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Retrograde embolization of a symptomatic hypogastric artery aneurysm

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Disclosure

Speaker name:

........Andrew W Unzeitig..................................

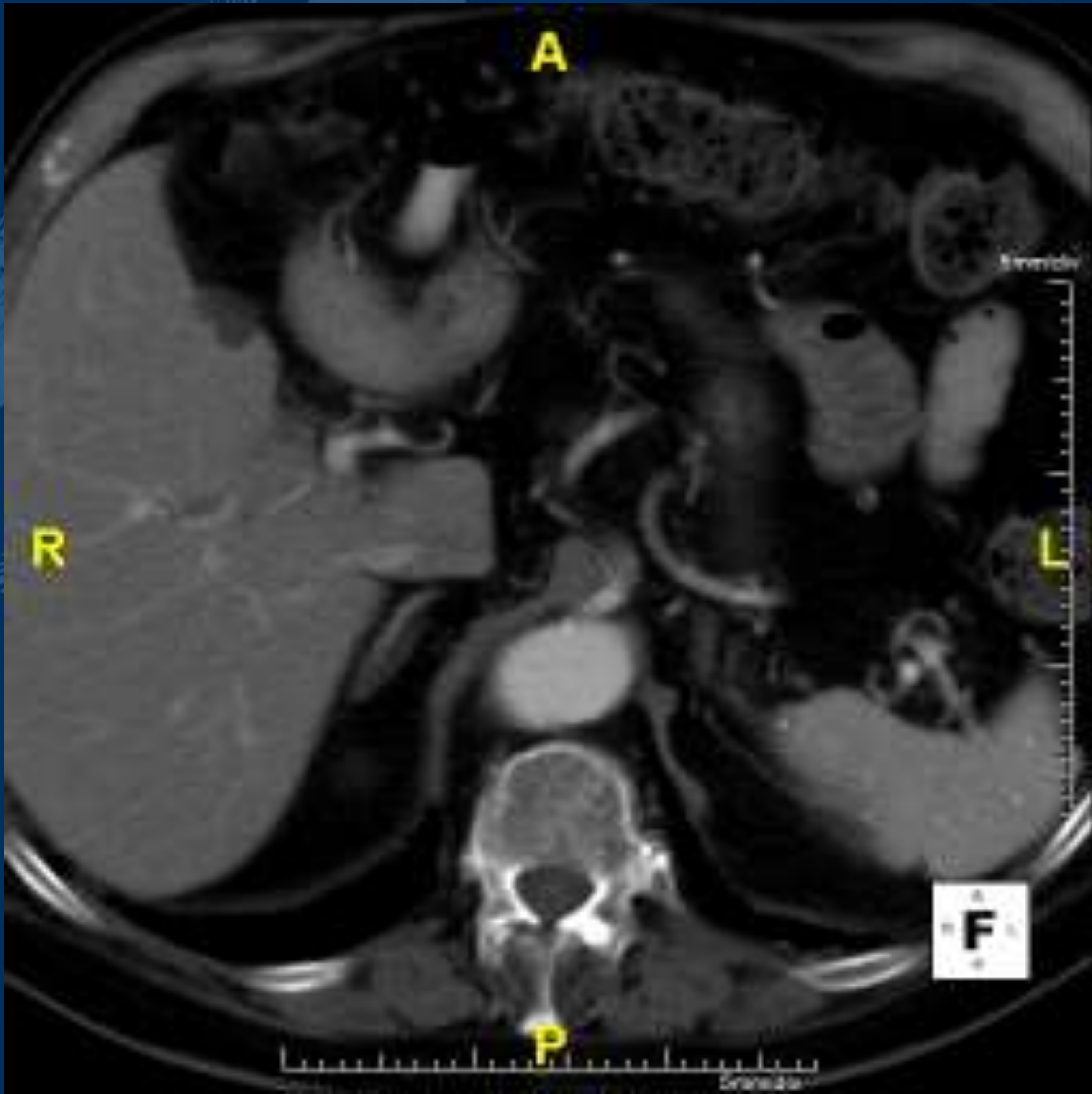
I have the following potential conflicts of interest to report:

