MY APPROACH TO ABDOMINAL AORTIC ANEURYSM WITH WIDE ILIACS

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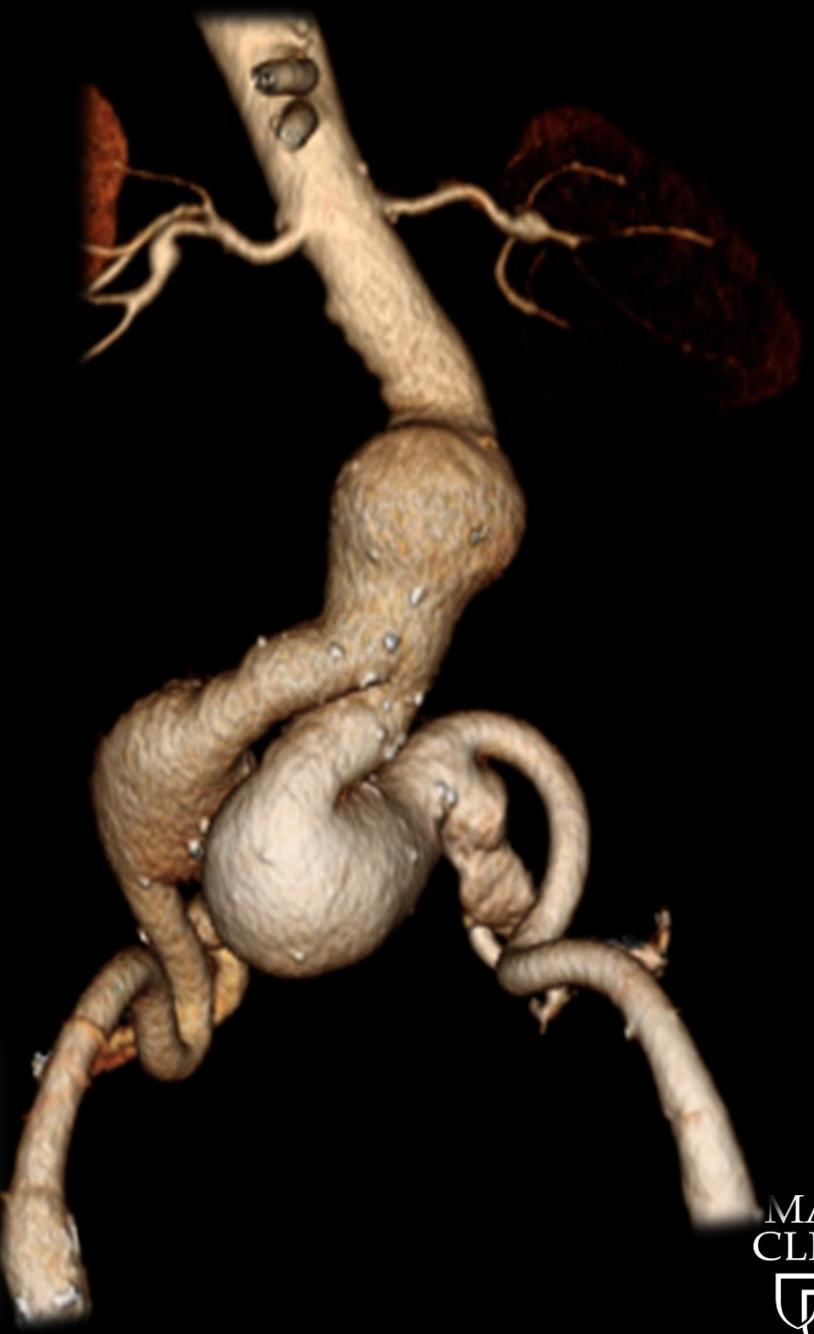
i-MEET
NEXT GENERATION
Multidisciplinary European Endovascular Therapy



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FACULTY DISCLOSURE

BCM:

- No disclosures

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CASE PRESENTATION

- 80 M presented with asymptomatic aortoiliac aneurysms
- Prior ascending aortic aneurysm repair with straight graft 6 months ago
- Lives independently
- PMH
  - Paroxysmal atrial fibrillation
  - Hypertension
  - Hyperlipidemia
  - Stage IIIa CKD
  - Family history of ruptured AAA

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PHYSICAL EXAM

- Vitals: SBP 100, HR 90s
- General: no acute distress
- Neuro: awake, alert
- Cardio/Pulm: unremarkable
- Abd: soft, large pulsatile mass palpable
- Pulse: 4+ bilateral radial, femoral, popliteal and pedal pulses

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PREOPERATIVE EVALUATION

- Dobutamine stress echo positive at rate of 115, no valvular abnormalities
  - Ejection fraction 59%
- Creatinine 1.5 mg/dL
- Pulmonary function tests within normal limits

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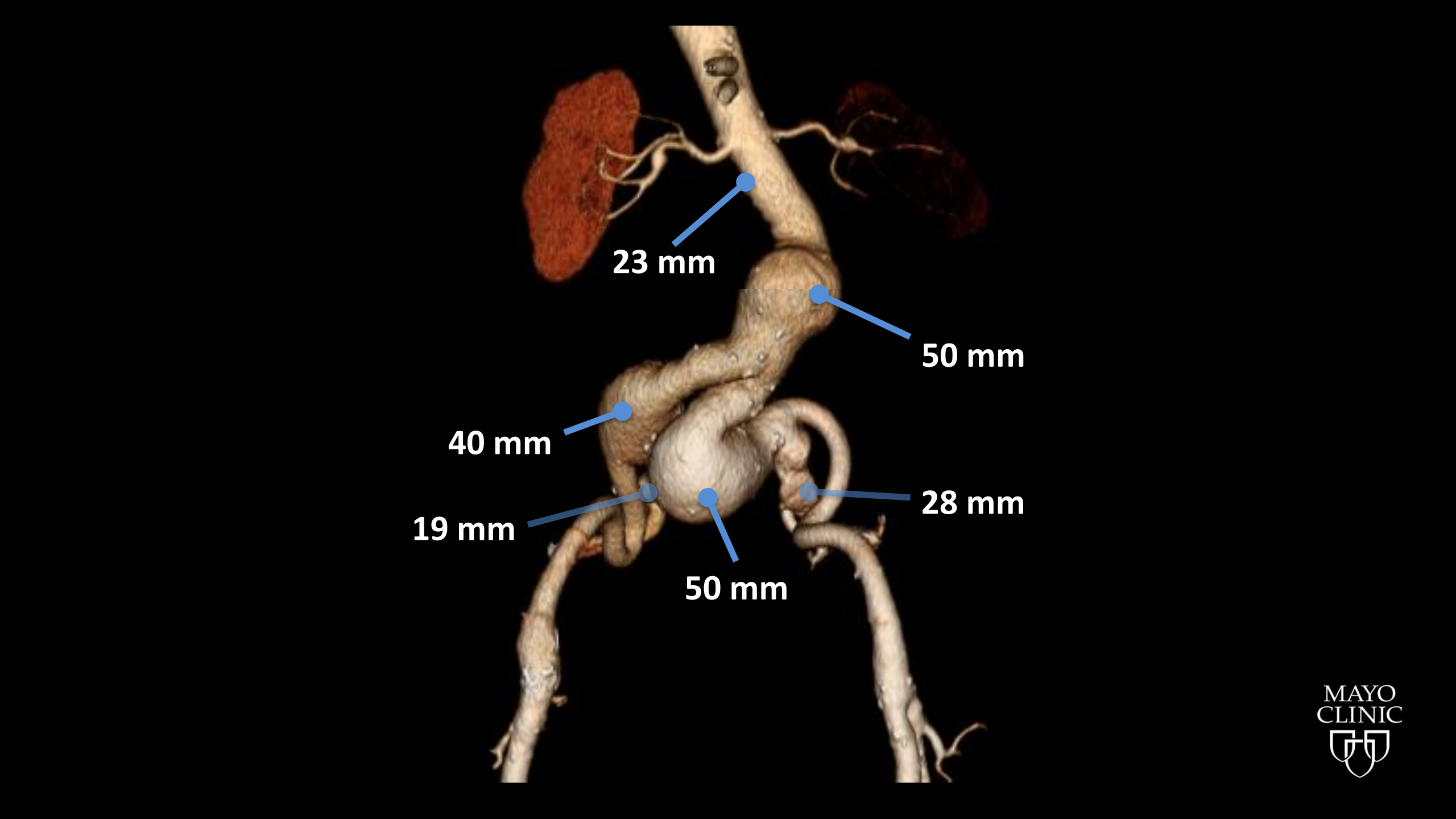

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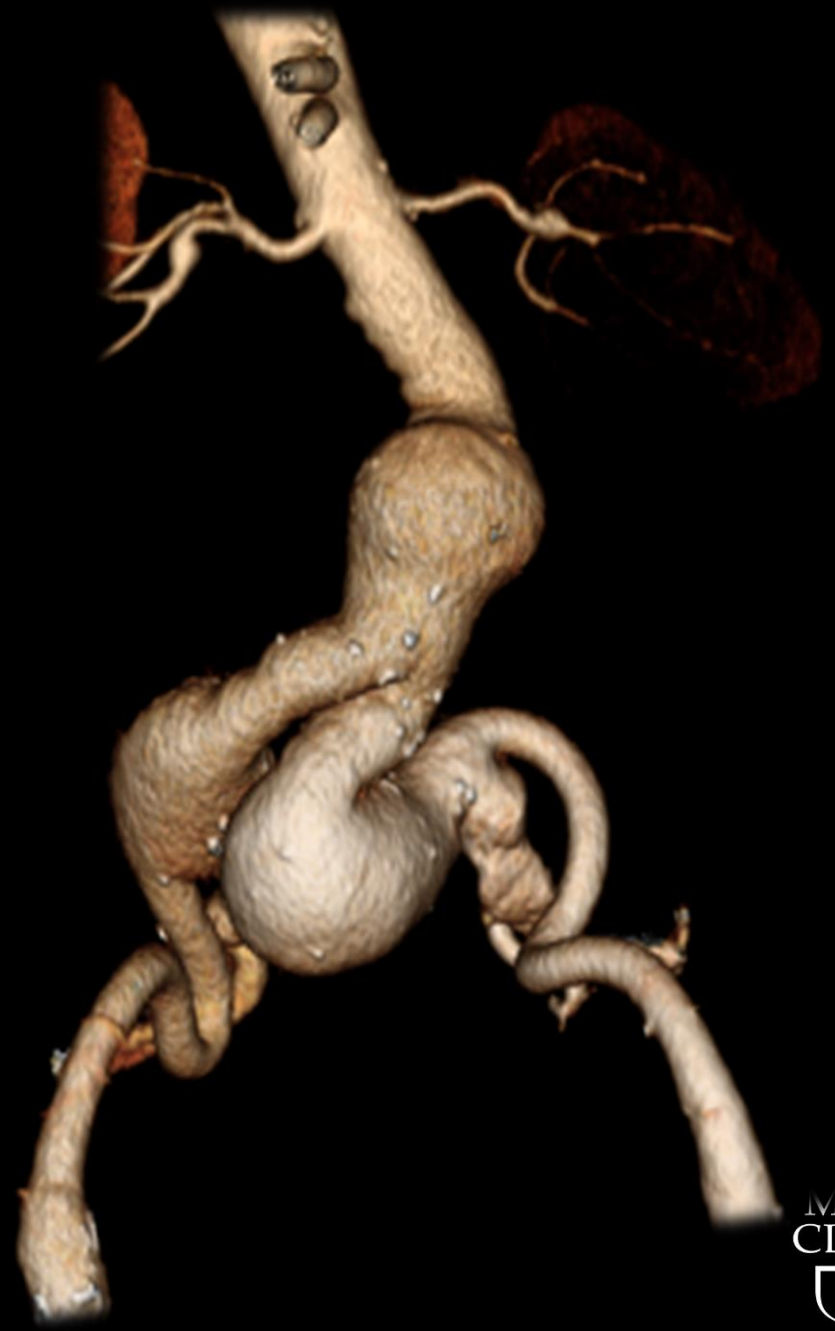
CHALLENGES

- Advanced age, high surgical risk
- Tortuosity
- Bilateral common iliac aneurysms
- Left internal iliac aneurysm
- Femoral artery aneurysms



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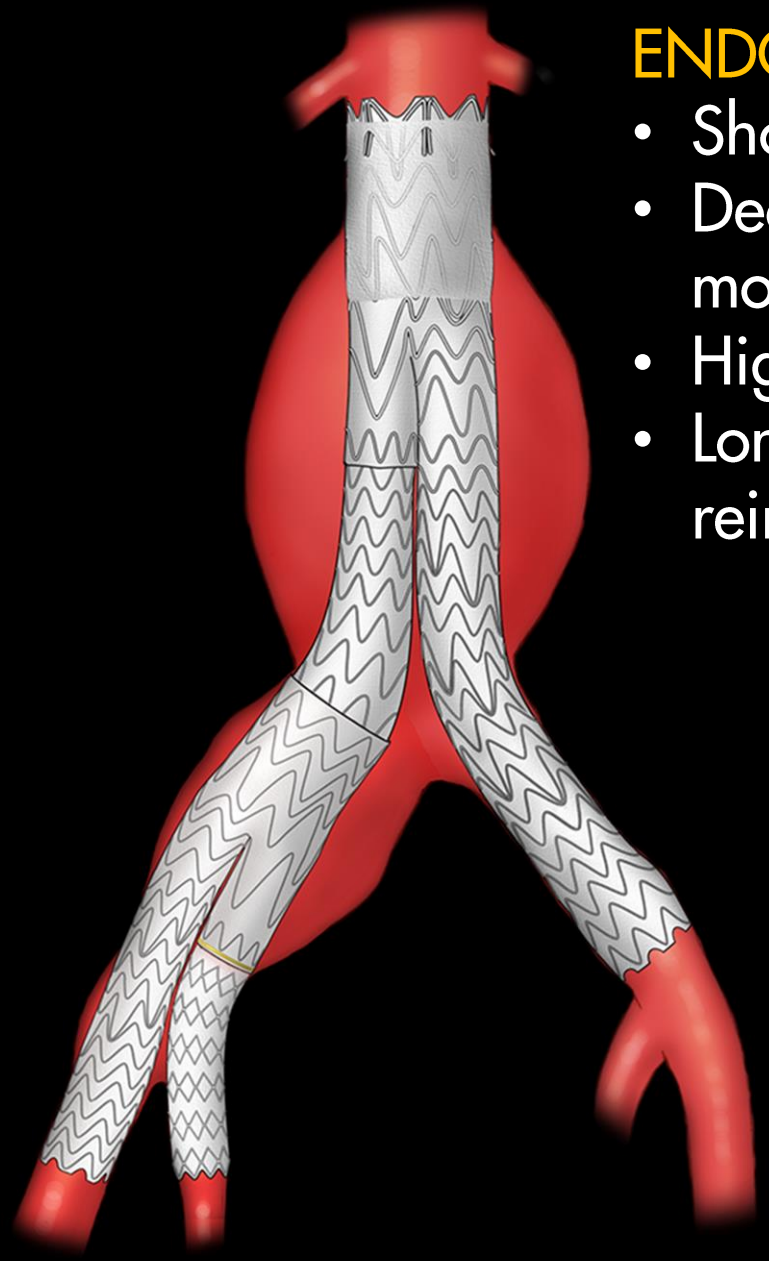
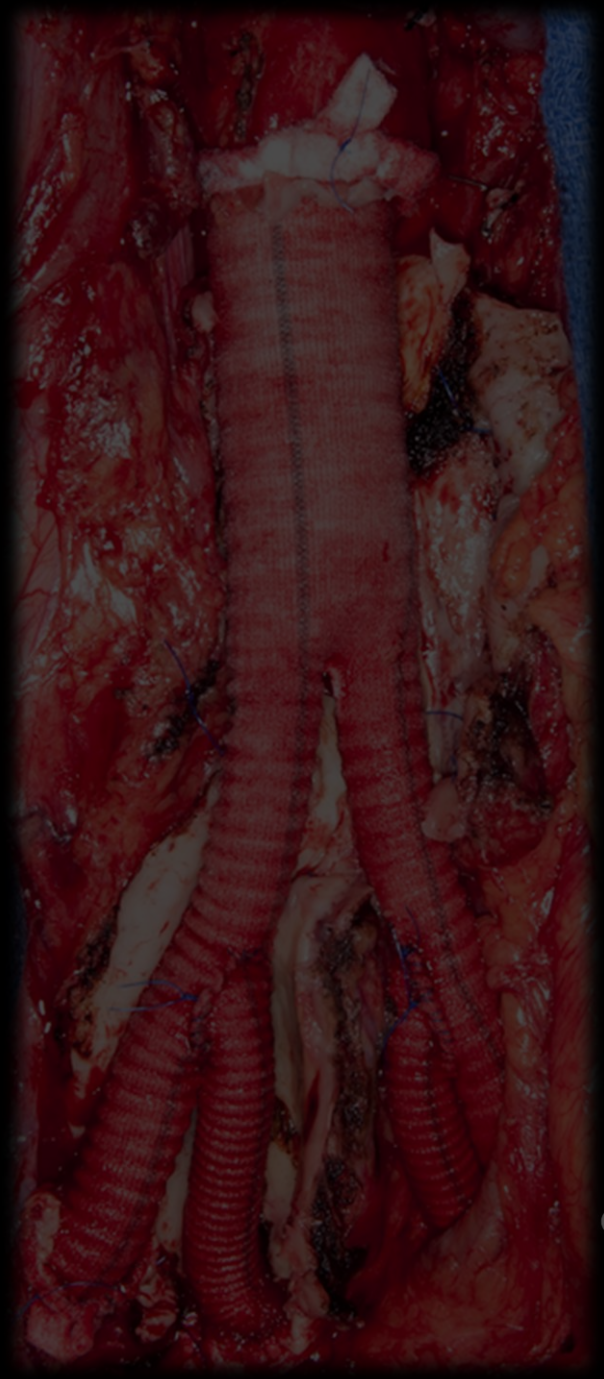


