



Interactive (challenging / frustrating) Case

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Disclosures

- In the last two years:
 - Speaker fees and travel reimbursement from Bentley InnoMed GmbH
- Previously:
 - Cook Medical:
 - Proctoring, case review, speaker, and travel fees
 - Boston Scientific:
 - Speaker, travel fees
 - Gore:
 - Speaker fees
- No financial interest in medical companies nor Gigli saws

Background

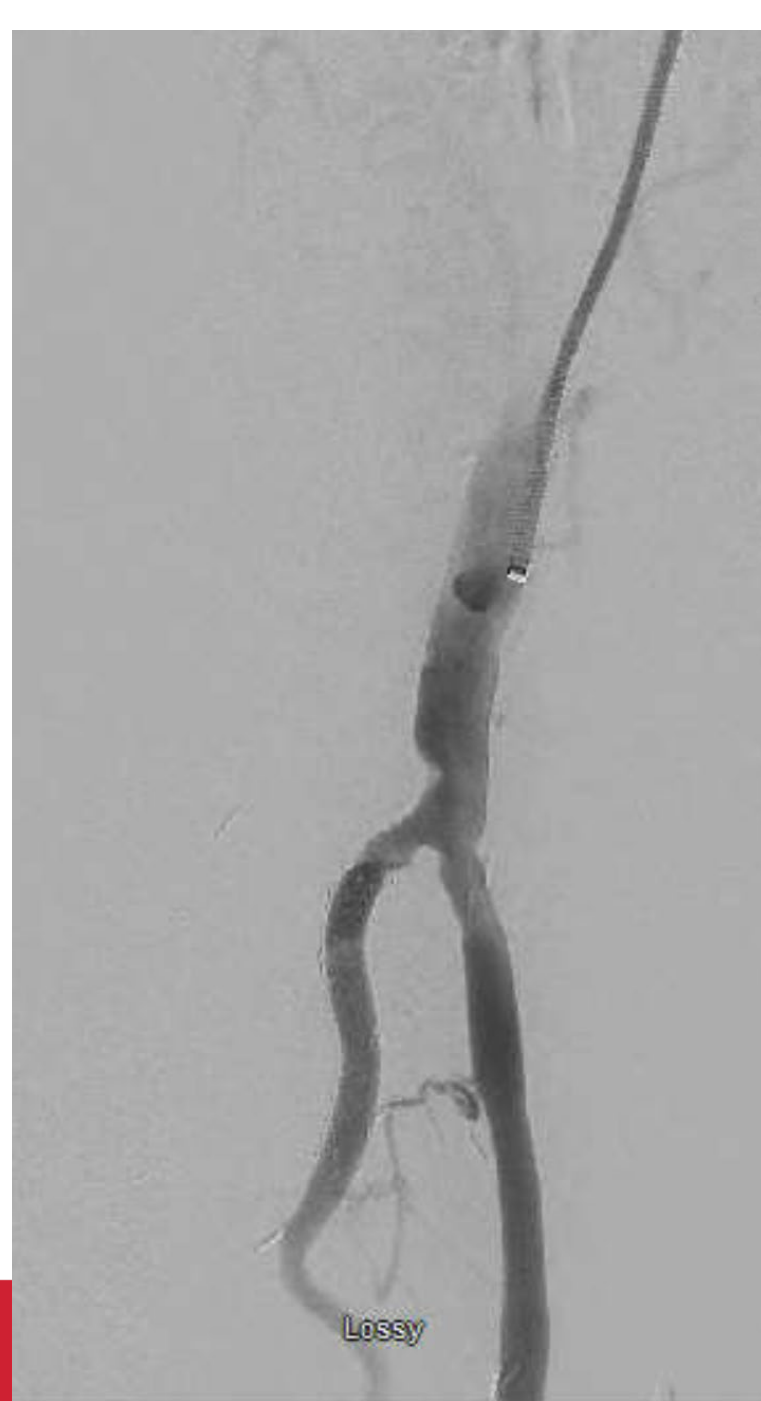