- ☐ 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

Case

- 88 yo male with history of open AAA repair 20 years ago presents with acute onset lower back and left groin pain.
- Very functional otherwise, cares for himself, mild aortic stenosis, HTN
- Exam: AFVSS, tender in LLQ, palpable distal pulses
- Labs: unremarkable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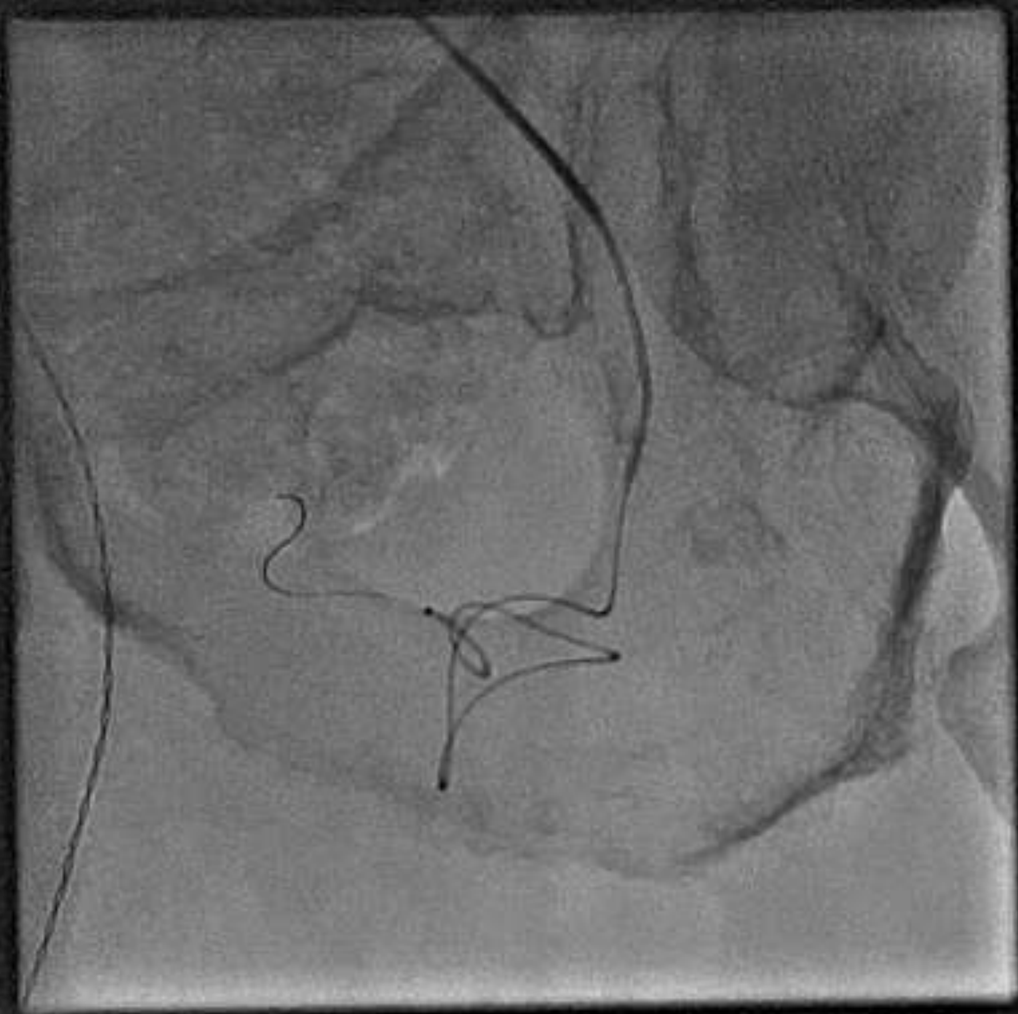
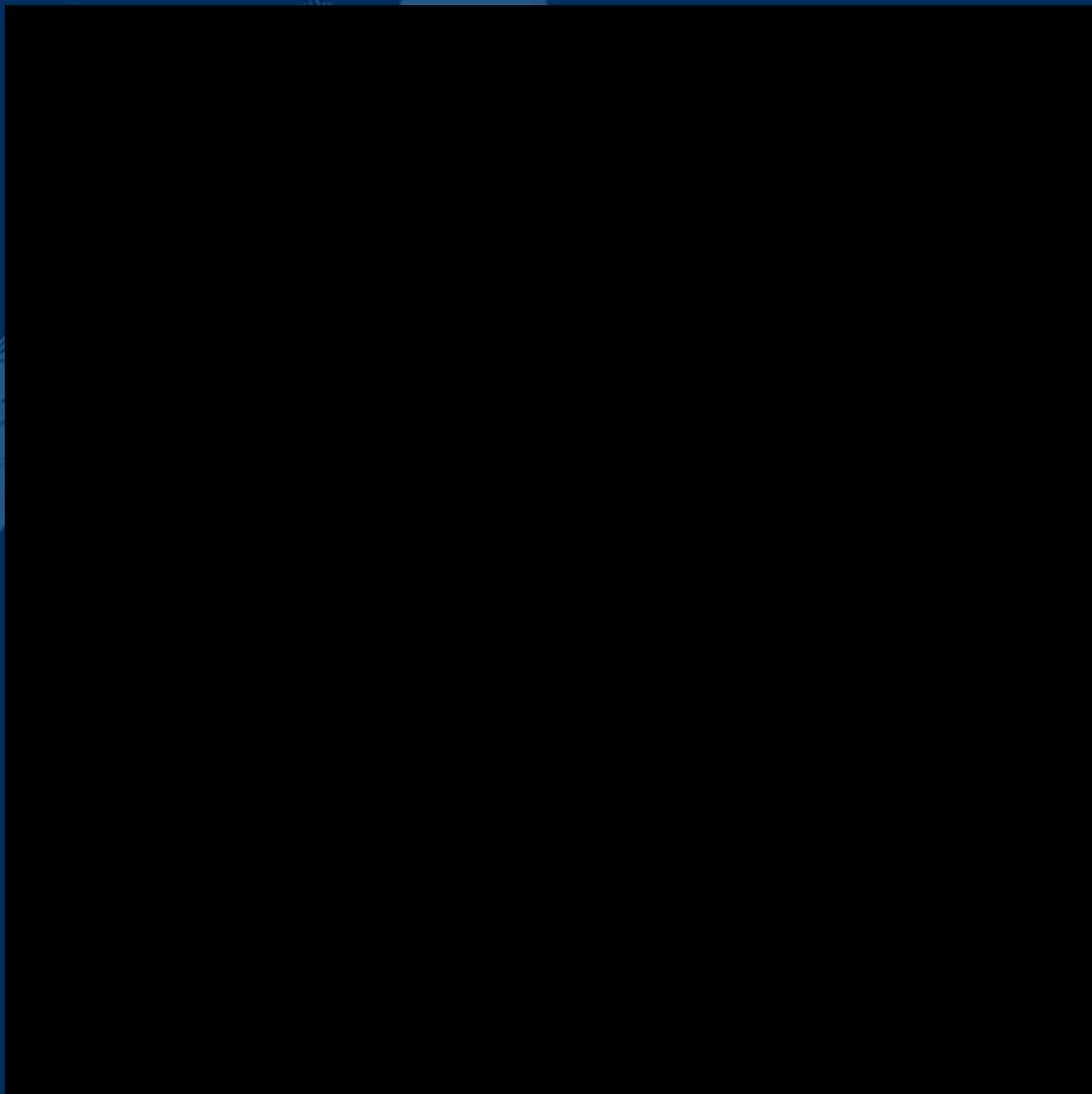
- CTA with >8cm left internal iliac aneurysm, stranding, possible contained rupture
- Occluded hypogastric origin, from previous open AAA repair
- Left side hyroureter