ENDOVASCULAR

- Shorter hospital stay
- Decreased perioperative morbidity/mortality
- Higher cost
- Long term reinterventions

OPEN

- More durability
- Lower cost
- Increased perioperative morbidity/mortality
- Longer hospitalization



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PROCEDURE

- Hybrid endovascular suite
- Bilateral percutaneous access
- Bilateral endovascular repair with iliac branch devices
- Extension into bilateral internal iliac arteries
  - Posterior division branch, left internal iliac
- AAA repair with Gore C3 graft

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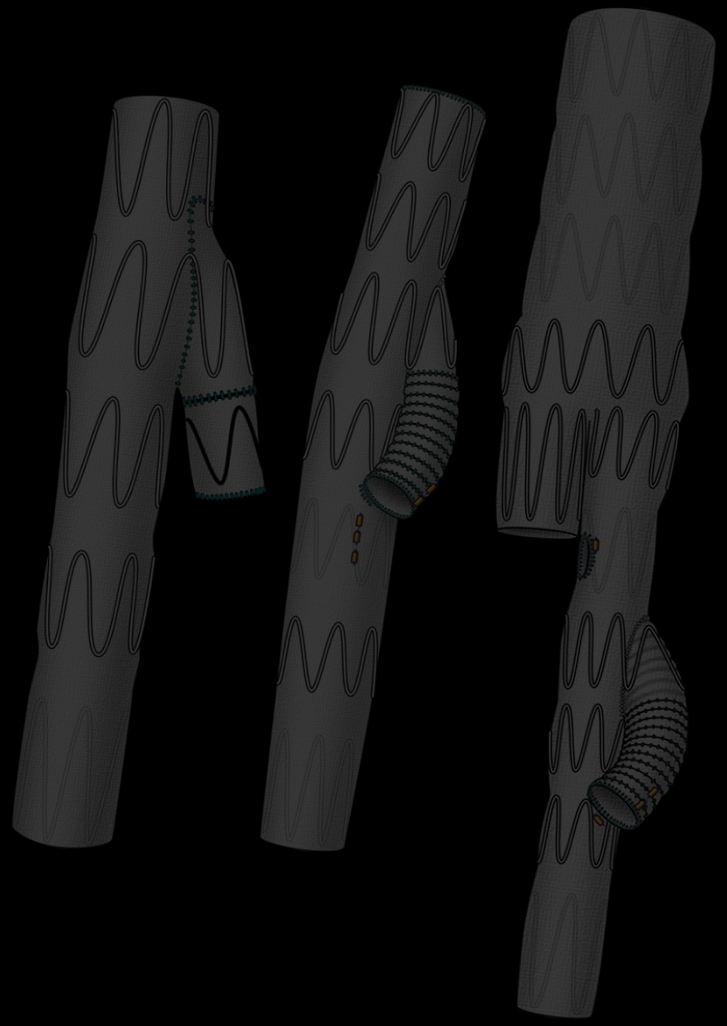
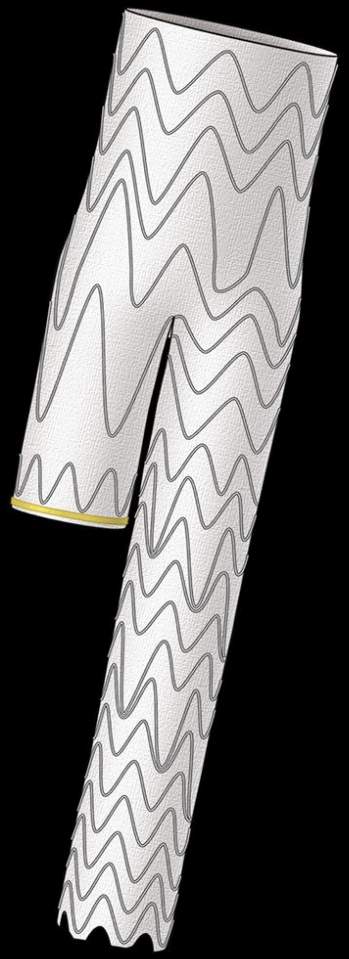
ILIAC BRANCH DESIGNS

COOK MEDICAL



WL GORE



JOTEC

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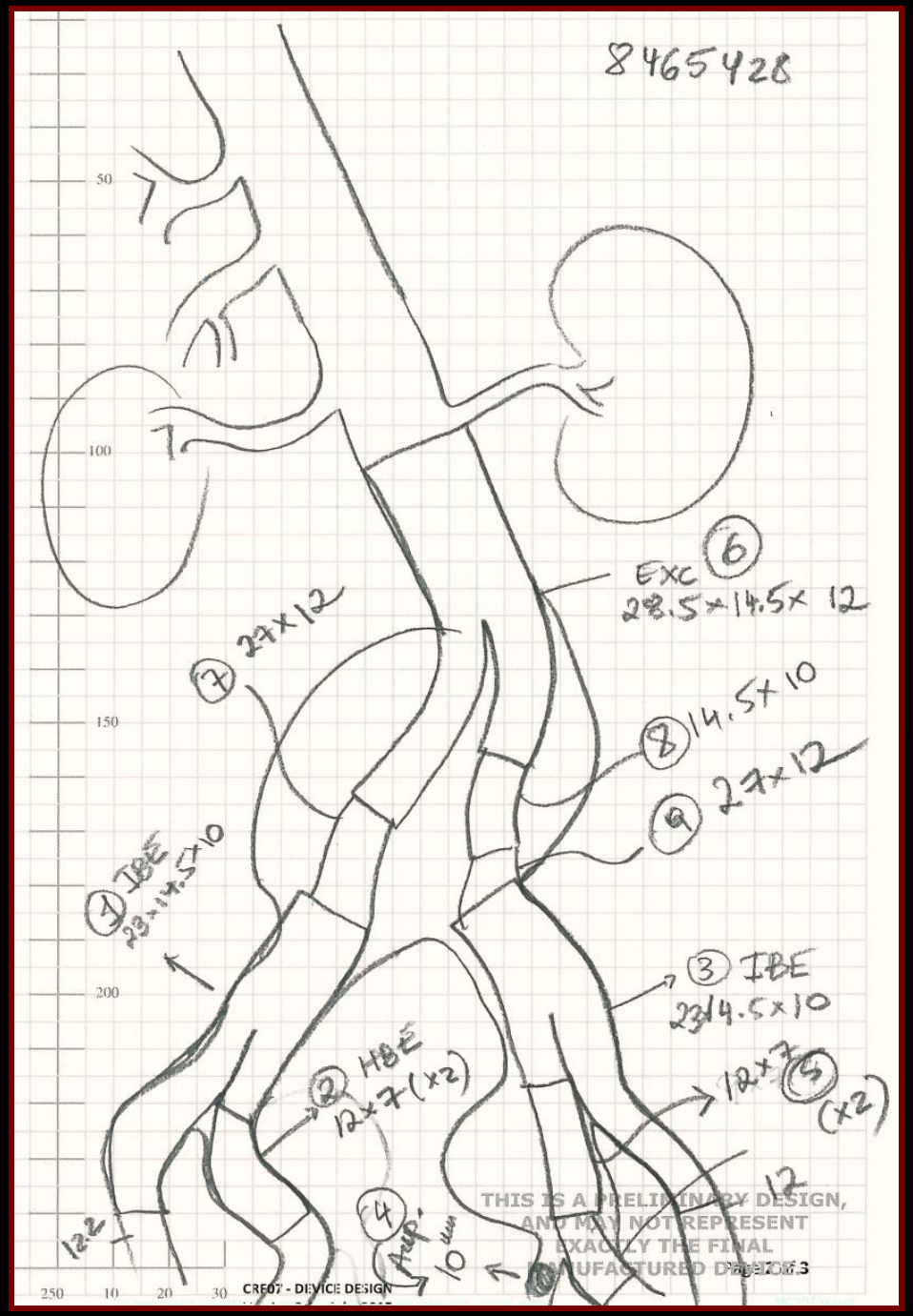
8465428
EXC 6
28.5×14.5×12
7 29×12
8 14.5×10
9 27×12
1 IBE
23×14.5×10
3 IBE
23/4.5×10
2 IBE
12×7 (×2)
12×7 5 (×2)
12
4 Aup.
10 mm
12
CRE07 - DEVICE DESIGN
THIS IS A PRELIMINARY DESIGN, AND MAY NOT REPRESENT EXACTLY THE FINAL MANUFACTURED DEVICE.

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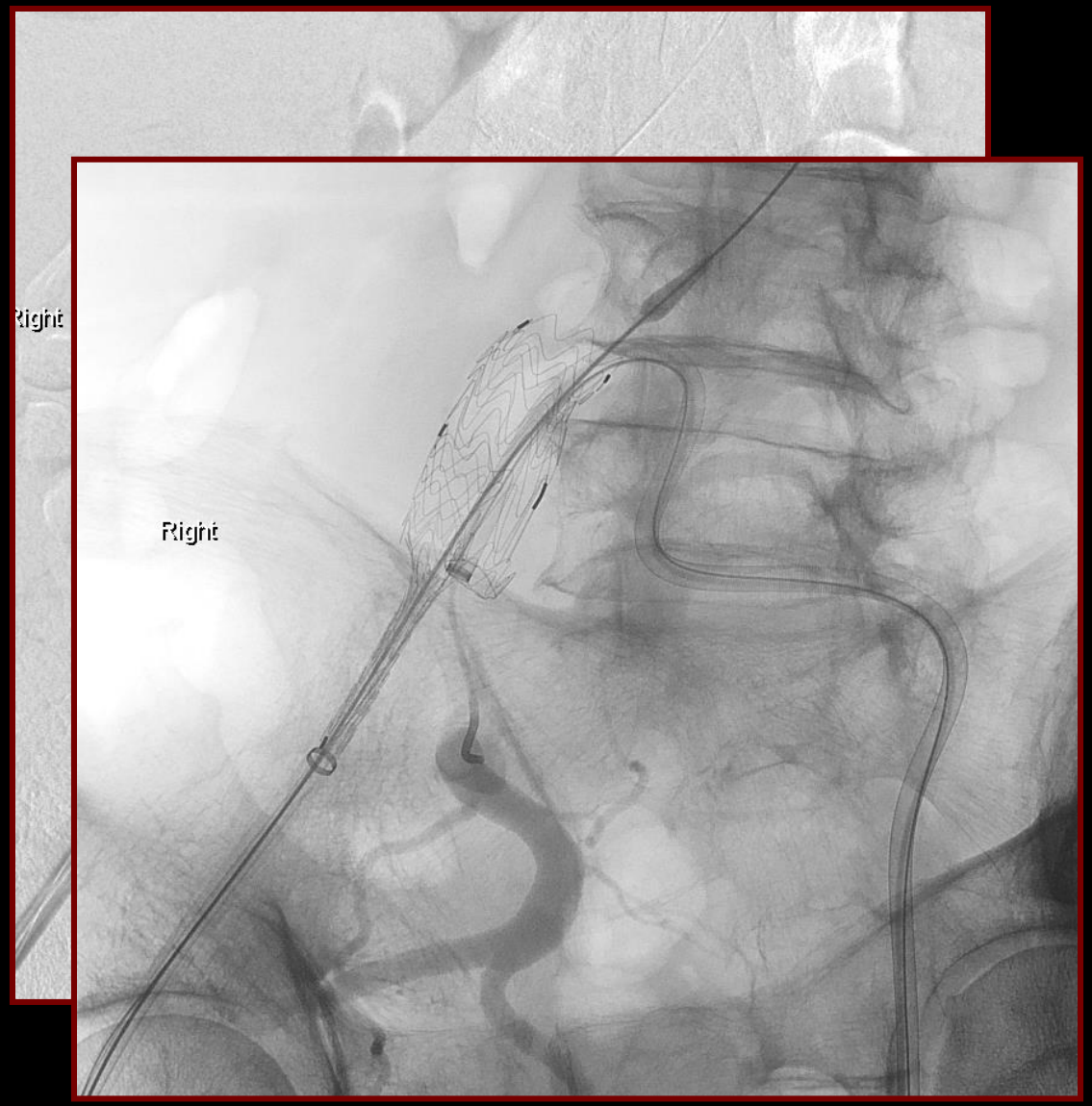

