

Successful Endovascular Repair of a Complex Abdominal Aortic Aneurysm with Multiple Postoperative Complications

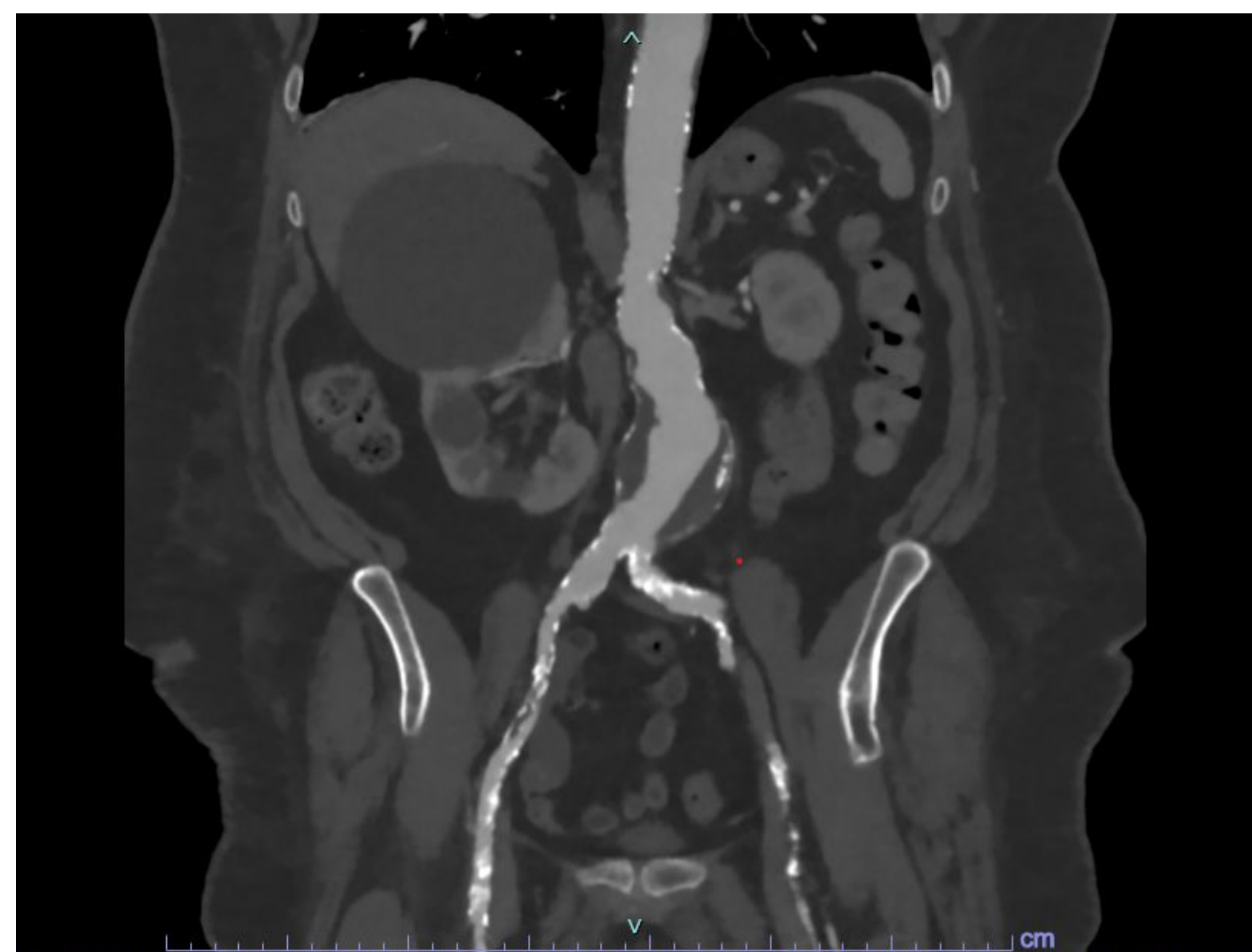
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PURPOSE

- Review series of complications ensuing initially aborted endovascular aneurysm repair (EVAR) and subsequent delay in definitive management of infrarenal abdominal aortic aneurysm (AAA)
- Discuss effectiveness of vascular surgery to resolve severe complications and significantly improve patient outcomes in high-risk cases