Plan

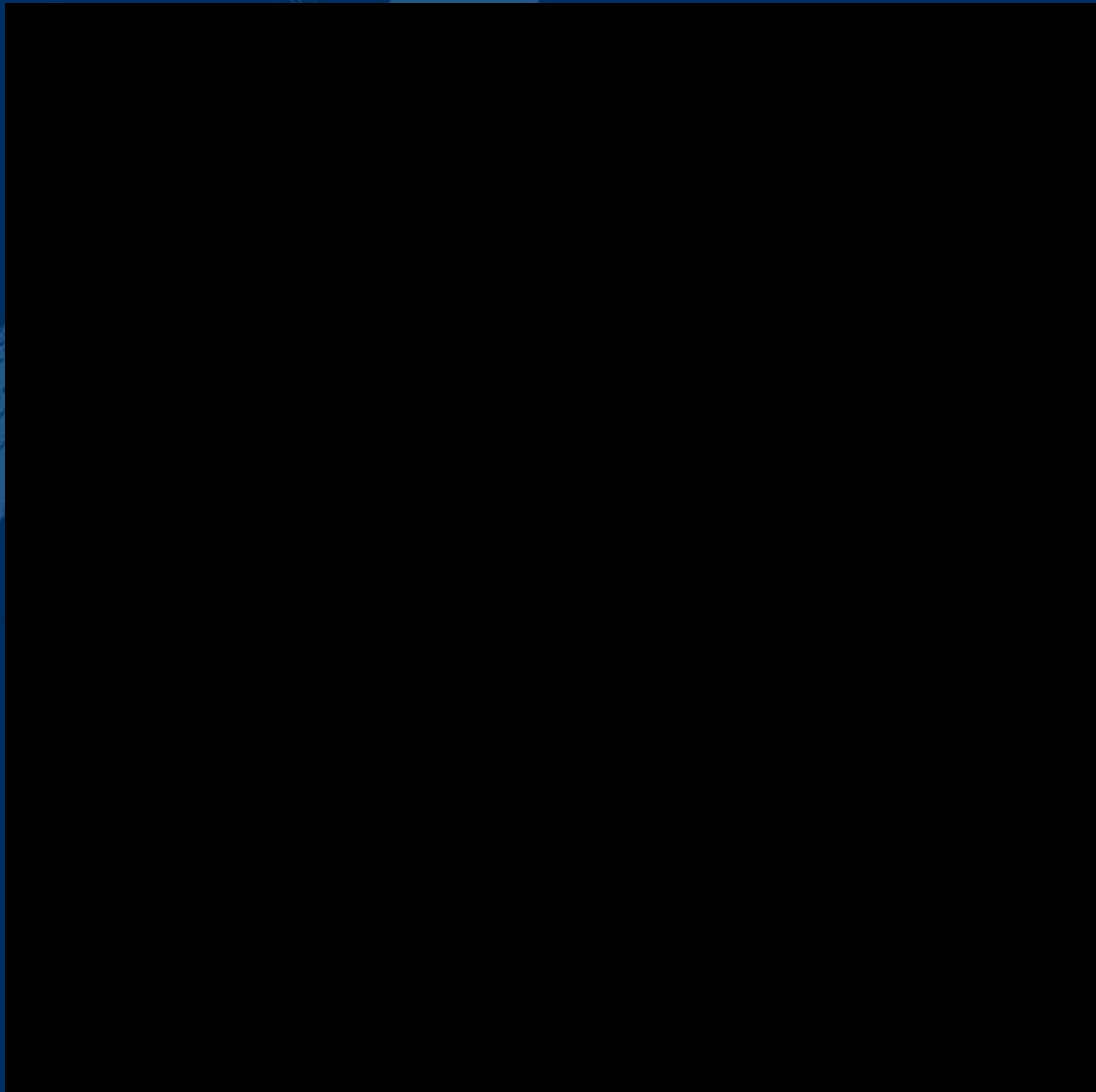
- OR for aortogram with attempted embolization, but most likely open repair of symptomatic/ruptured large internal iliac artery aneurysm