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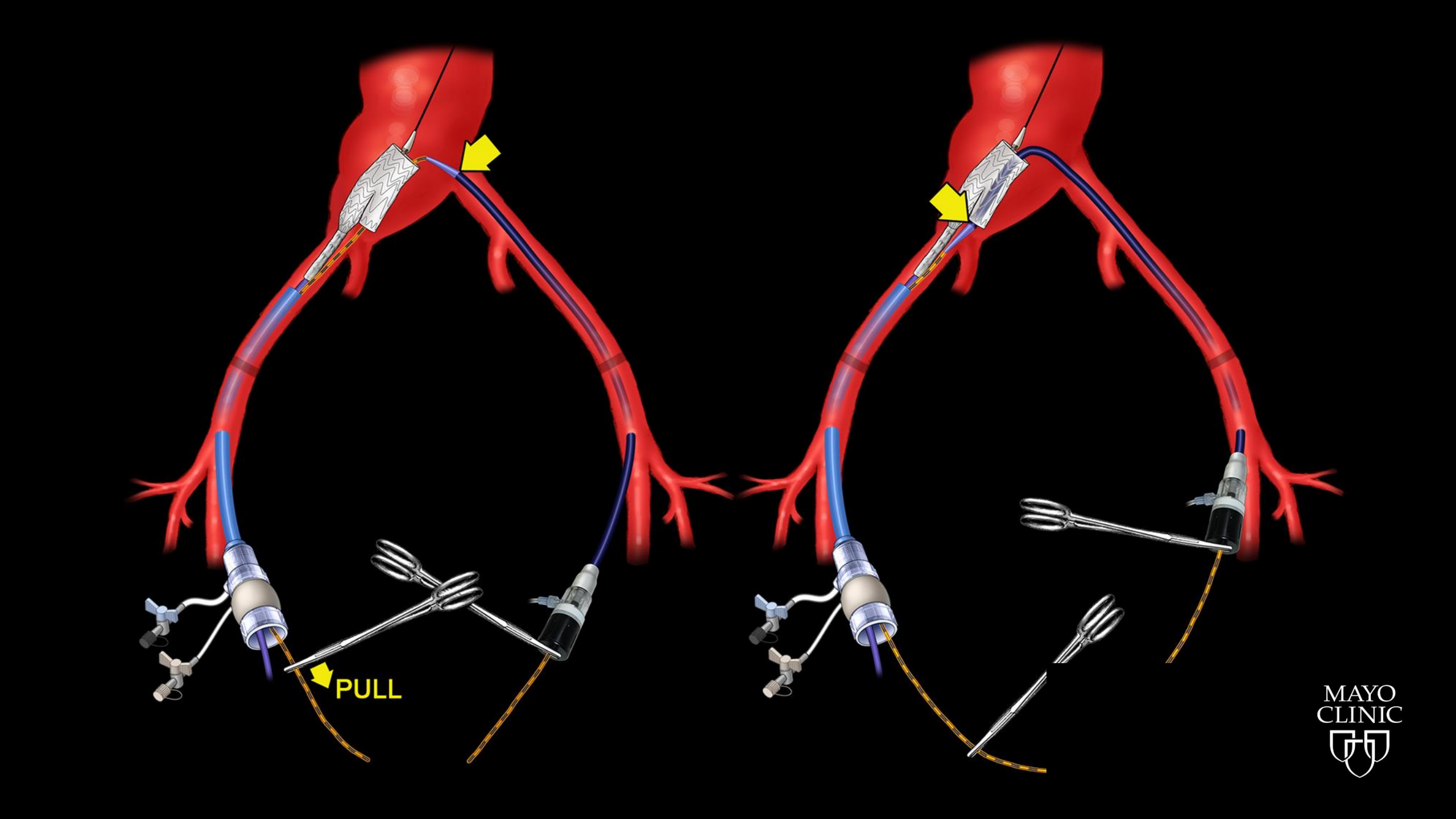
PULL
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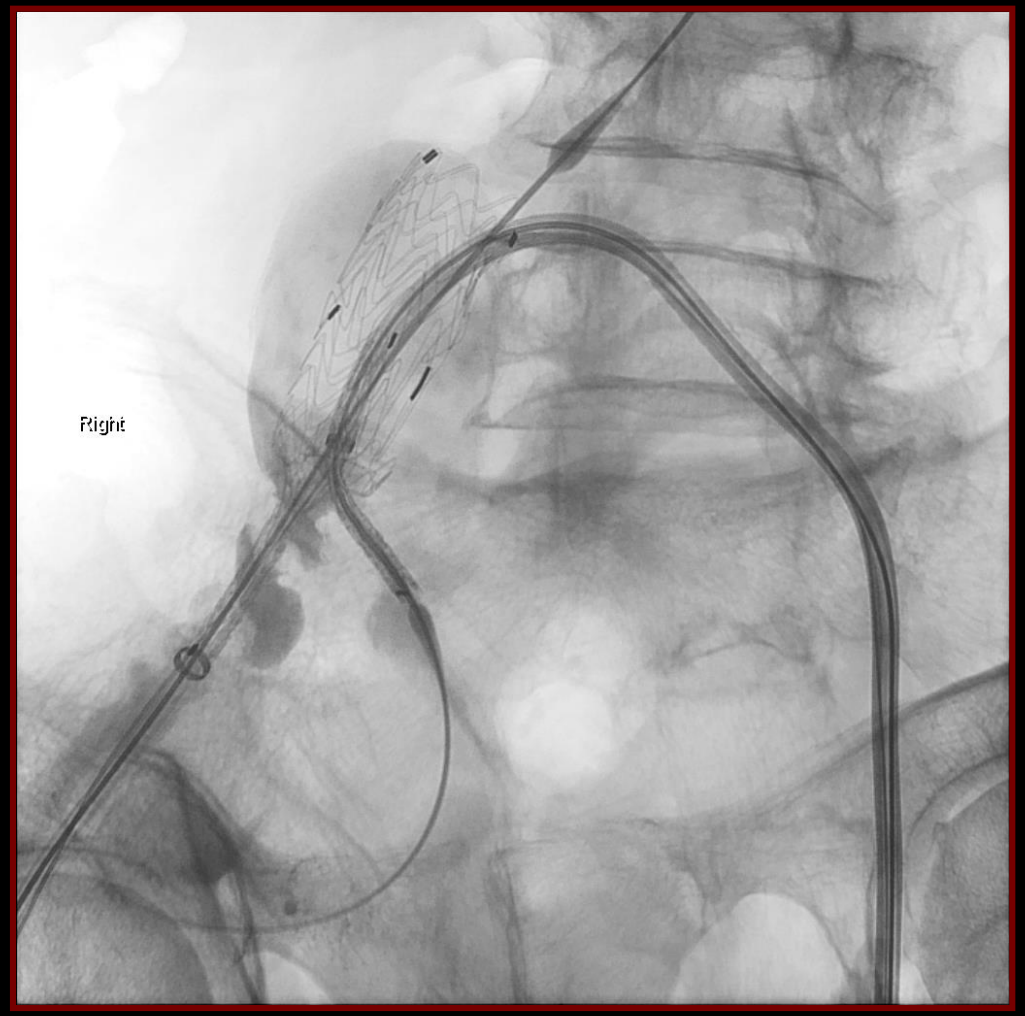

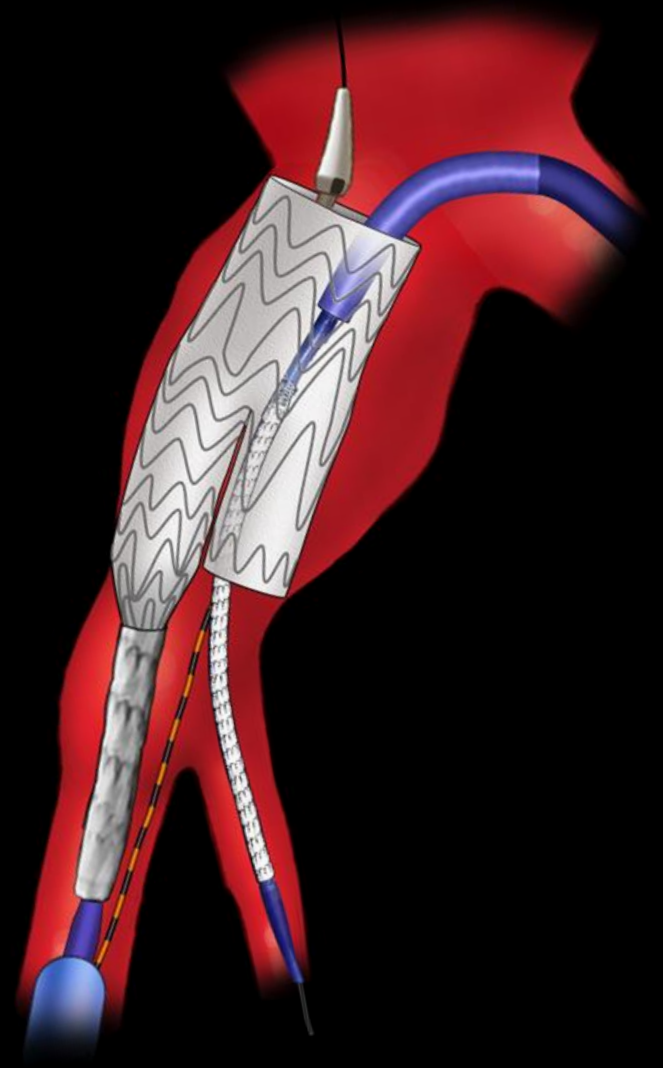

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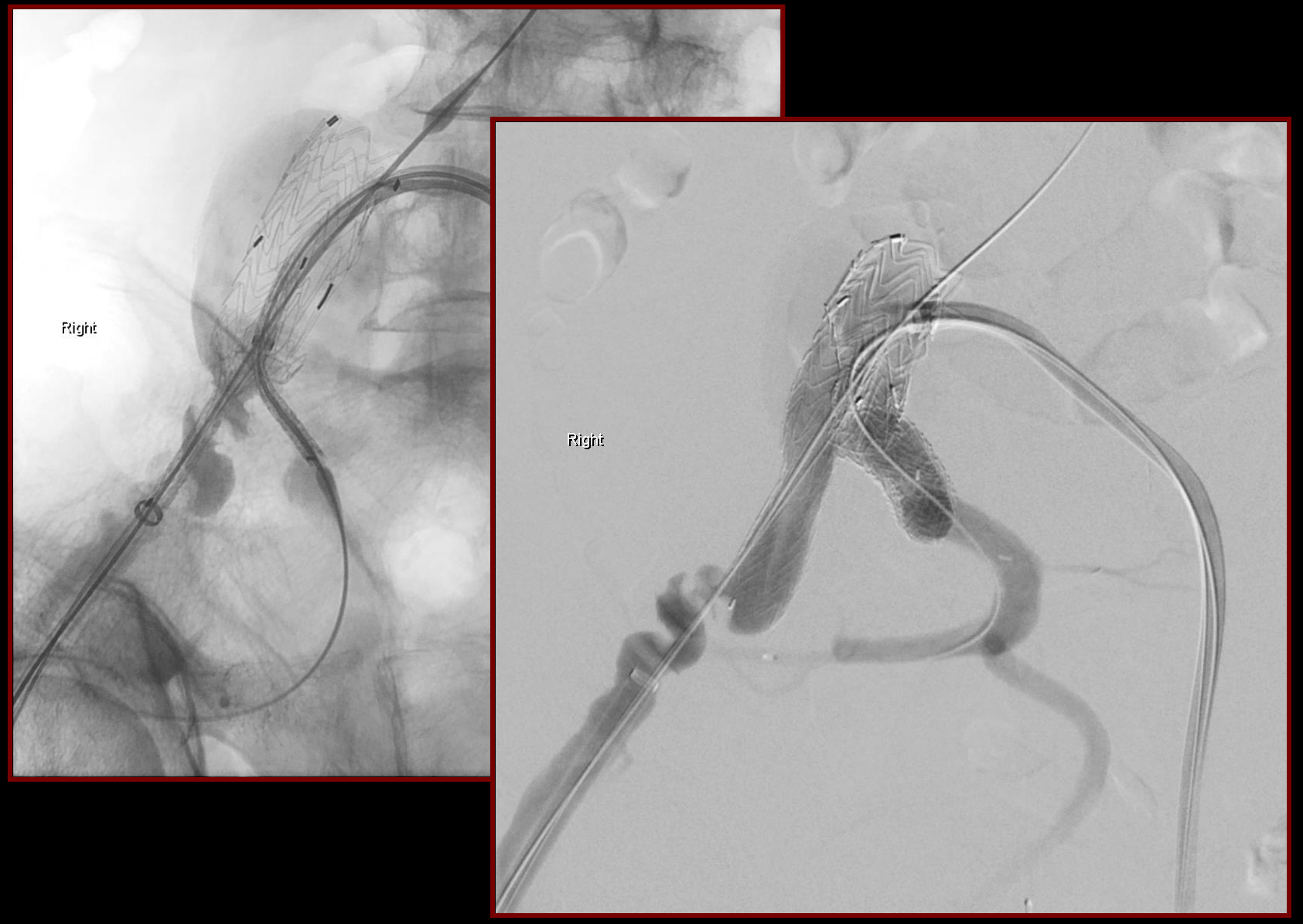

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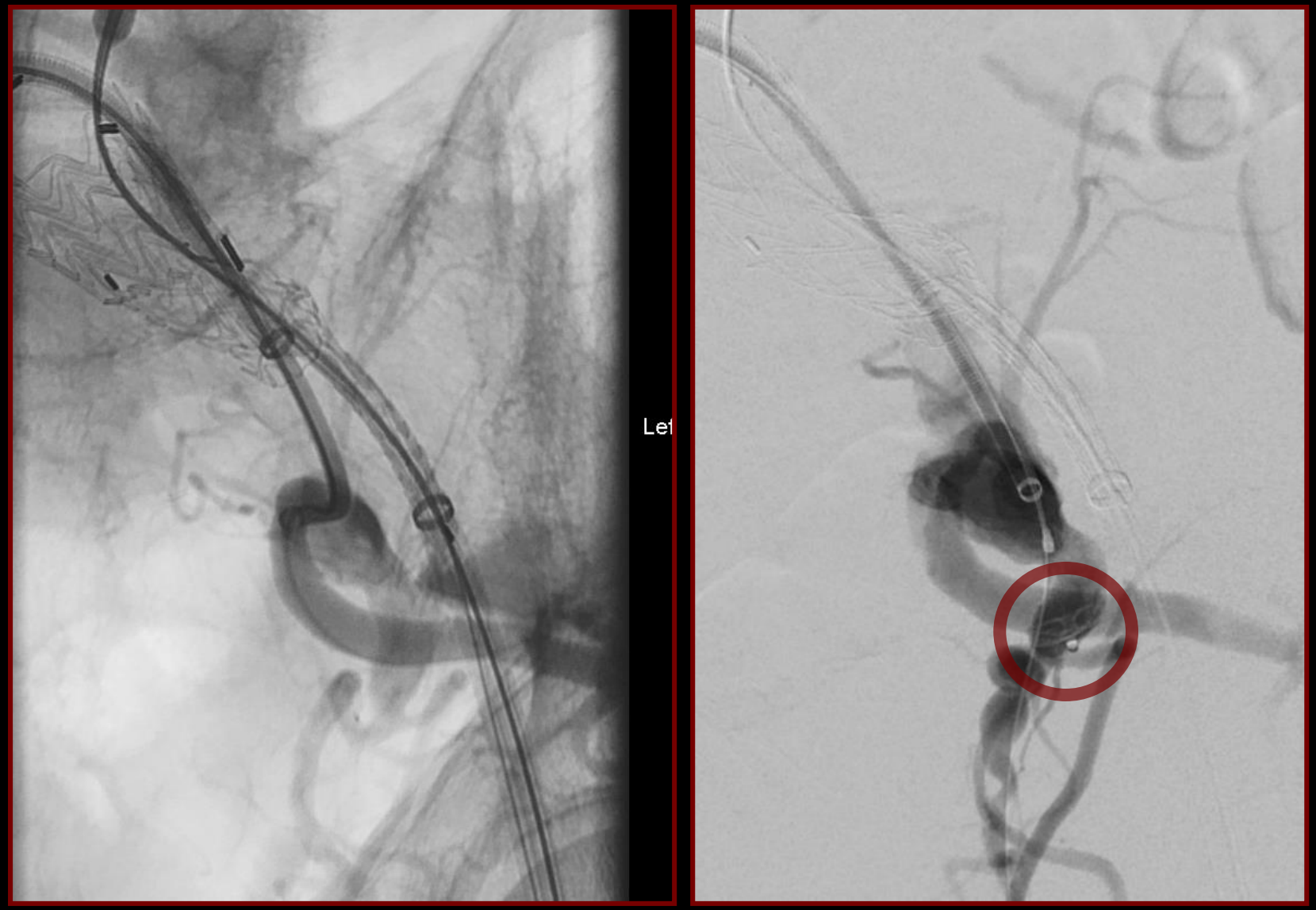

