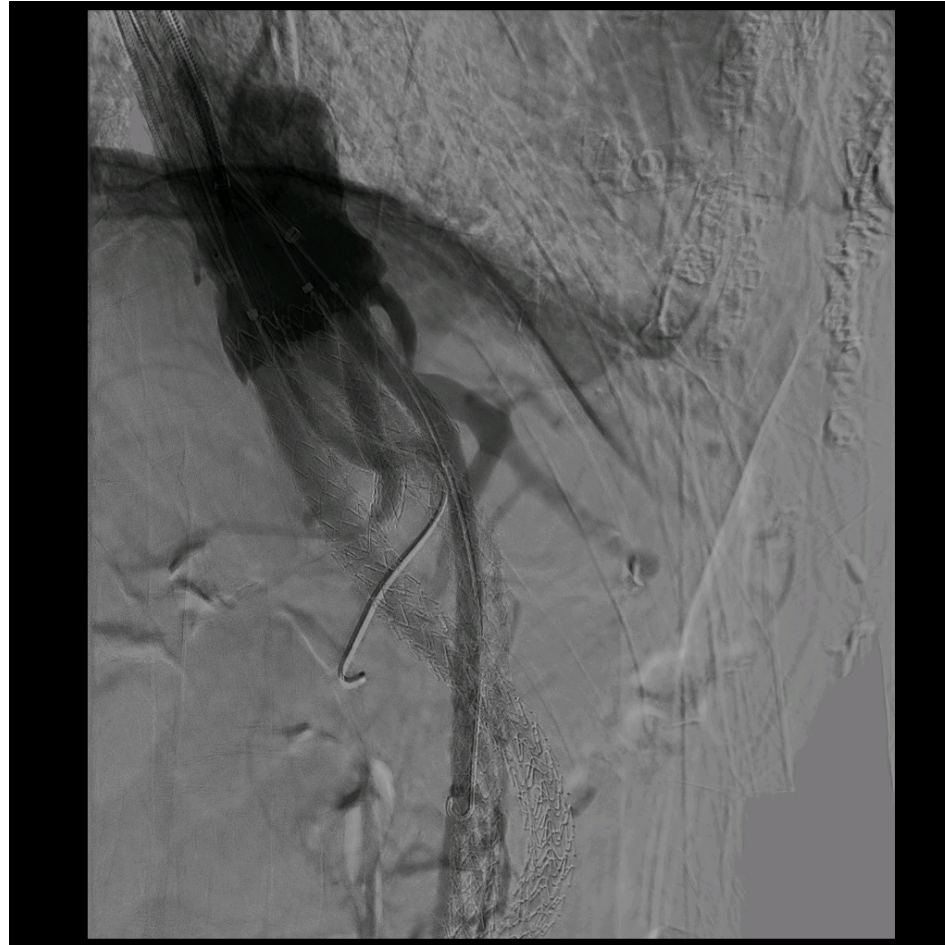
Nellix in Nellix, Chimney in Chimney



Nellix in Nellix, Chimney in Chimney

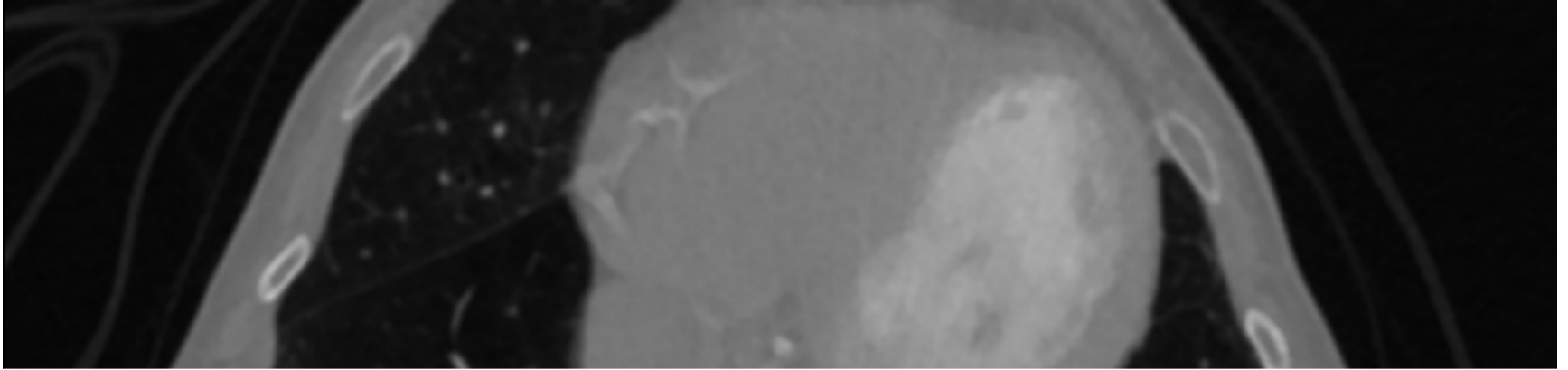


Nellix in Nellix, Chimney in Chimney

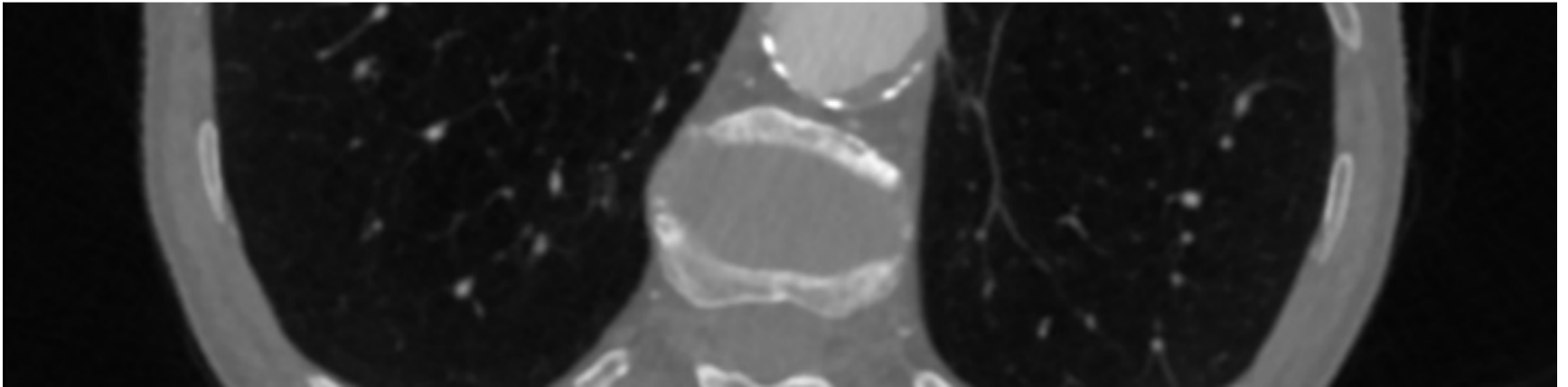


Left Axillary Hematoma





Postoperative CT-angiogram



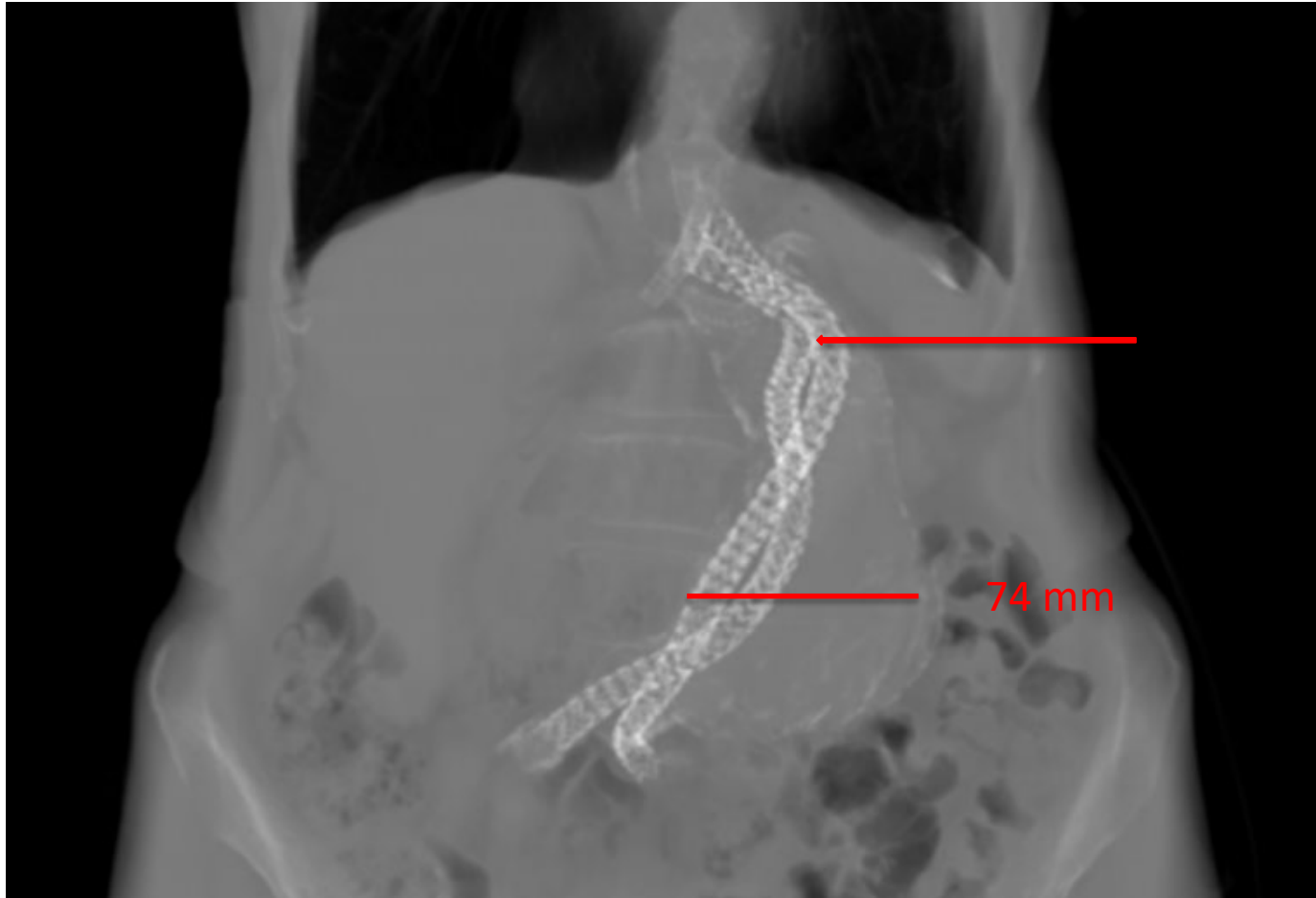