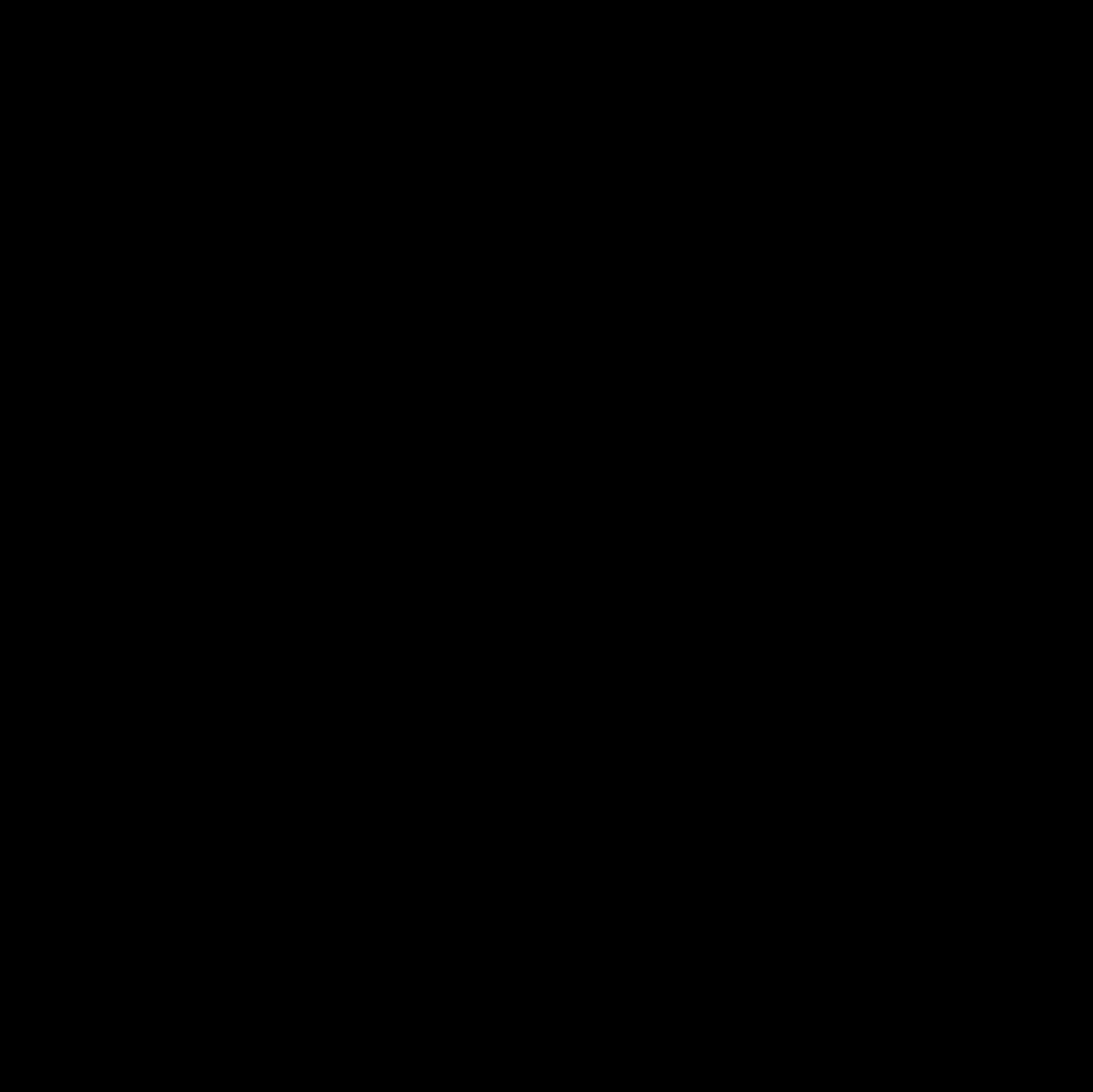
- 4Fr sheath Antegrade left CFA
- 4fr angled Glidecatheter to select medial circumflex femoral artery
- 2.7 fr ProGreat through the medial-circumflex to obturator artery collateral pathway