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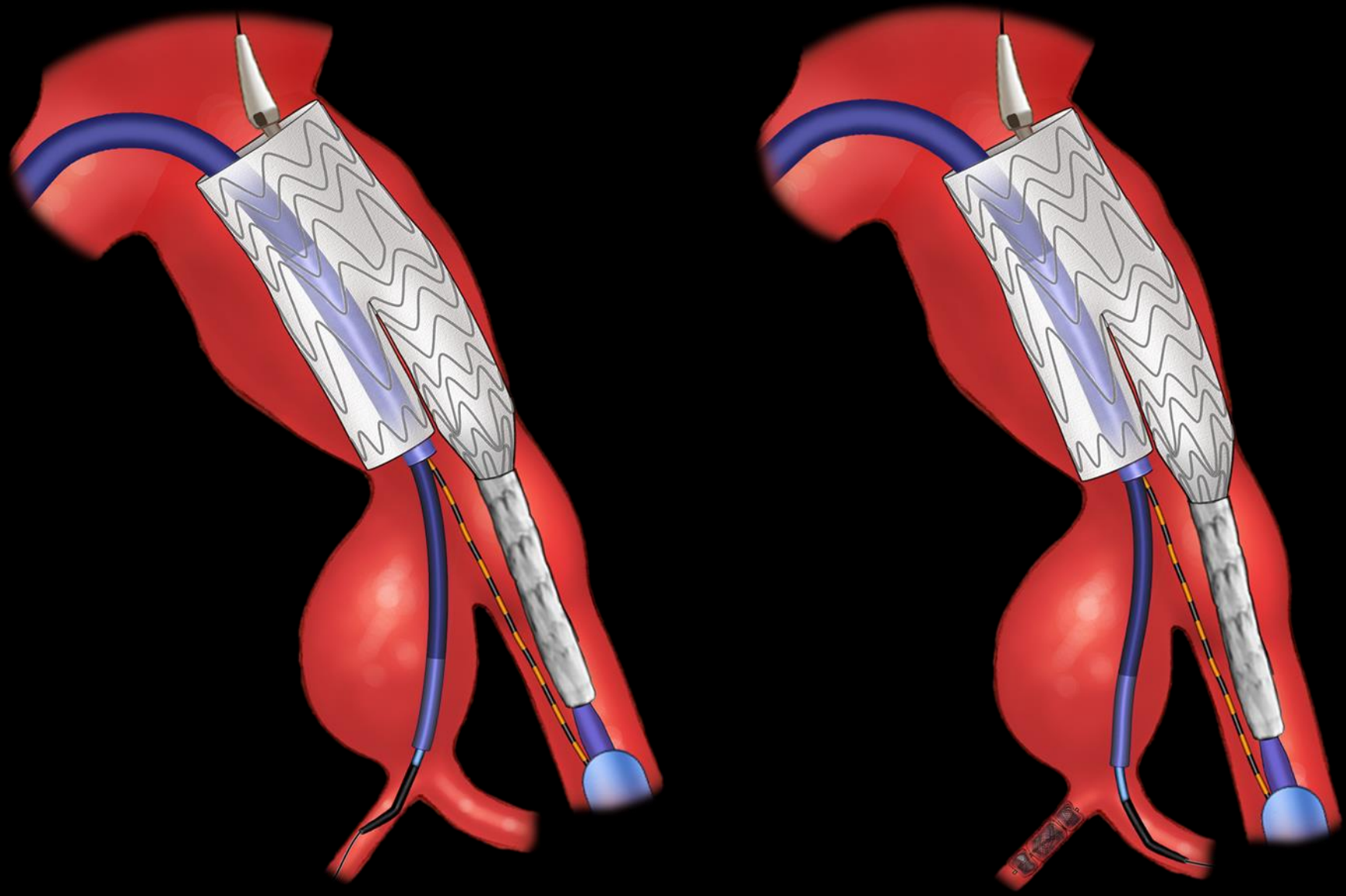

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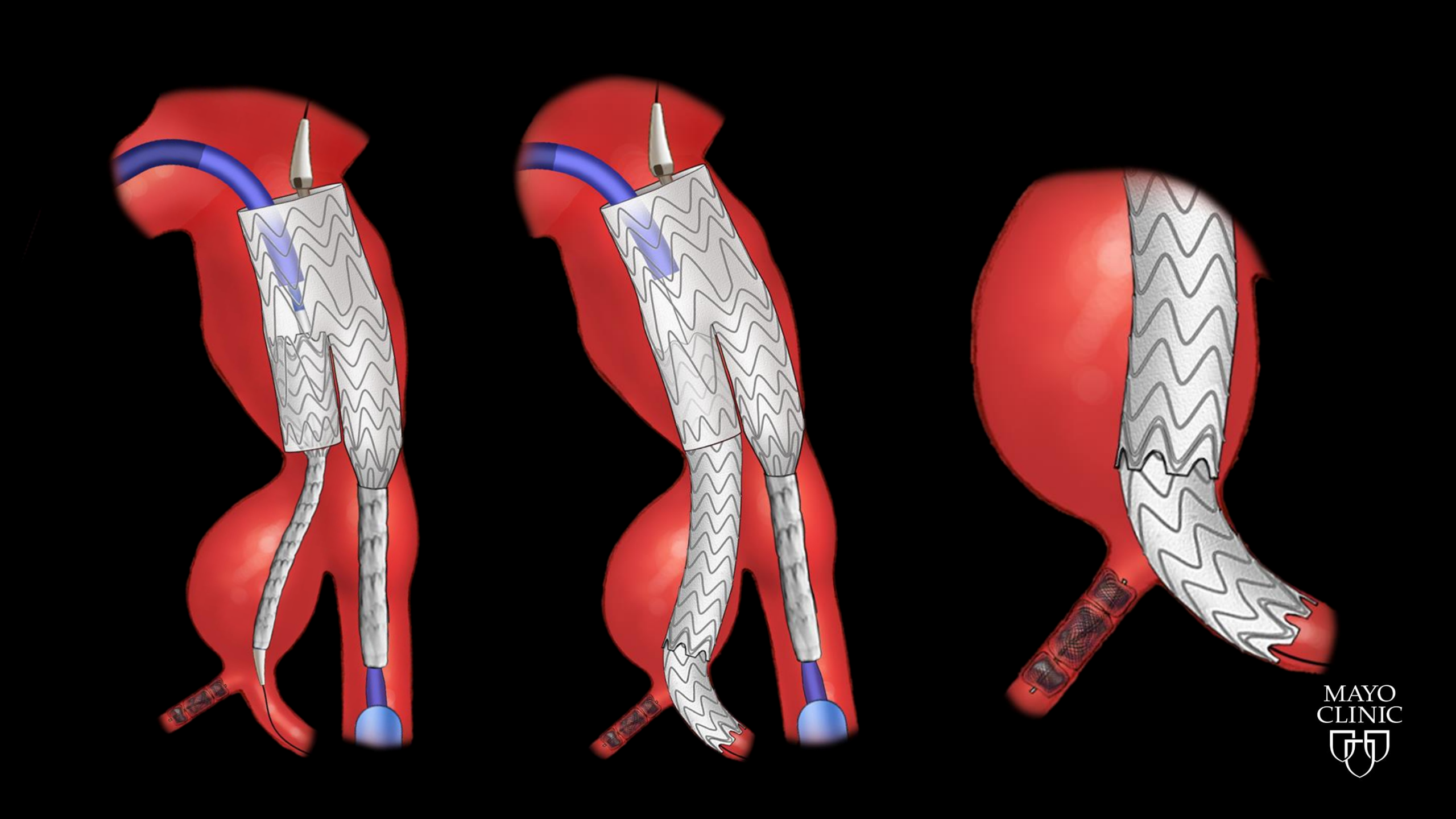
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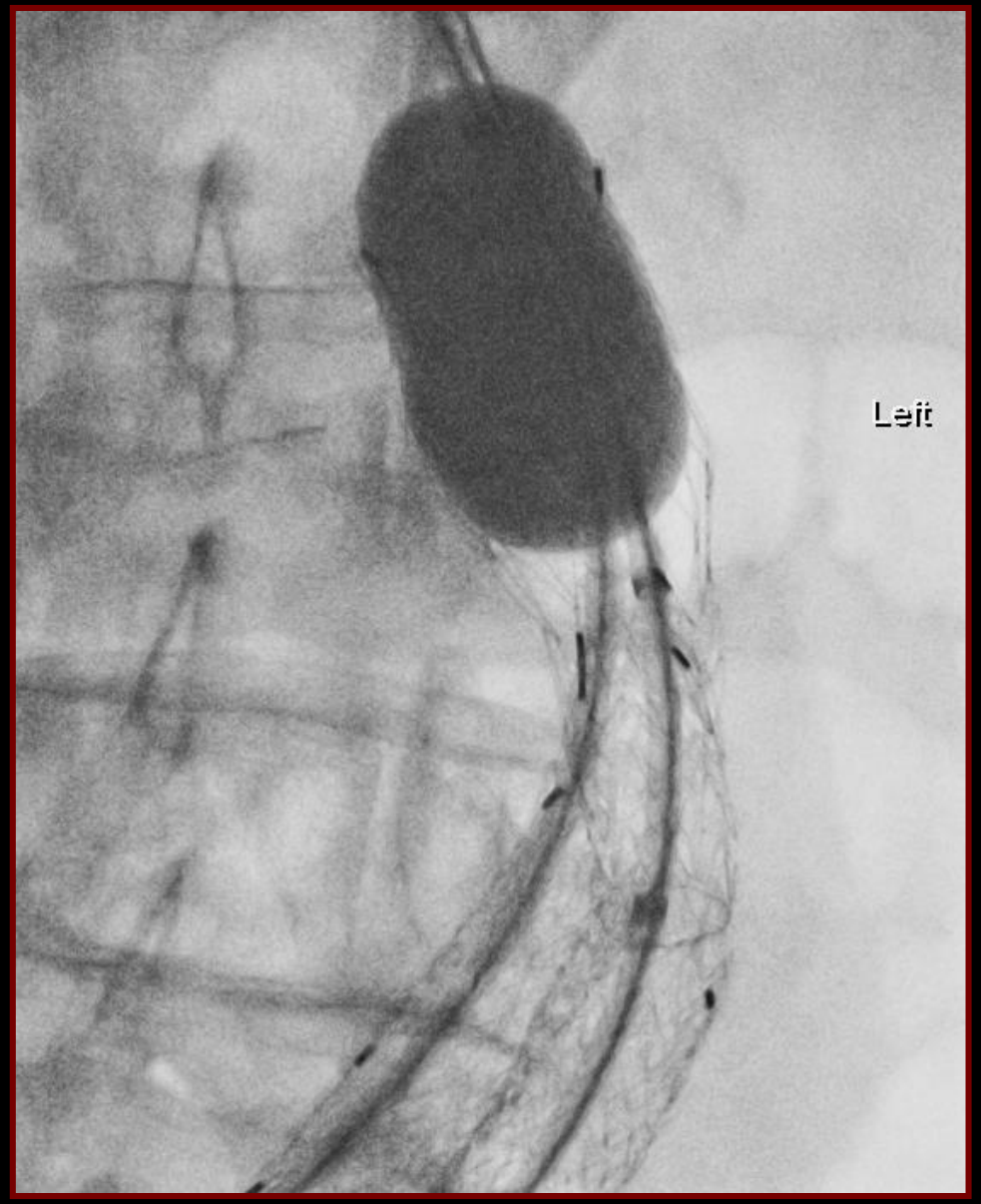