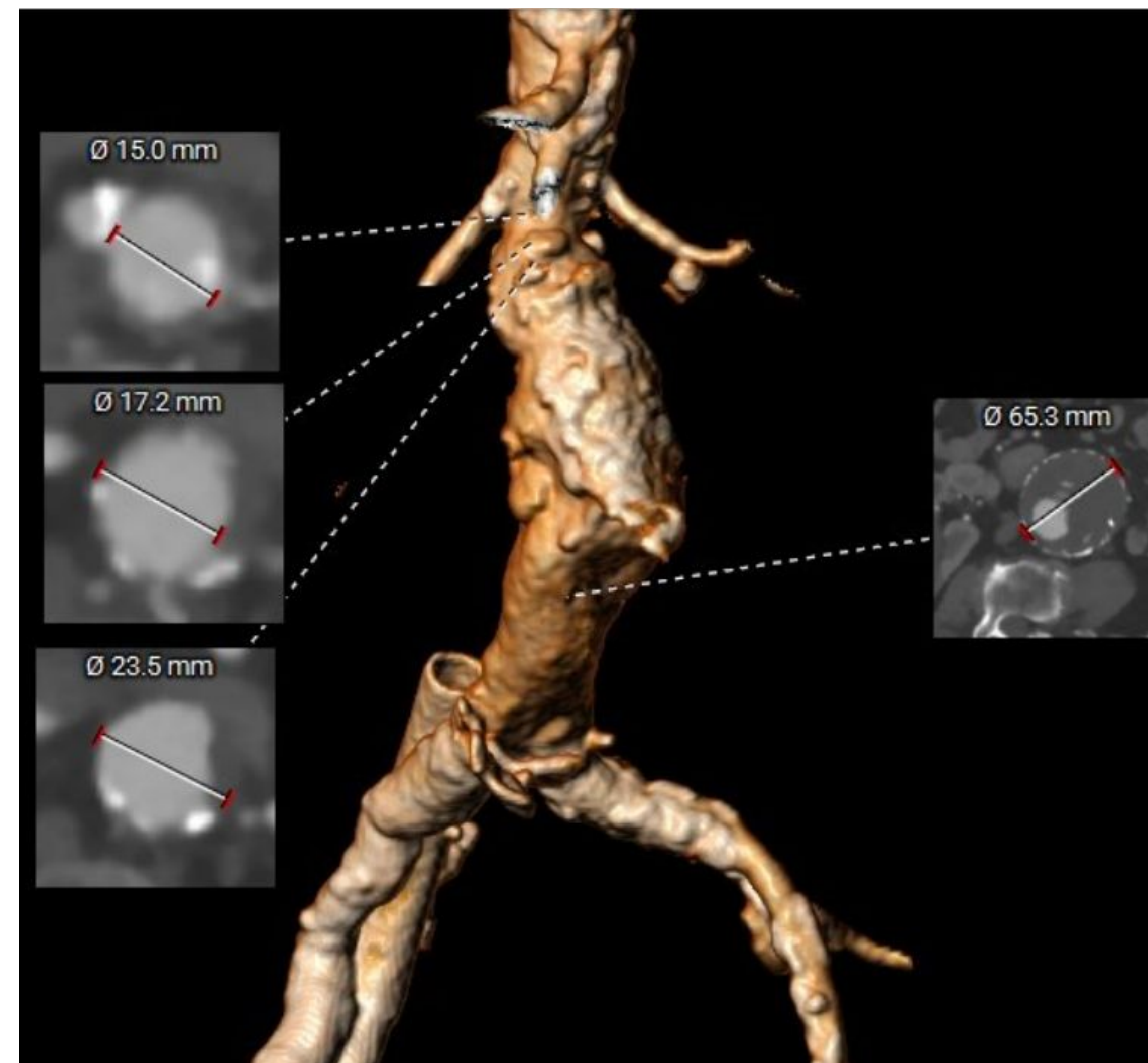
MATERIALS AND METHODS

- 79-year-old female presented for EVAR for 5.5 cm infrarenal AAA with interventional cardiology. The procedure was aborted due to following complications:
 - Right iliac artery perforation controlled with multiple covered stents.
 - Large retroperitoneal hematoma causing mass effect and compression on right iliac vein
 - Right lower extremity deep vein thrombosis (DVT), requiring thrombectomy, thrombolysis, and iliac vein stenting.



- Patient also underwent left lower extremity angiogram with same interventionist after reporting lifestyle-limiting claudication. No intervention was pursued due to her unaddressed aneurysm.
- Over the following three years, the aneurysm grew to 6.5 cm.