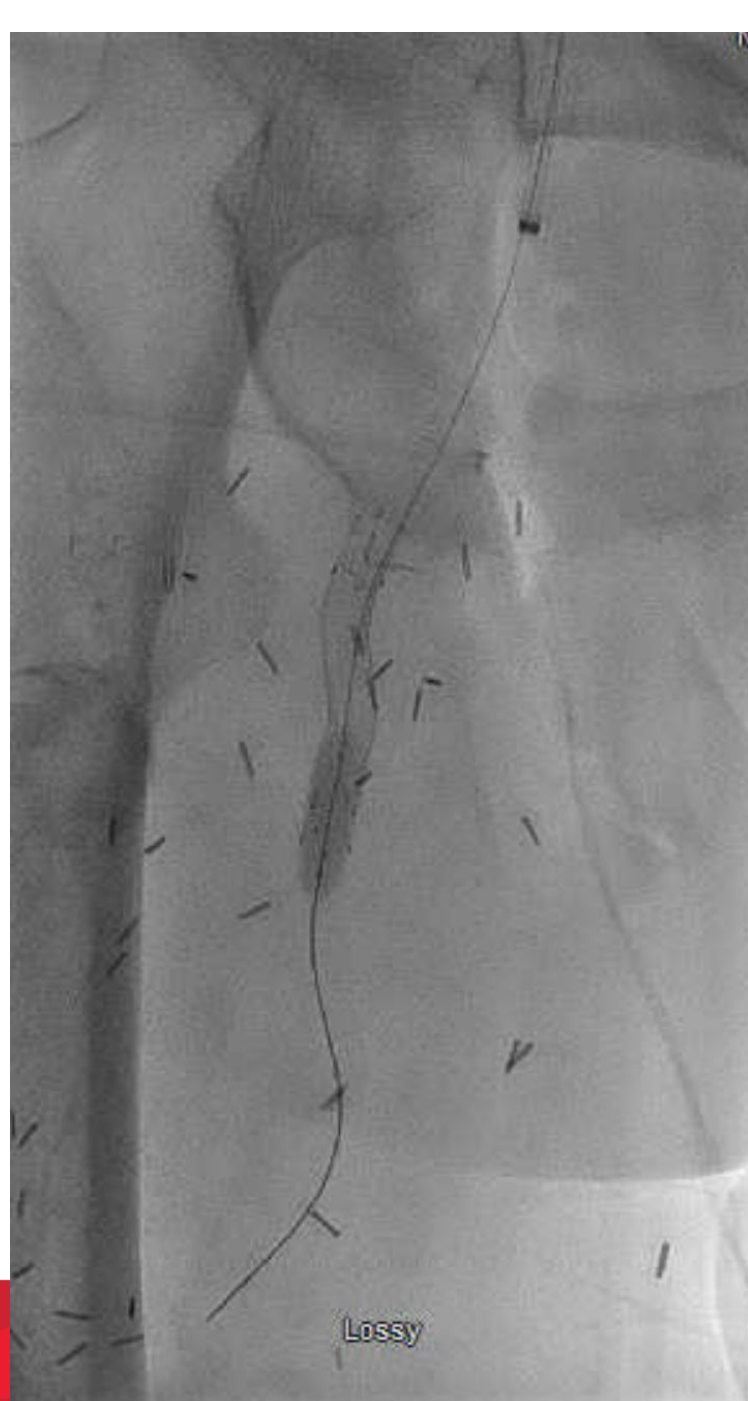
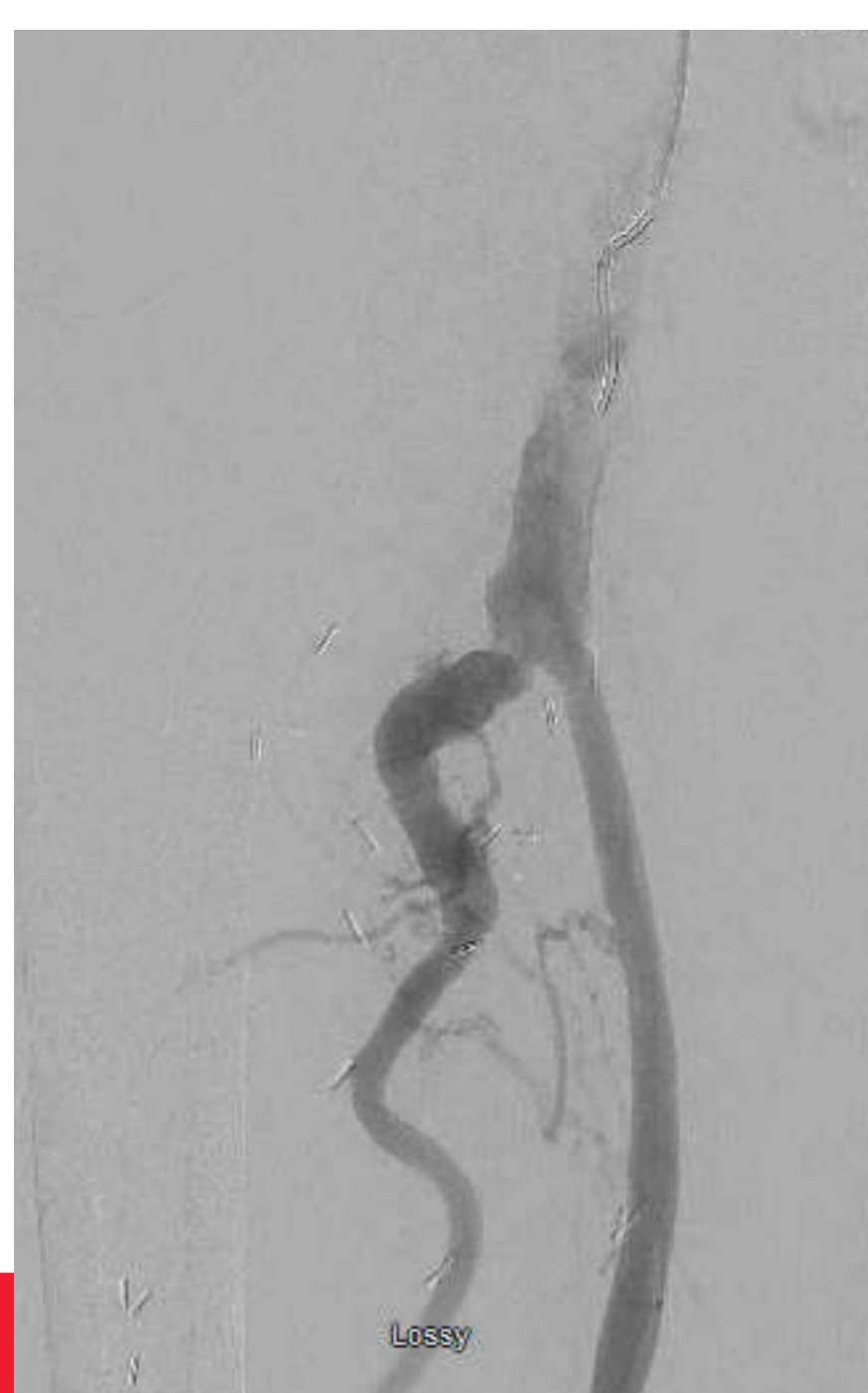
- 58 year old male
- Recent admit for chest pain NYD, incidental finding of 3.4cm “right femoral artery aneurysm” on a CT PE
- PHx:
 - HTN
 - Chest pain workup negative with only mild CAD found on cath
 - Right thigh AVM operated on a few times back in early nineties when he was 25 years old
 - Functionally completely well and normal, works as a pharmacist