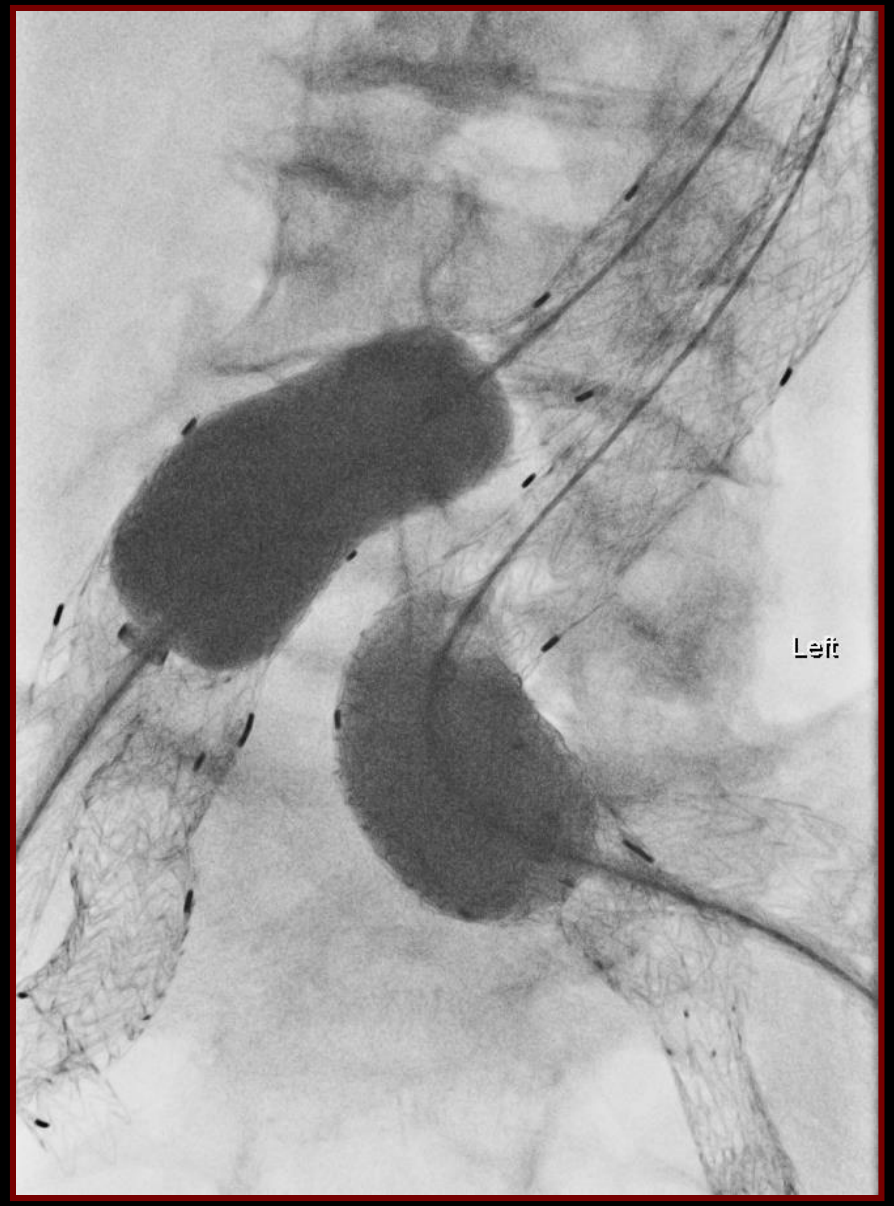

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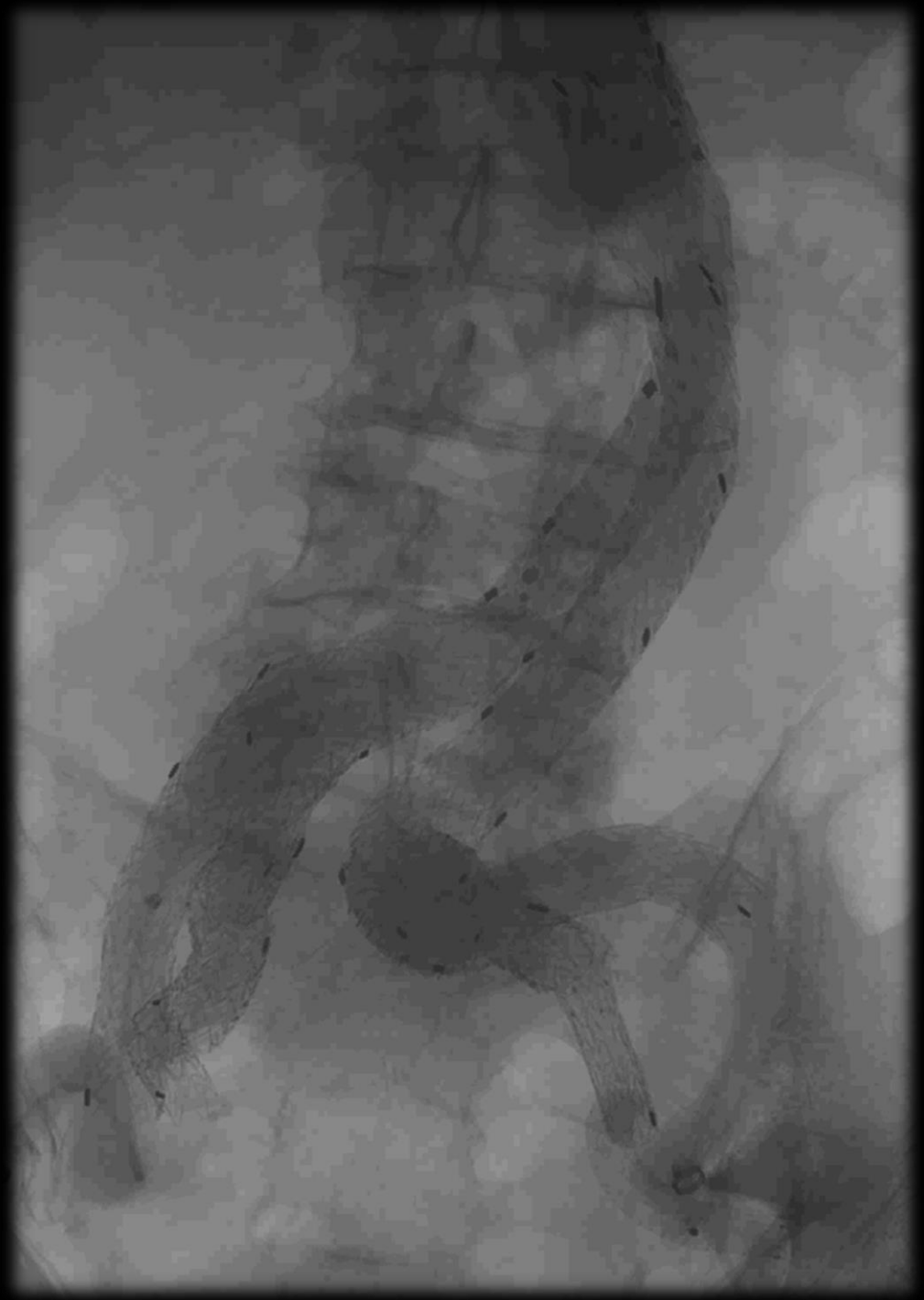

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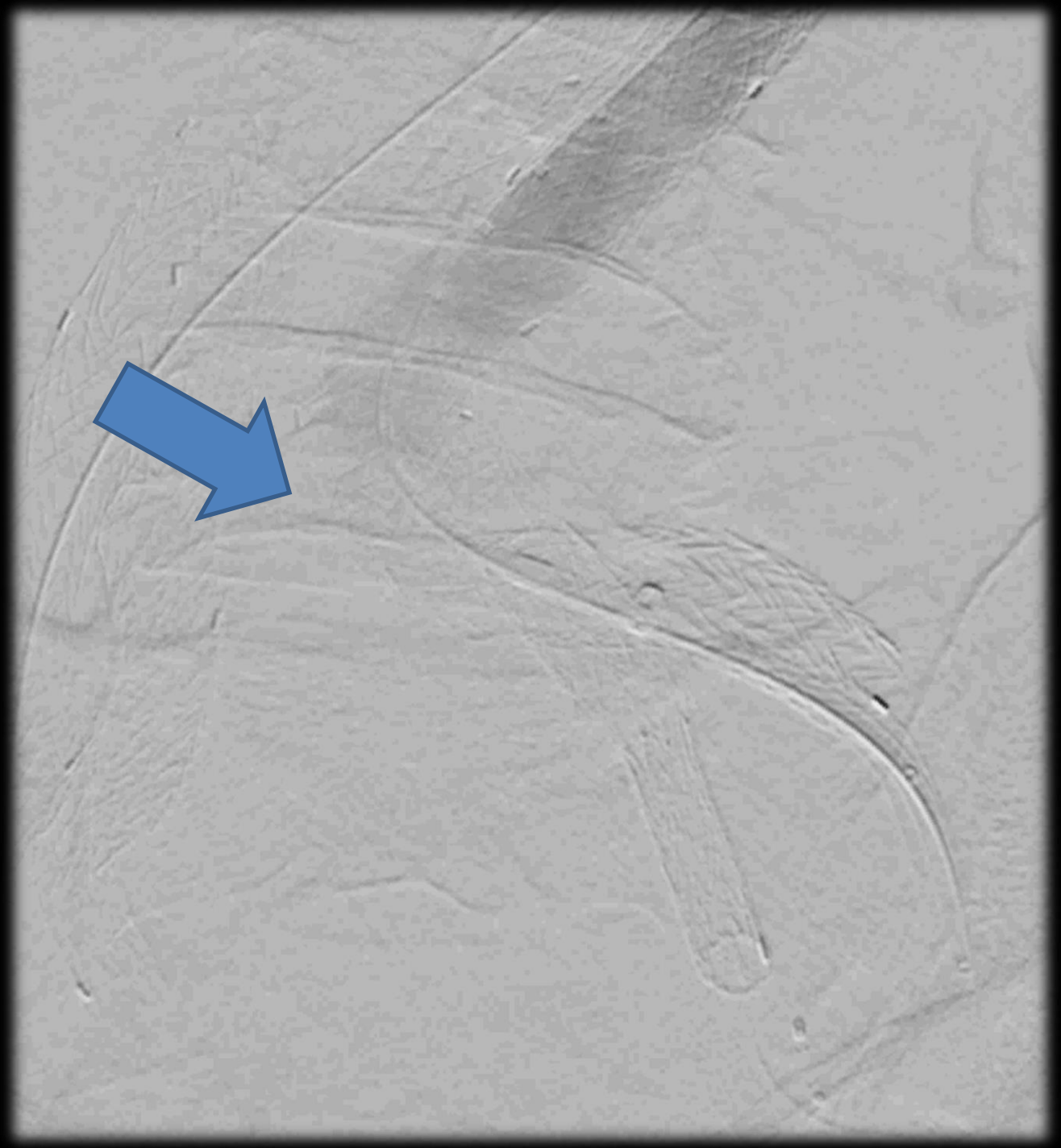

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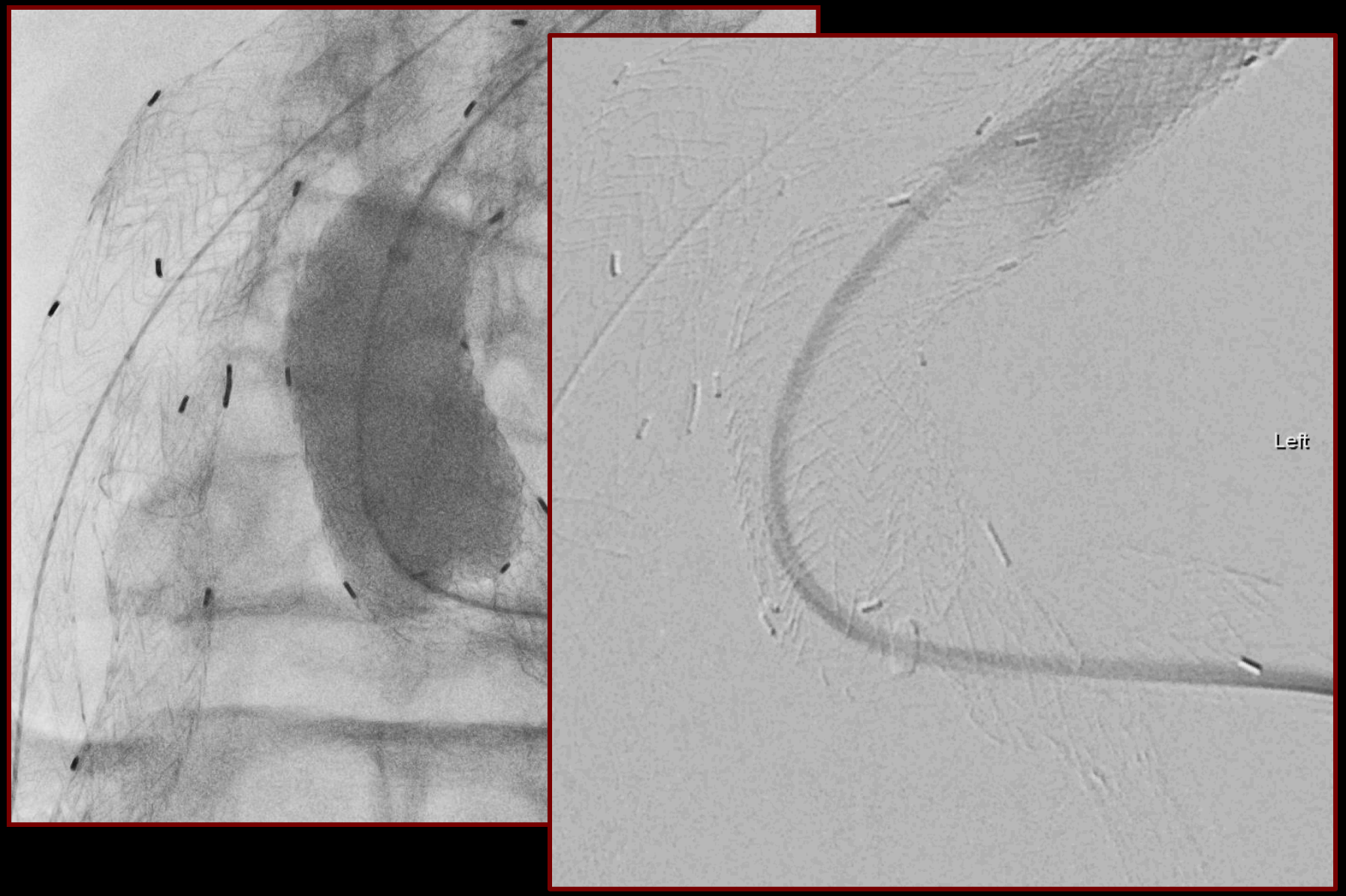

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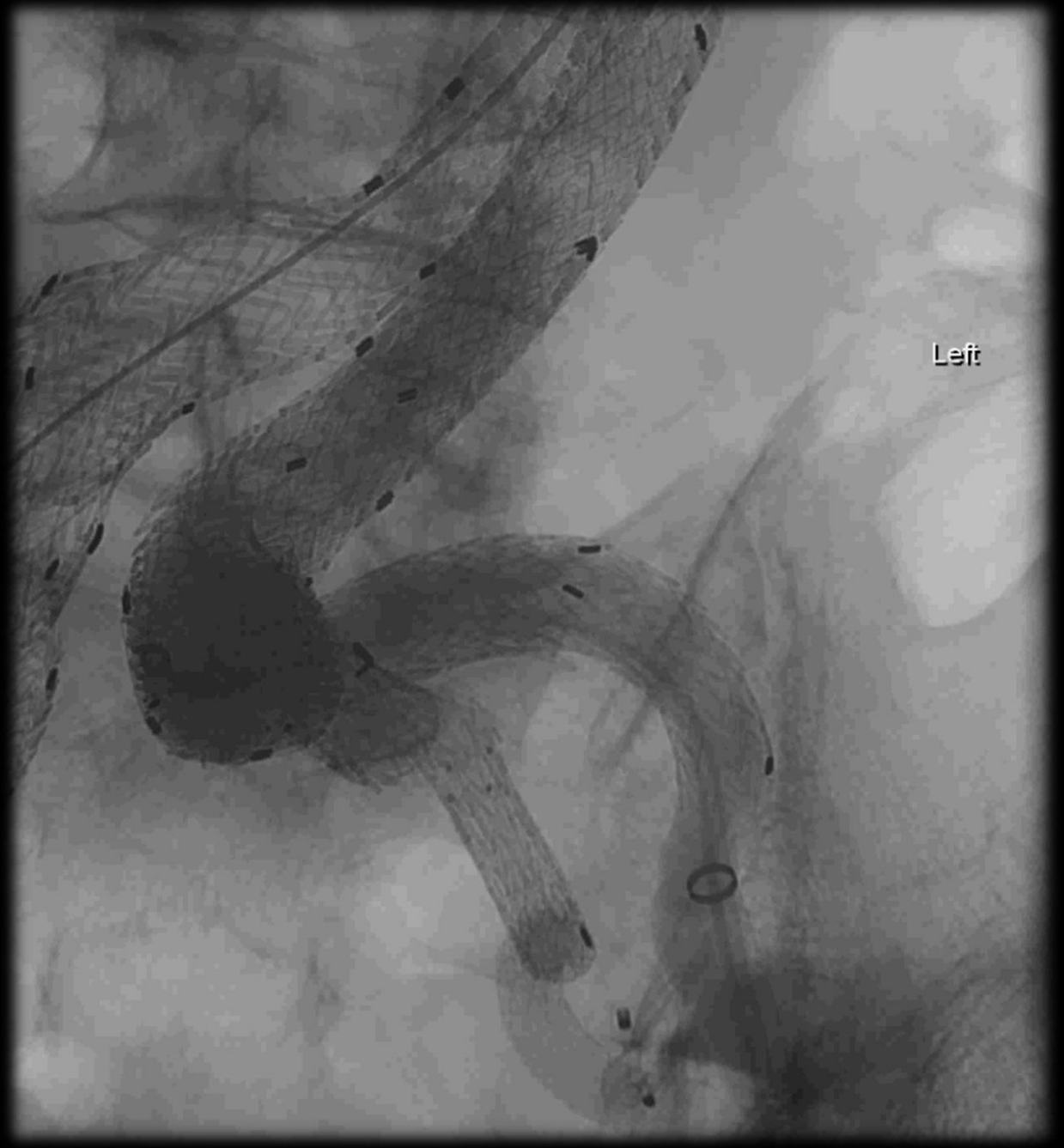