Postoperative CT-angiogram



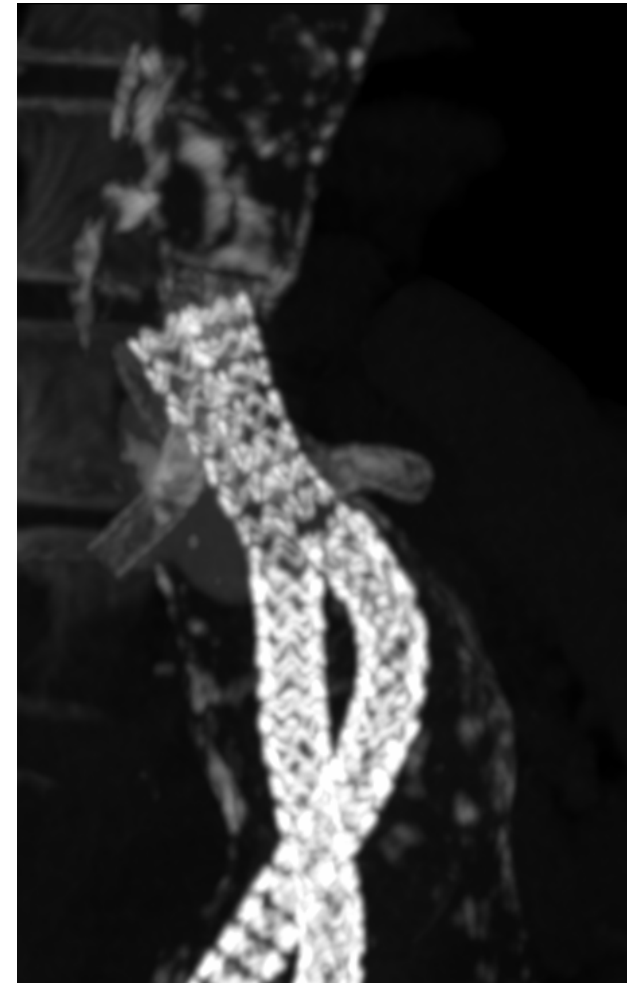
Abdominal XR 6 months



CT 6 months



CT 6 months



Current Situation

- 15 months post-NINA with recurrent migration
- 80 years
- Asymptomatic
- At home
- AAA sac stable 74 mm
- Renal function (GFR 44) and COPD (Gold III) stable
- New CT Angiography March 2018

Learning & Discussion Points

- AAAs with challenging neck remain a challenge
- If you go wrong at the start, you are always steps behind
- New devices also have (new) problems. Do we join the hype or wait for longer follow-up?
- Stick to IFU. Beware, these may change with new devices
- Stick to what you can and know