“Details”

- Glue injection in January of 1991
- Developed a pulmonary embolus in summer of the same year
- Had a filter placed
- Underwent some kind of open surgery for the AVM which he understands was to block the blood flow into the mass, but the mass was not resected mostly secondary to encountering substantial bleeding
- Surgical notes not available
- Has a football shaped deep, soft, rubbery mass on his anterior thigh extending up to the femoral triangle with an incision at the superior most aspect, healed, soft.

What would you do?

- There also were some pulmonary arterial aneurysm / vascular malformations at the lung bases bilateral – “suspicious for HHT”
- Scan of the head also done, normal, no AVMs
- Found a scan from three years prior, and the profunda aneurysm shows growth from 2.8cm to 3.4cm in that period of time
- Started to complain of sporadic thigh and leg numbness, inconsistent distribution, no pain / involvement of foot, no weakness to knee extension
- What would you do?
- Observe?
- Open?
- Full endo?
- Hybrid?



Difficulties

- Truth be told it was not easy
- So little of aneurysm visualized wanted to get the viabahn as close to the CFA as possible, so had to use two overlapping stents to get just the right length
- Controlled CFA, SFA, and used balloon for profunda, then resected aneurysm off CFA/SFA
- Bleeding back around stent externally
- Sutured from inside stent, out through aneurysm wall, and then to piece of interposition dacron, essentially plicating the aneurysm shut around the distal anastomosis which controlled bleeding nicely and then clamped dacron
- Then distance needed to suture dacron onto the CFA defect was very short

Post-op

- Postoperatively at three months he is still tired, complaining again of tightness / numbness in thigh, dyspnea, slow to recover.
- No weakness to knee extension, can step up a single stair without difficulty, but would be tired at the top.
- ECG and an echo show nothing
- Venous duplex of leg shows no DVT
- Arterial duplex of the repair shows ? Leak at distal end of the sac around the stent
- CTA done

Now what?

- “Sac” is stable. Still 3.4cm, and same as when compared to immediate postop scan
- What to do now?
- Any further investigations?
- Observe and wait for sac growth?
- Operate? – open / endo / combined?