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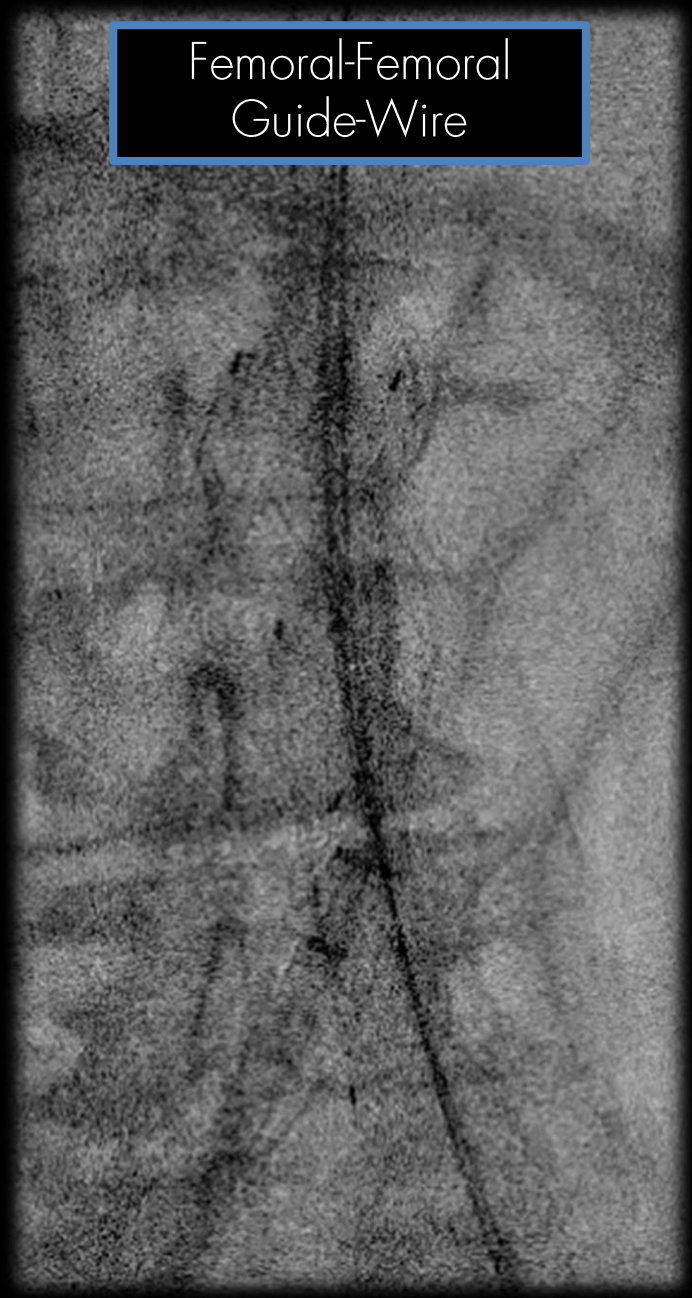
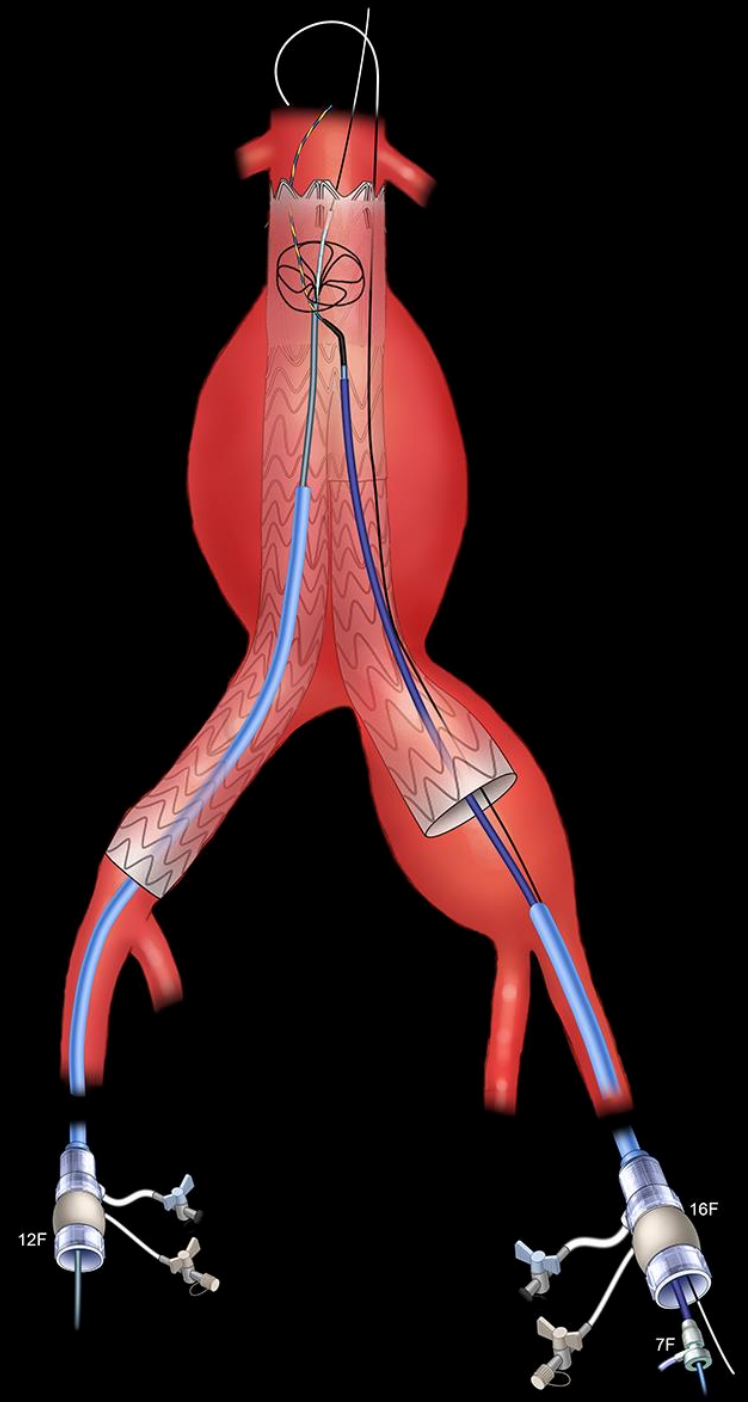
Femoral-Femoral Guide-Wire





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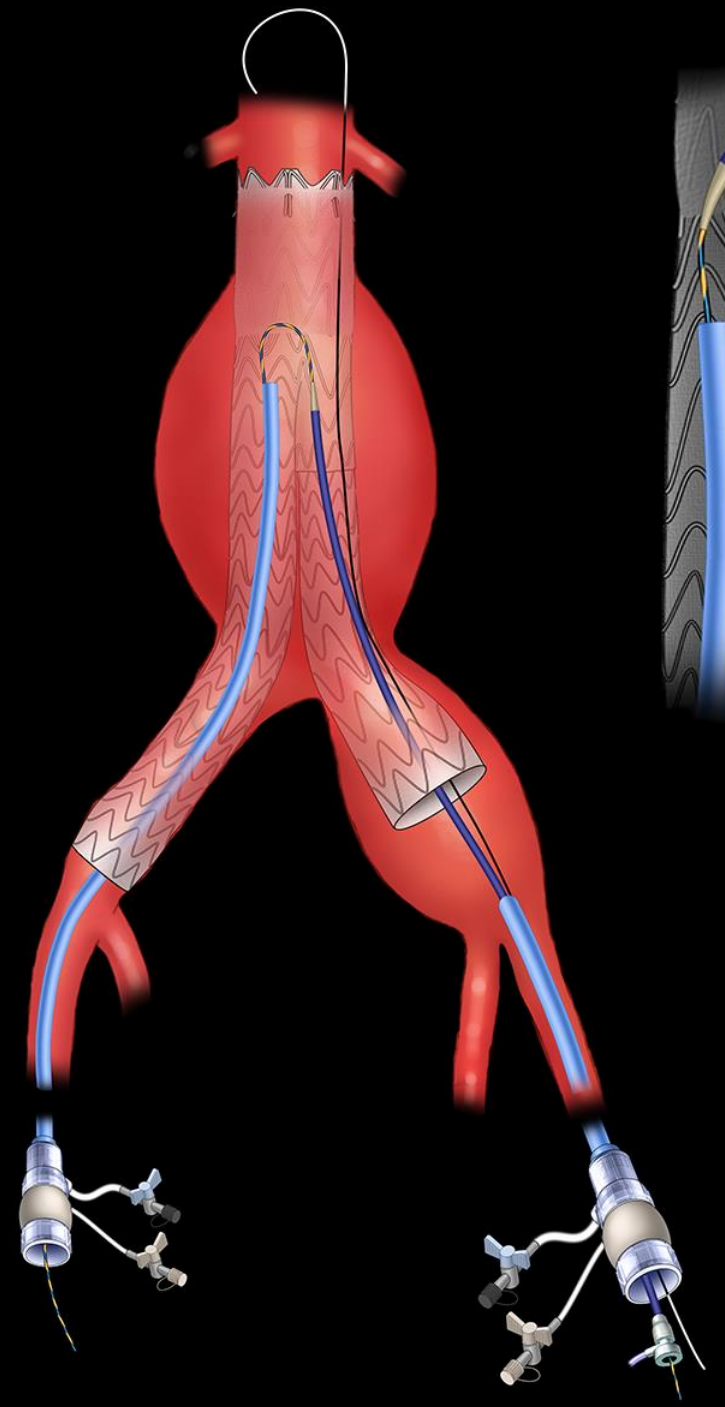
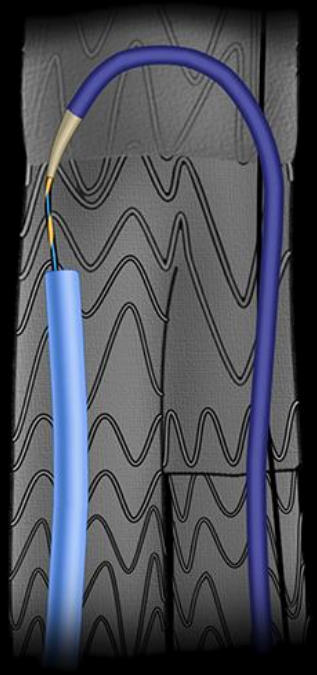
7Fr HyperFlex
Ansel Up & Over





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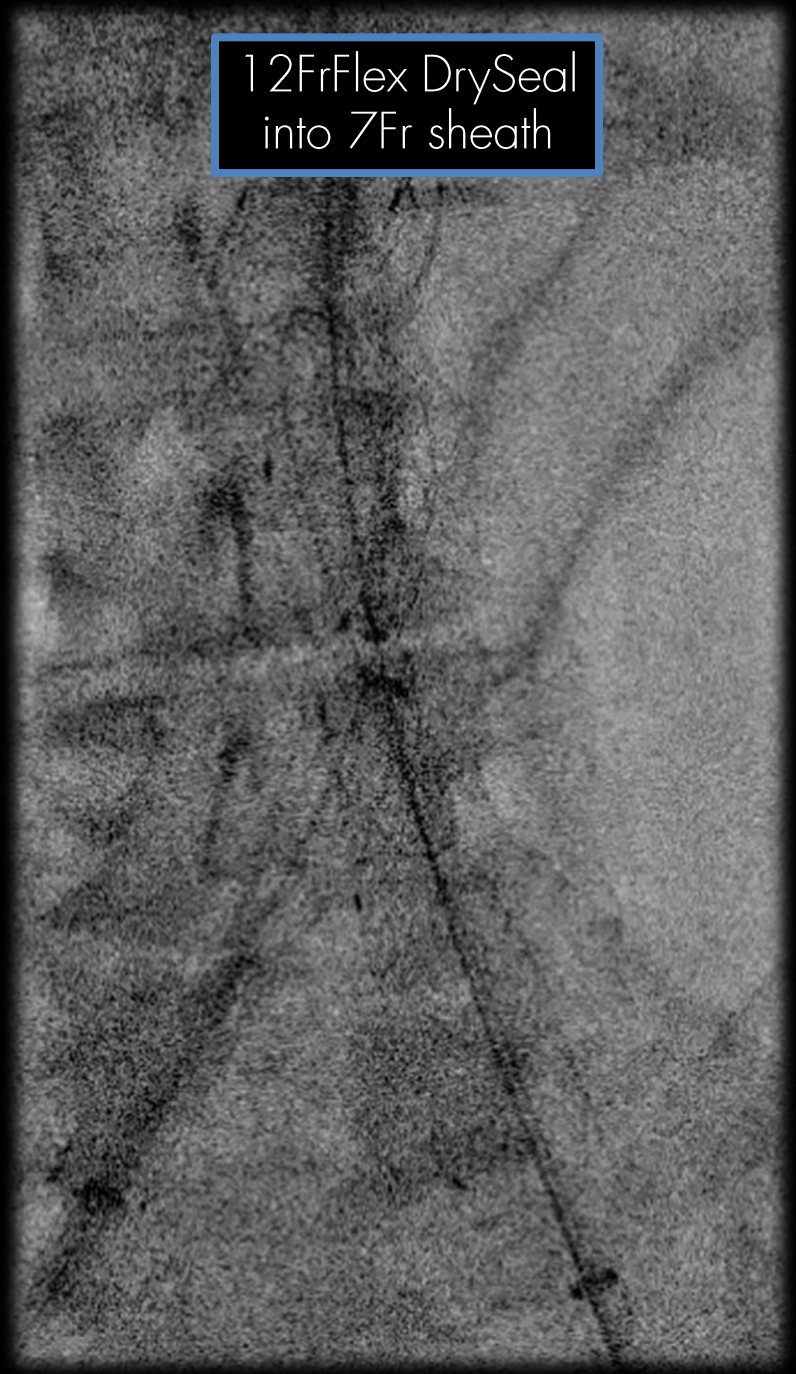