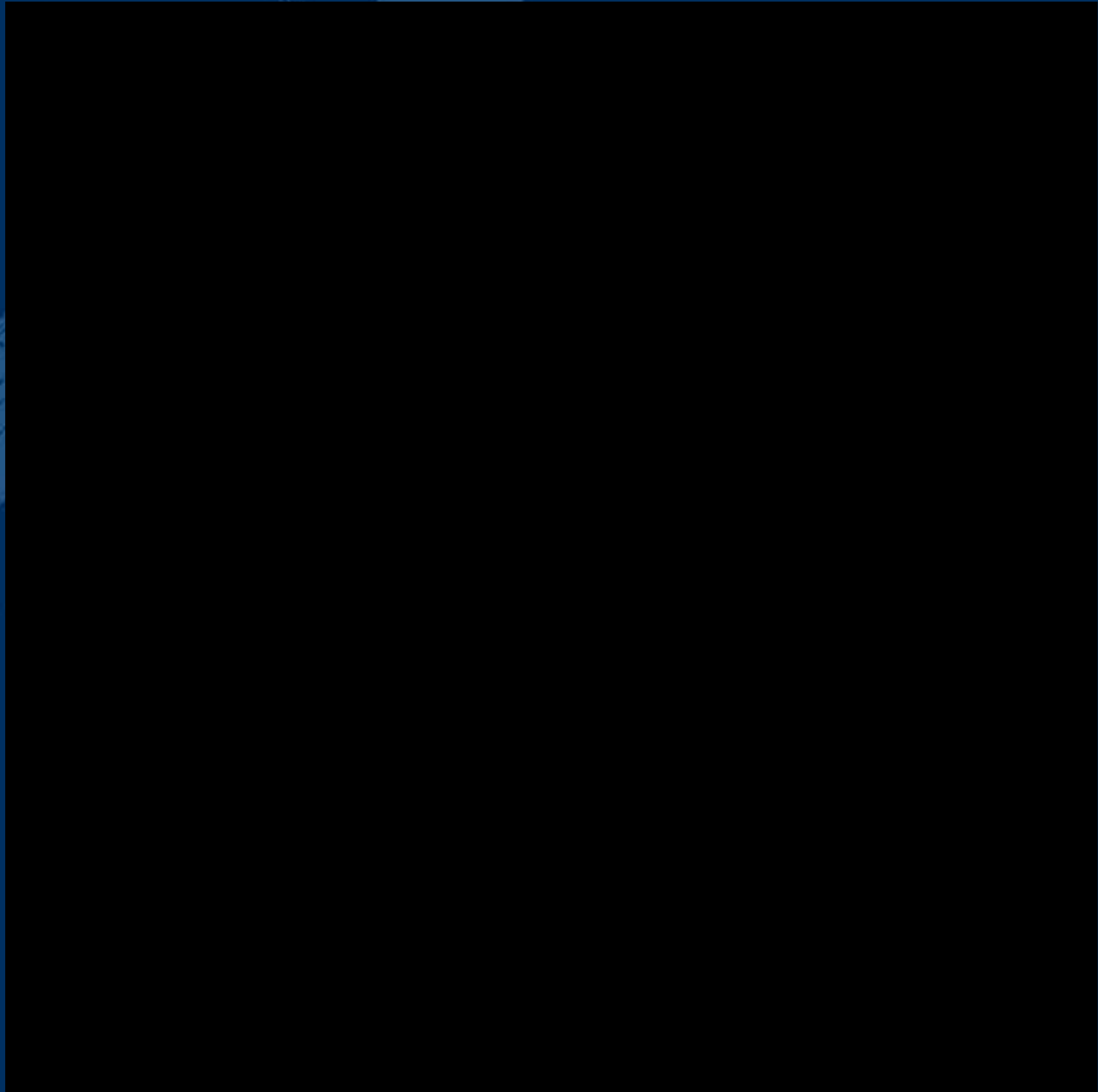




- Detachable coils deployed to fill sac and inflow, 2 large framing coils, 6 hydrocoils (CX and Azur coils; Terumo)
- Small branch off pudendal artery, unable to select