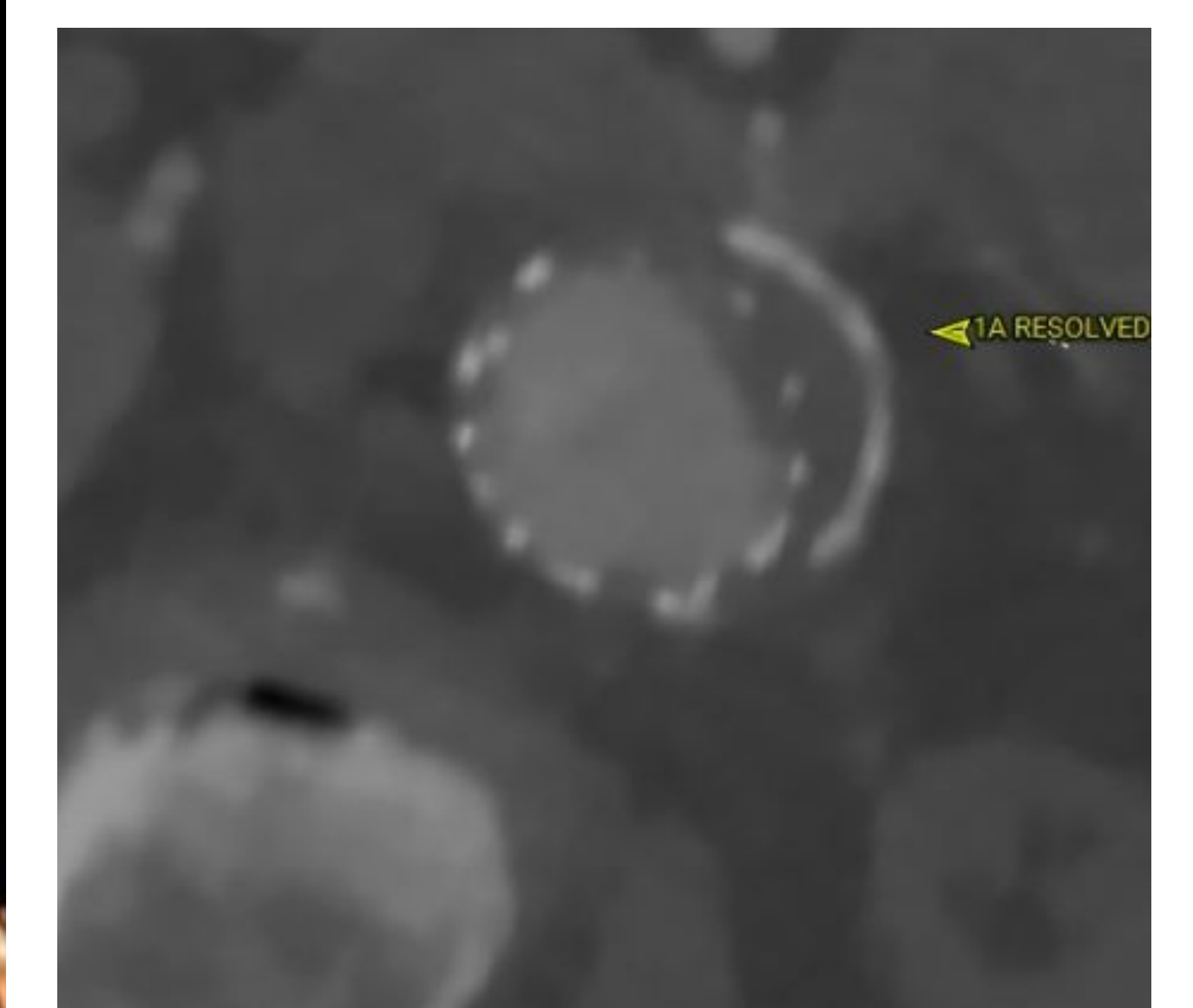
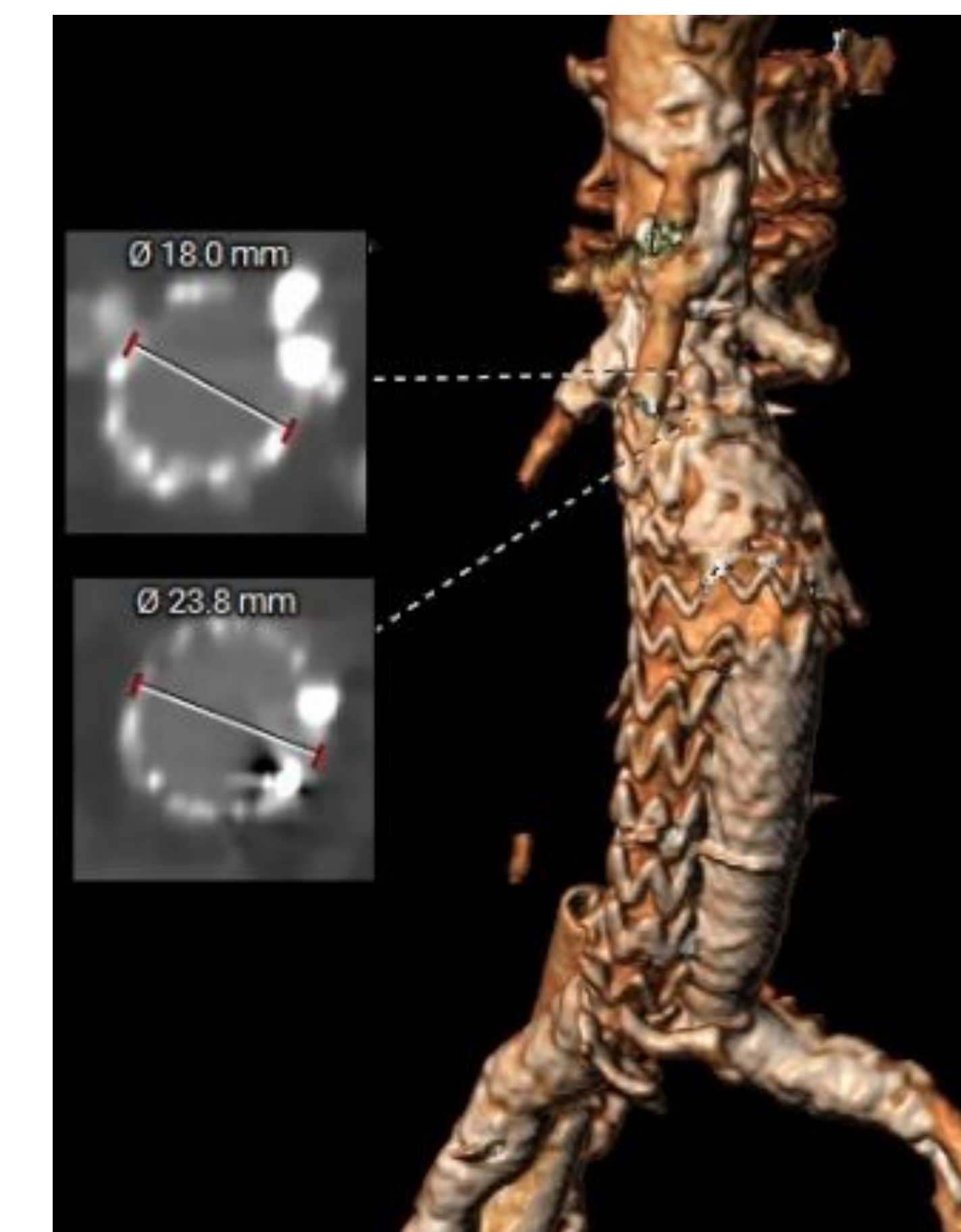
RESULTS



- Index Operation
 - Right femoral and axillary artery cutdowns
 - Percutaneous access of left femoral artery
 - Aorto-bi-iliac endograft (Endurant) placement
 - VBX stents used for left limb extension
- Patient lost to follow-up.
 - After 1 year, type Ia endoleak with enlarging aneurysm sac (7.8 cm) identified on CTA.

RESULTS

- Proximal aortic cuff placement with bilateral renal artery snorkels
- Heli-FX EndoAnchors.



- Follow-up CTA at 6 months identified a type II endoleak with sac enlargement (8.3 cm)
 - Angioembolization of the left iliolumbar artery
- CTA at 1 month obtained showed no endoleak and stable aneurysm sac size.
- CTA at 1 year showed no endoleak and sac regression (8 cm)

CONCLUSION

- Due to the significant delay in definitive management, the aneurysm grew in size, limiting treatment options and predisposing the patient to complications such as type IA endoleak after appropriate management was performed.
- The patient's successful outcome underscores the importance of comprehensive surgical strategies and meticulous postoperative follow-up.