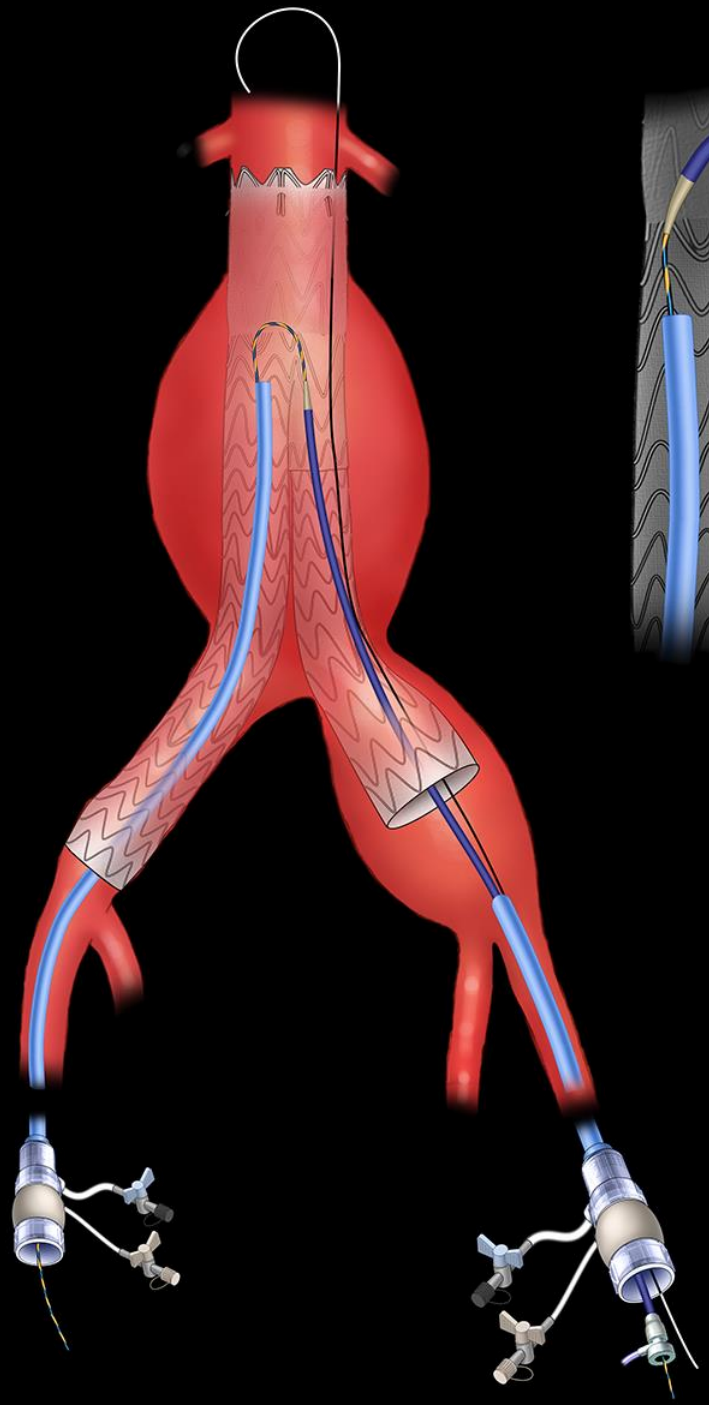

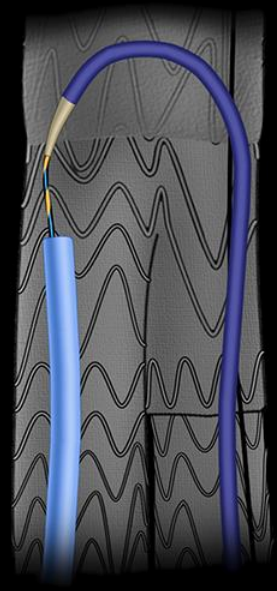

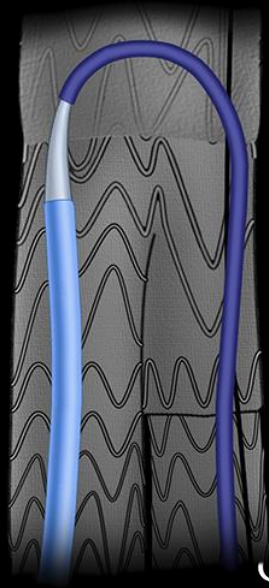

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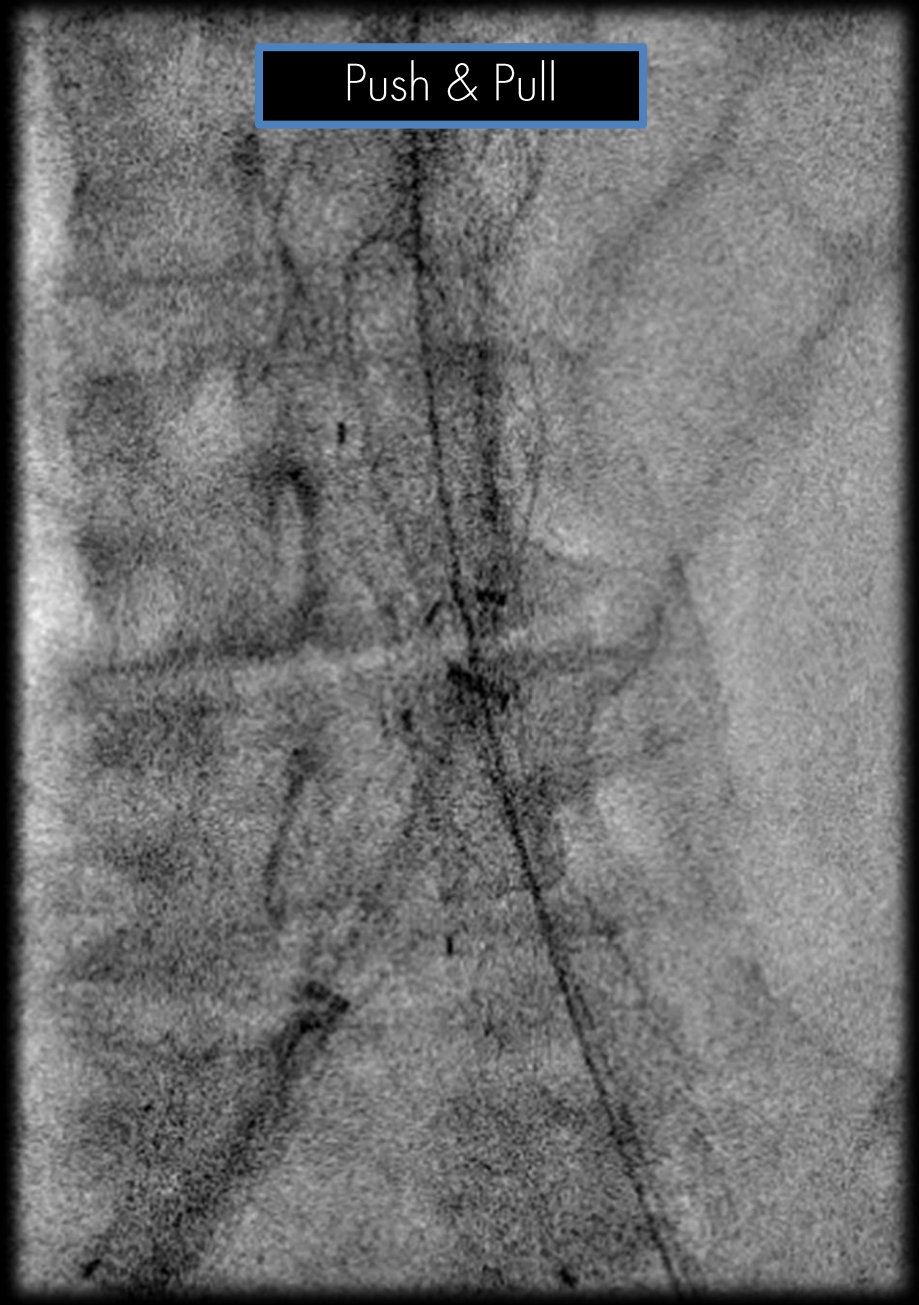
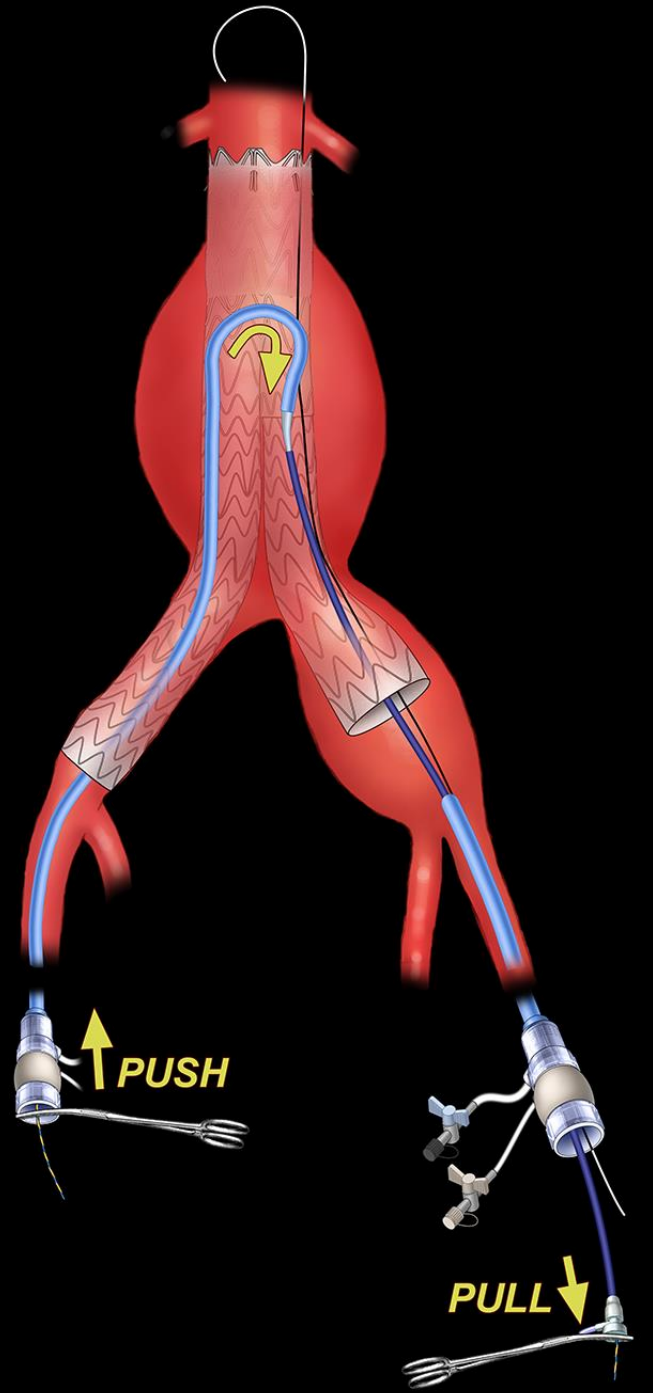
Push & Pull





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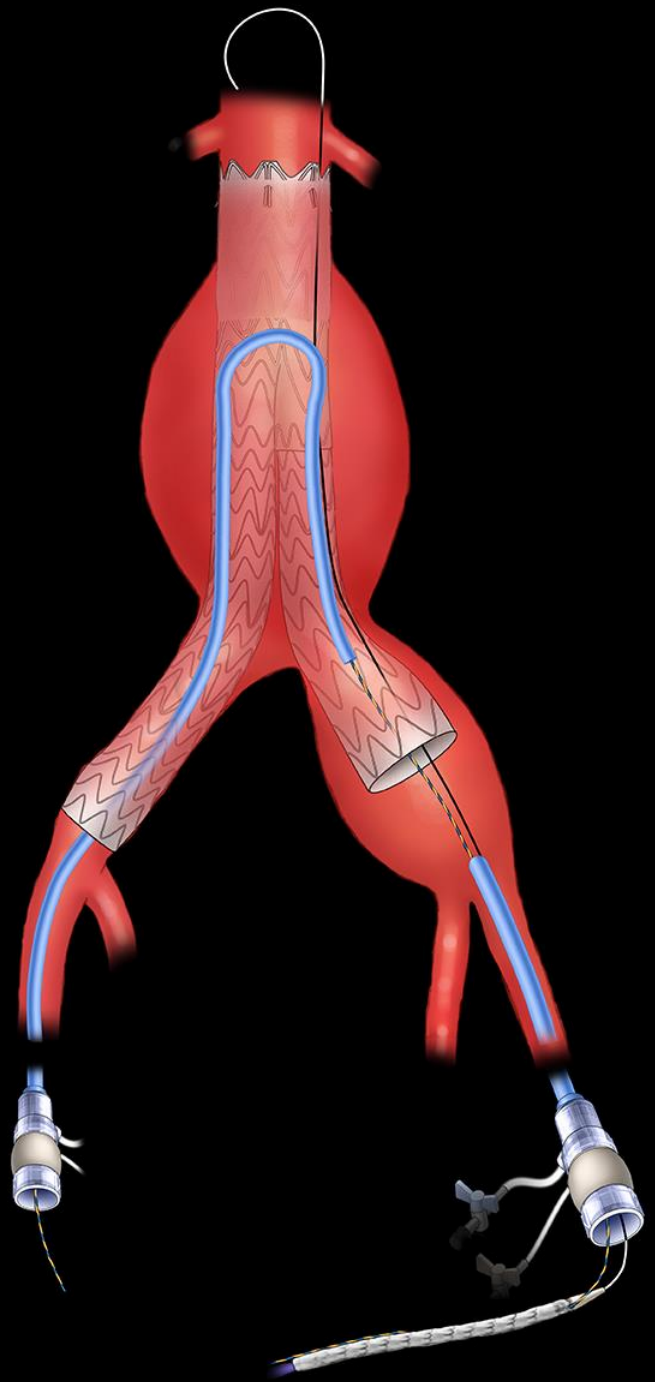