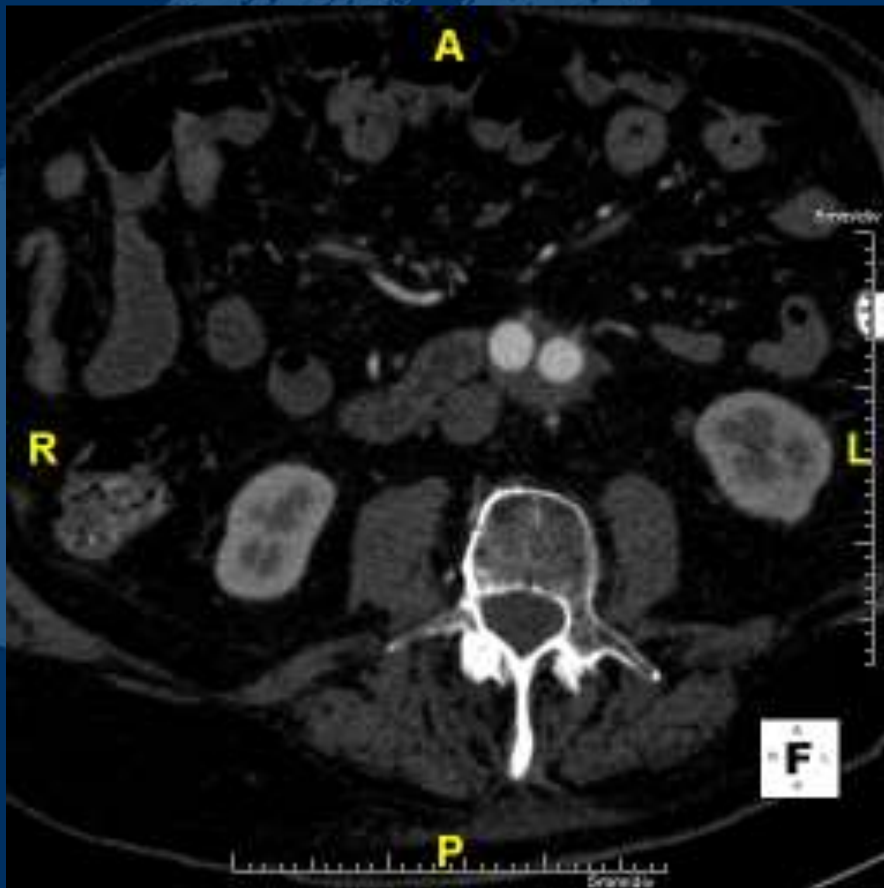


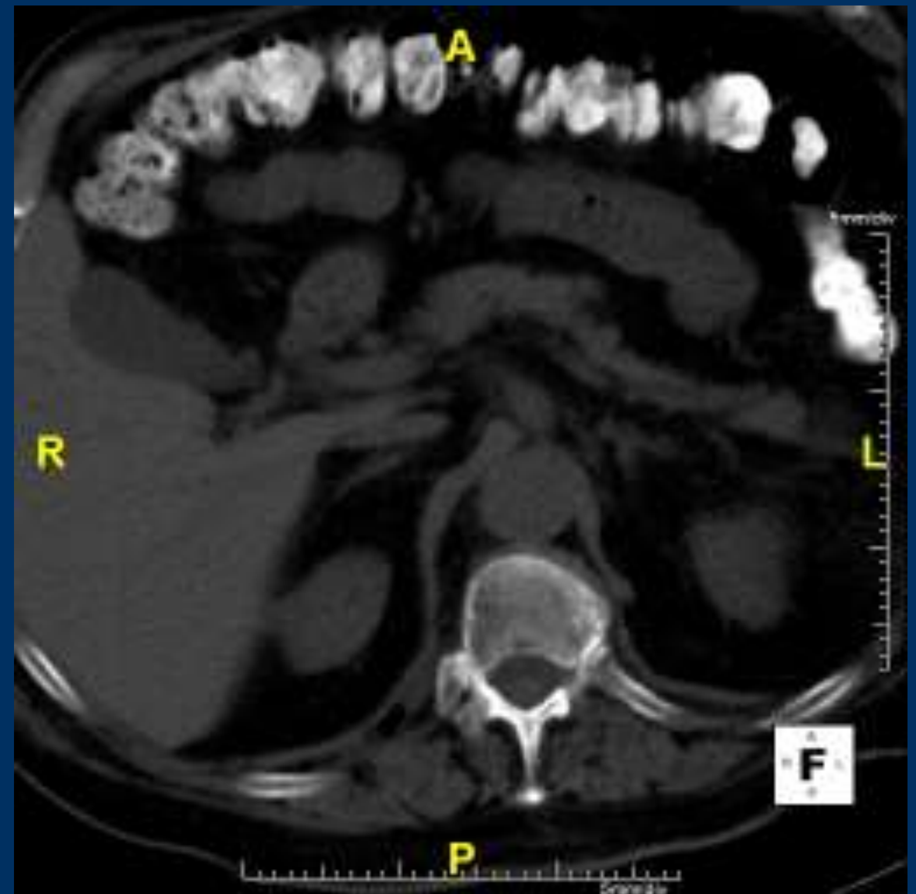
- 2k units of heparin given at start, reversed with 10 mg protamine
- Pressure held at arteriotomy sites
- To ward