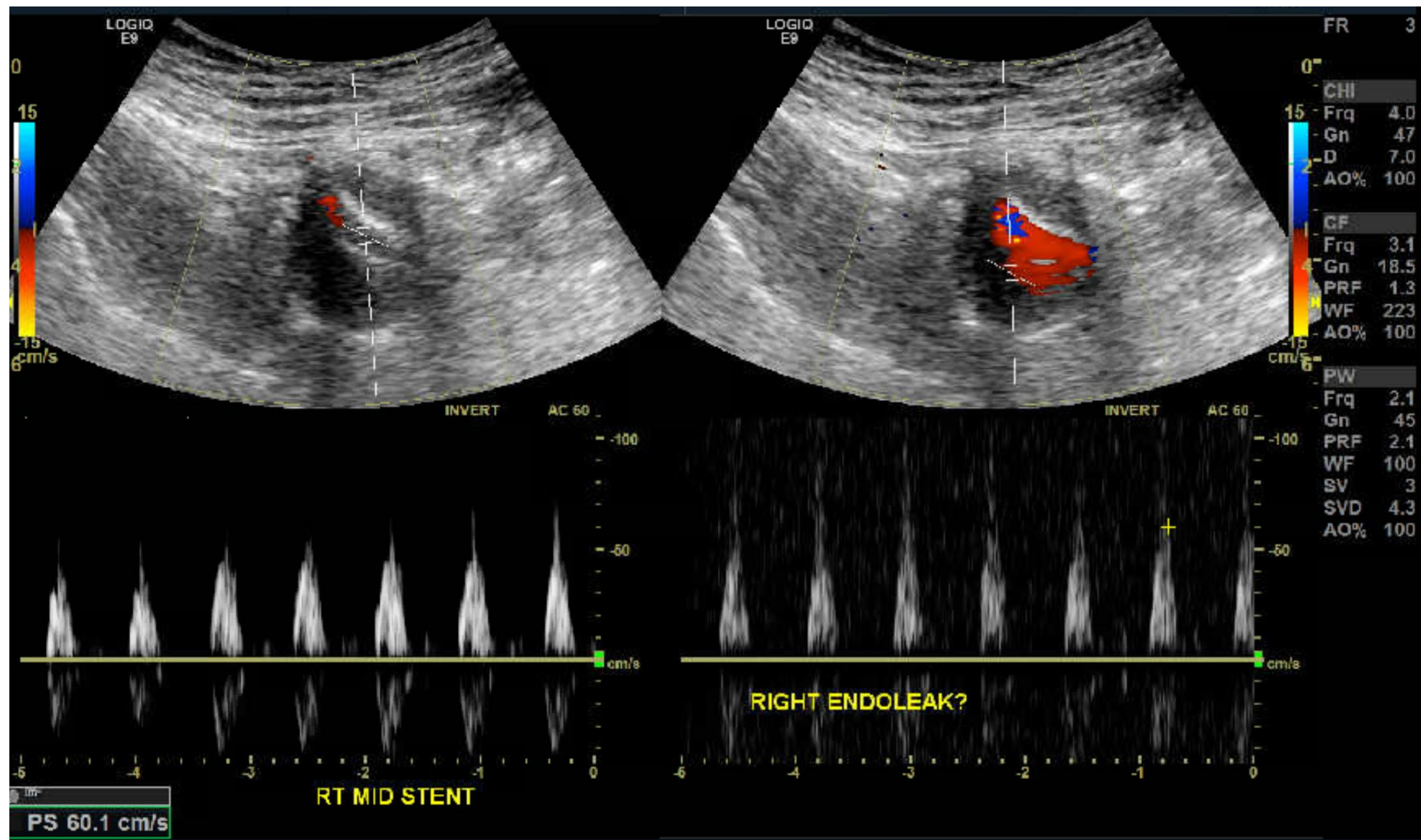


Post-op (Round 2)

- Patient does fine post op,
 - but continues to complain of vague thigh symptoms, now it sounds like thigh pain constant, worse with exercise,
 - no involvement of calf or foot,
 - palpable pedal pulses
- First post op duplex:
 - No leak, sac 3.1cm
- Second duplex (six months)
 - No clear leak, but sac is 3.3cm, and very low velocities can be measured in the sac even without visible color doppler flow

Duplex

- Duplex was repeated
 - Likely endoleak, difficult to visualize, again mostly in distal sac, mostly along the stent wall
 - Does not get elevated velocities in the proximal graft / anast, but does have low velocities within the entire stent
 - Sac has grown again 3.6cm (another 2mm of growth)



What now?

- Ideas?