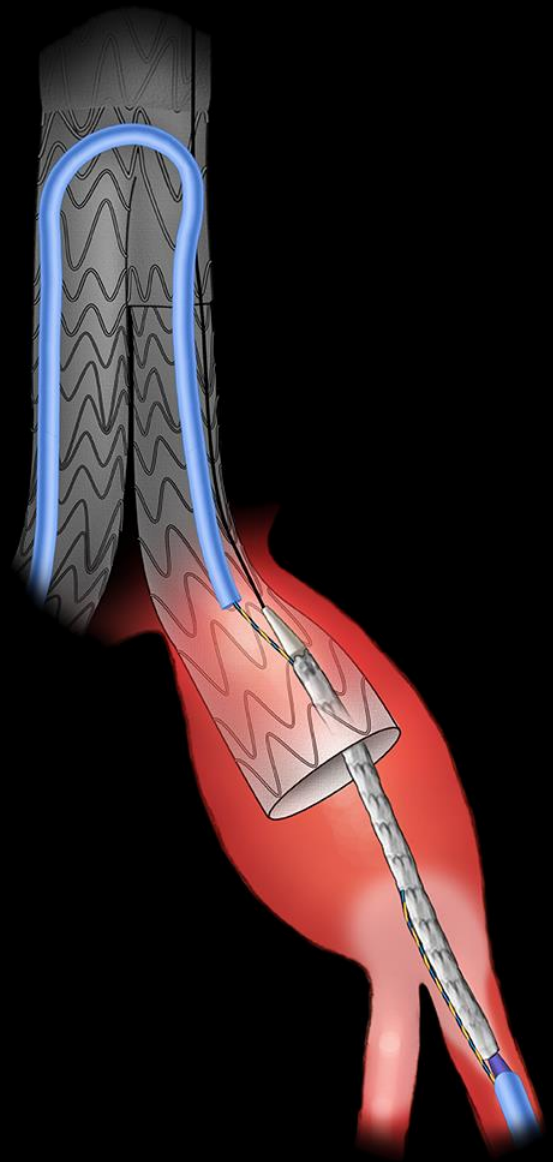

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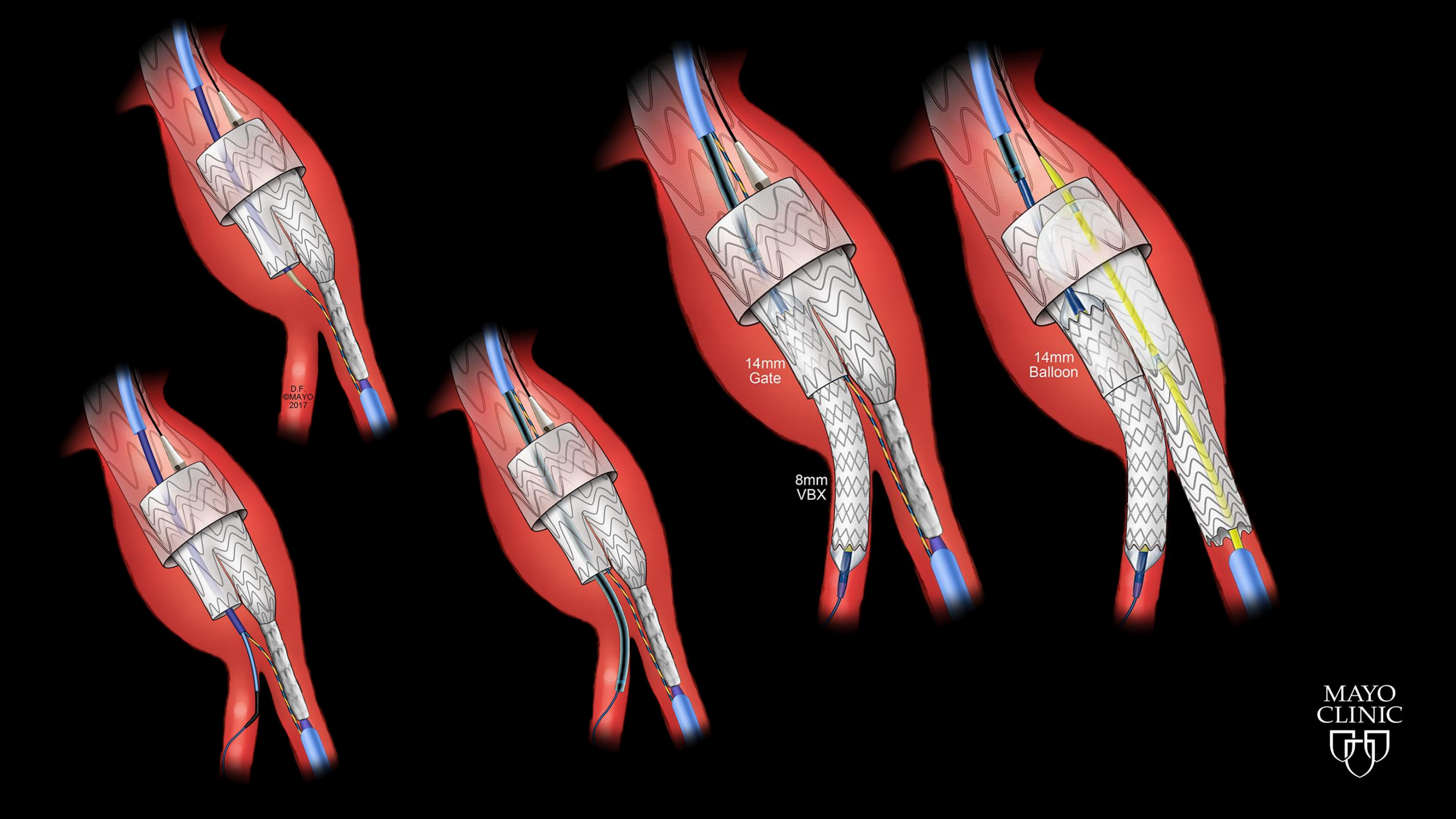
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Balloon
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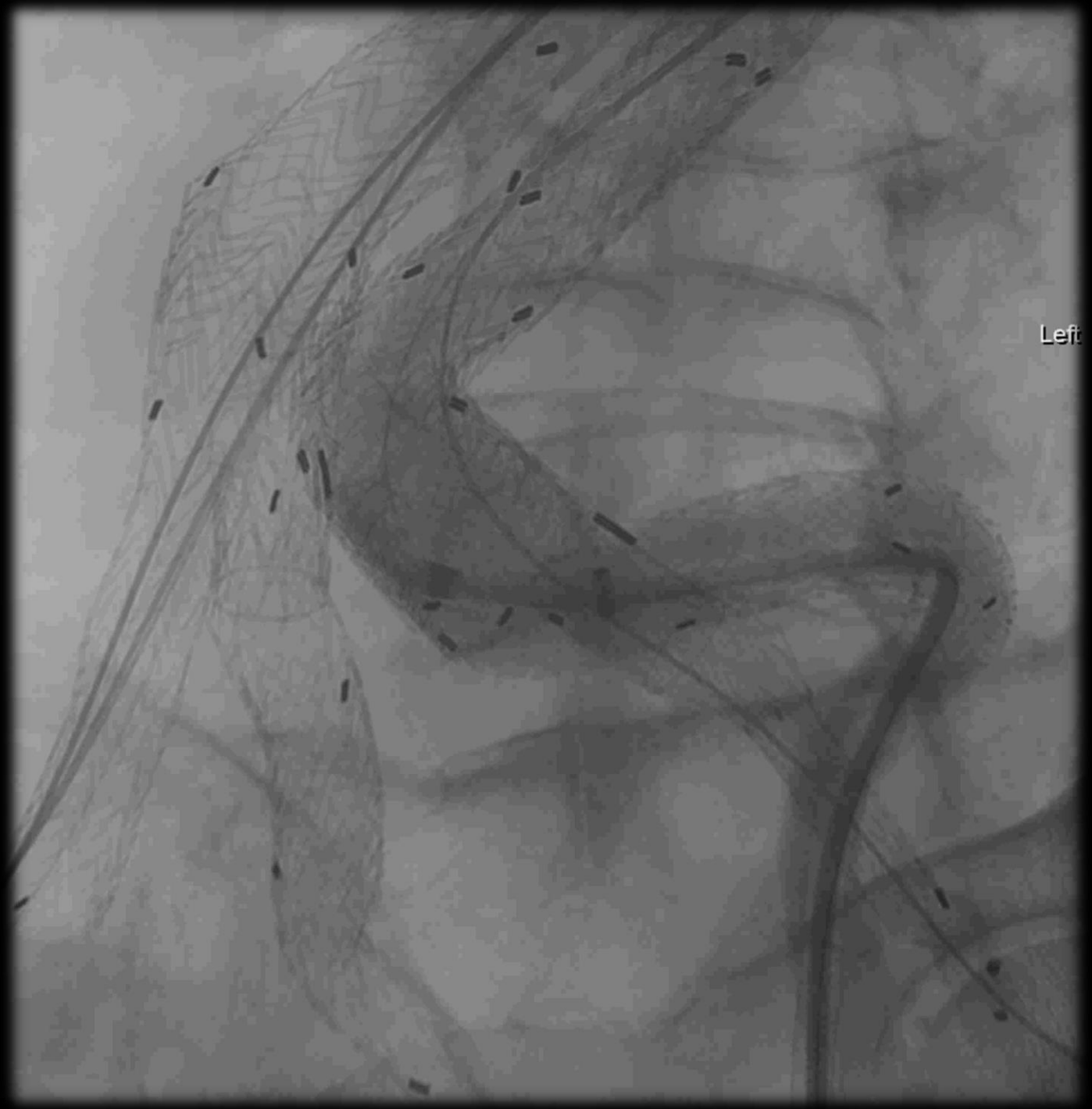

HOSPITAL COURSE

- Uneventful
- No complications
- Discharged POD1
- Stable creatinine

- 1 year follow up…

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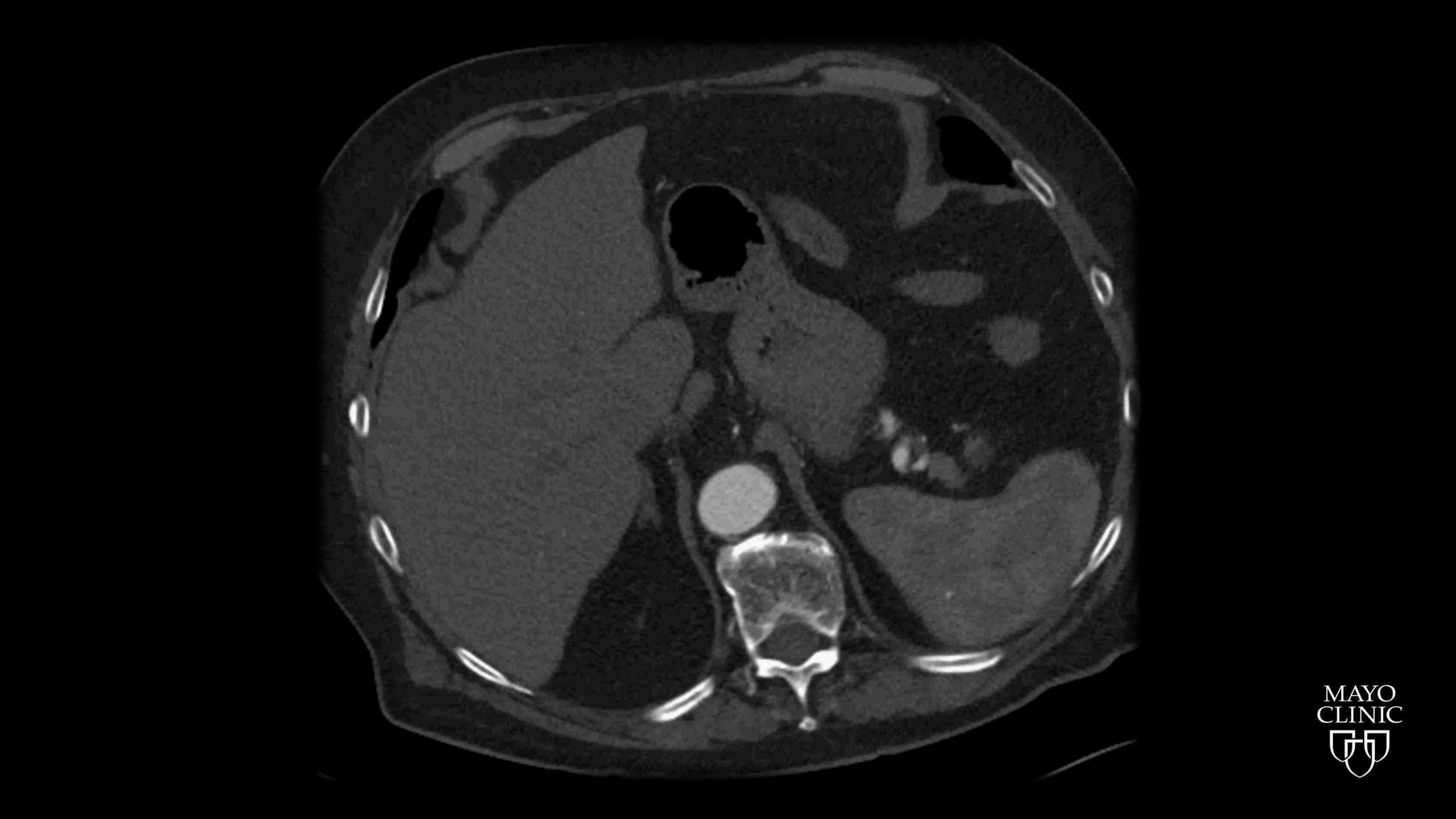
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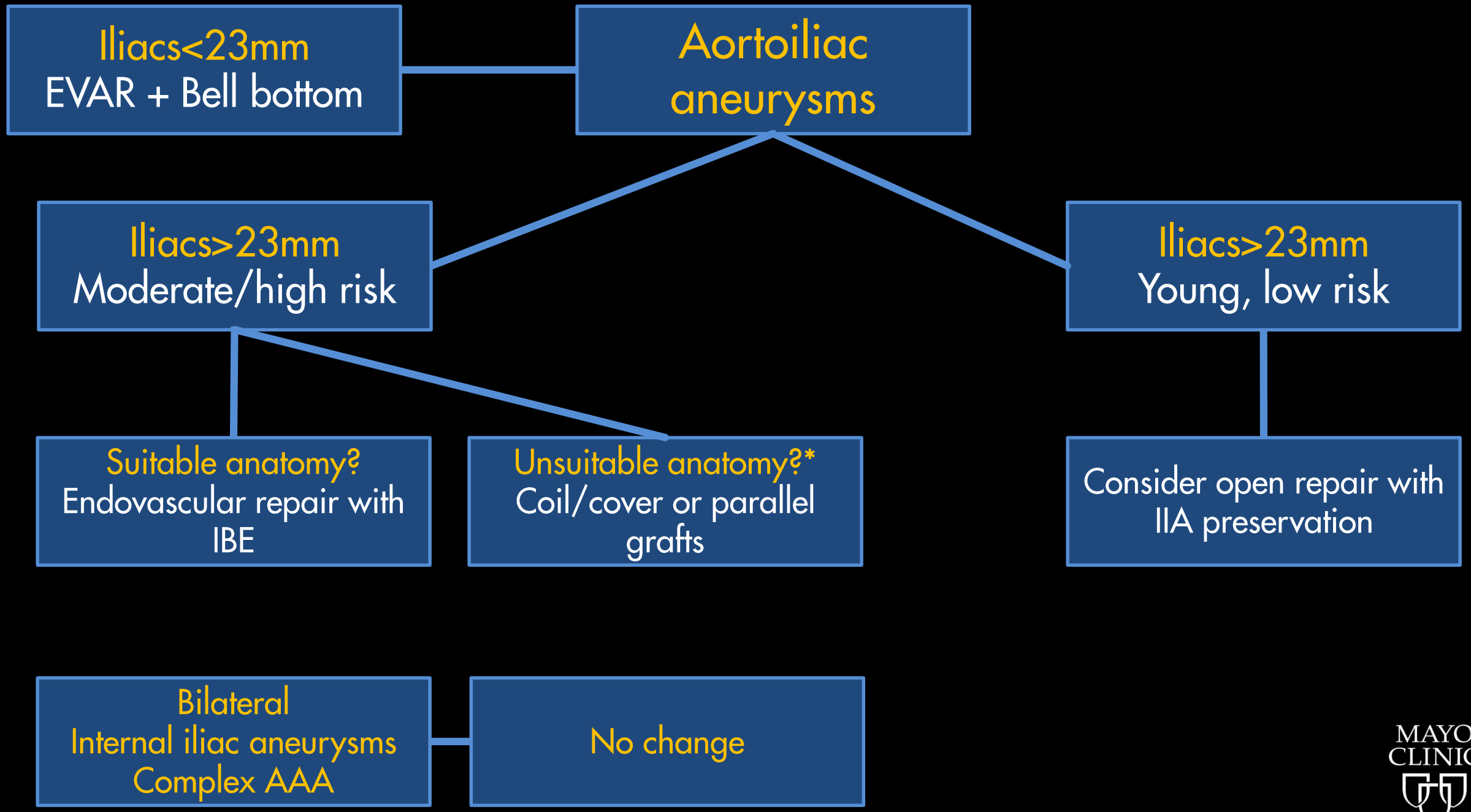
Iliacs<23mm
EVAR + Bell bottom
Aortoiliac aneurysms
Iliacs>23mm
Moderate/high risk
Iliacs>23mm
Young, low risk
Suitable anatomy?
Endovascular repair with IBE
Unsuitable anatomy?*
Coil/cover or parallel grafts
Consider open repair with IIA preservation
Bilateral
Internal iliac aneurysms
Complex AAA
No change

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CONCLUSION

- Endovascular repair is our preference in aortoiliac aneurysms
- Iliac branch cases can be technically challenging if performed outside IFU, but feasible utilizing advanced endovascular techniques and creativity
- Long term results mostly available in cases performed under IFU, but anecdotal experience suggests similar results in challenging anatomies