POD 1

- Pain resolved
- Stable H/H

CTA POD 1



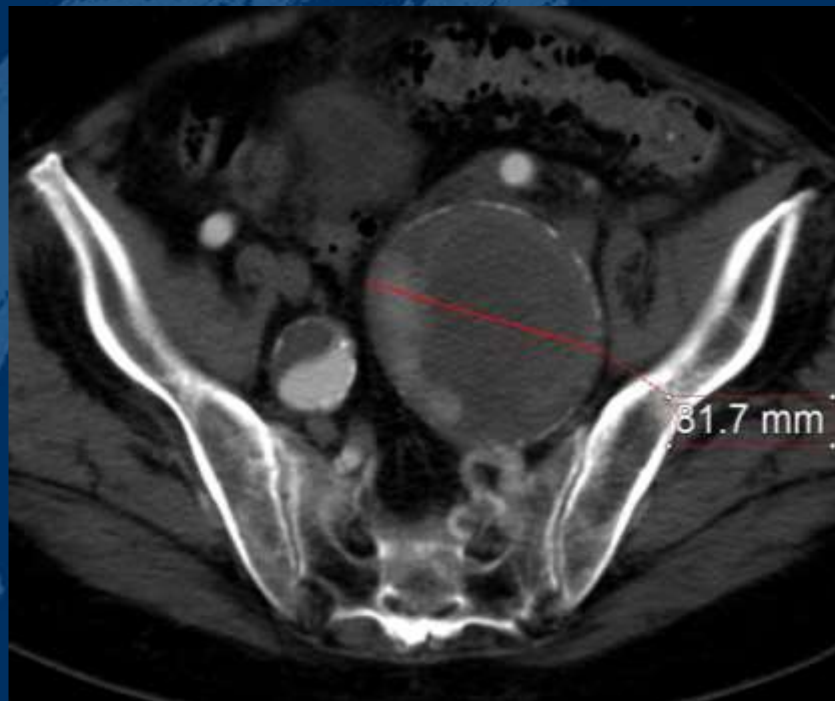


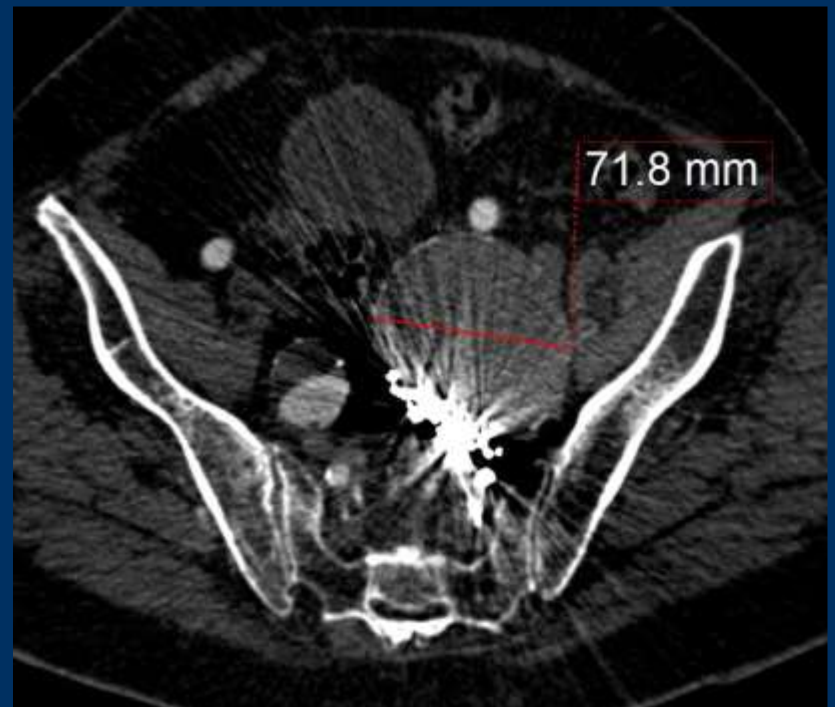
- Discharge POD 2
- One month CTA with slight decrease in sac size, persistent R CIA and IIA aneurysms

- Doing well at 6 mo followup, now 2 years post doing well, followed with duplex

Pre-op

6mo f/u





Comments

- Hypogastric artery aneurysms are rare and often present with rupture.
  - Dix et al. Eur J Vasc Endovasc Surg 2005 30, 119-129
    - Review of the isolated internal iliac aneurysm, 82 papers
    - 40% present with rupture, 30% mortality
- Previous open surgical ligation or coverage of the origin after EVAR may preclude more common endovascular treatment methods
  - With antegrade occlusion, collateral pathways will dilate
- Pre-op imaging with CT can guide best treatment options, increased suspicion in setting of previous AAA repair
- Embolization via femoral artery-hypogastric collaterals can be a helpful adjunct and should not be overlooked, even in emergency cases.

Thank you

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