



Single-stage Total Aortic Replacement After TEVAR In Patient With Mega-aortic Syndrome

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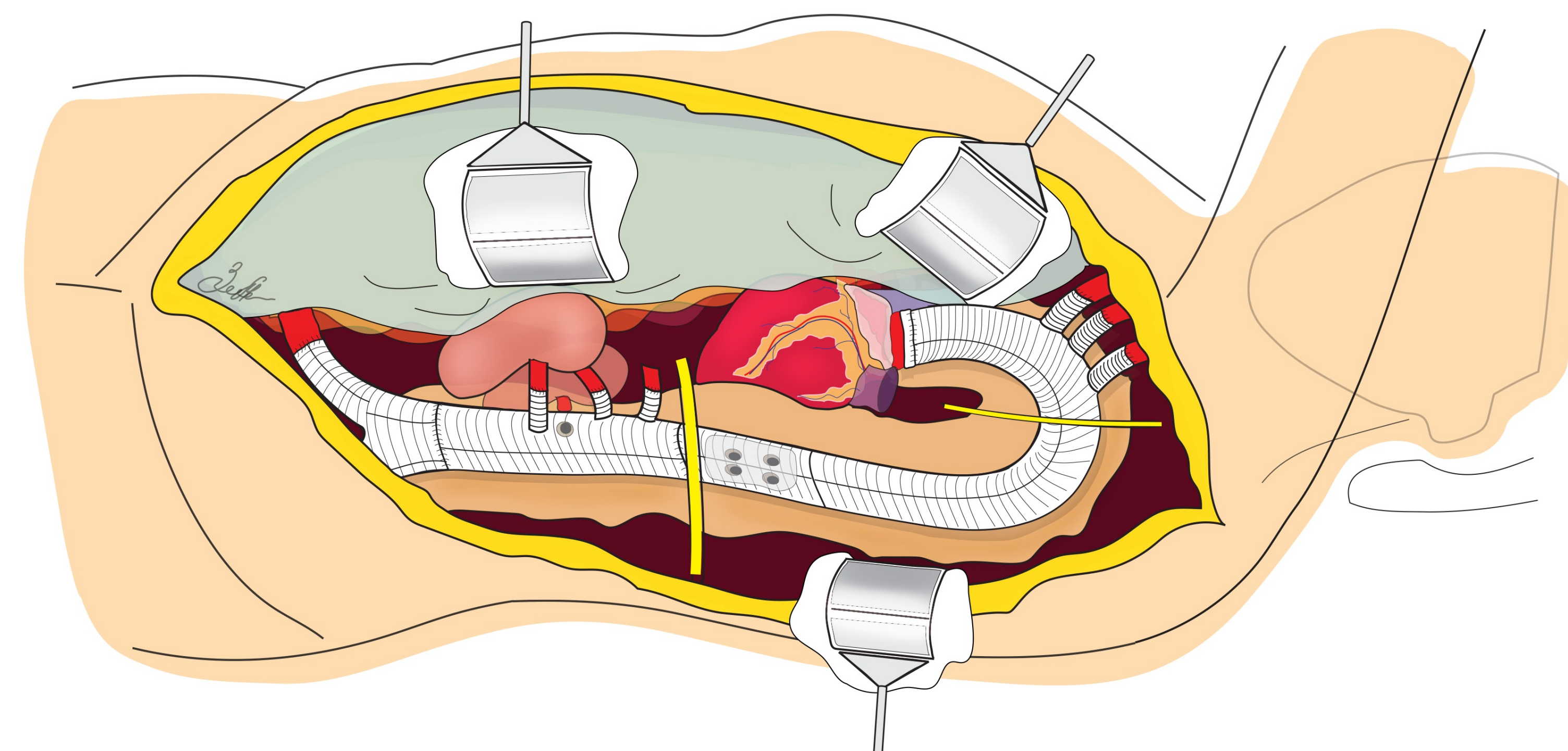
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Introduction

- ✓ The mega-aortic syndrome (MAS) is a relatively rare disease that causes the aneurismal transformation of the whole aorta
- ✓ The choice of surgical approach for treating young patients with MAS remains a challenge
- ✓ Most surgeons have been used staged open or hybrid approach, but results of the cumulative mortality of two major aortic intervention are unsatisfactory
- ✓ We present our technique of single-stage total aortic replacement through thoracophrenilumbotomy incision for the patients with MAS

Background

- ✓ We present a case of successful simultaneous whole aortic replacement in a patient with MAS and multiple primary aortic procedures



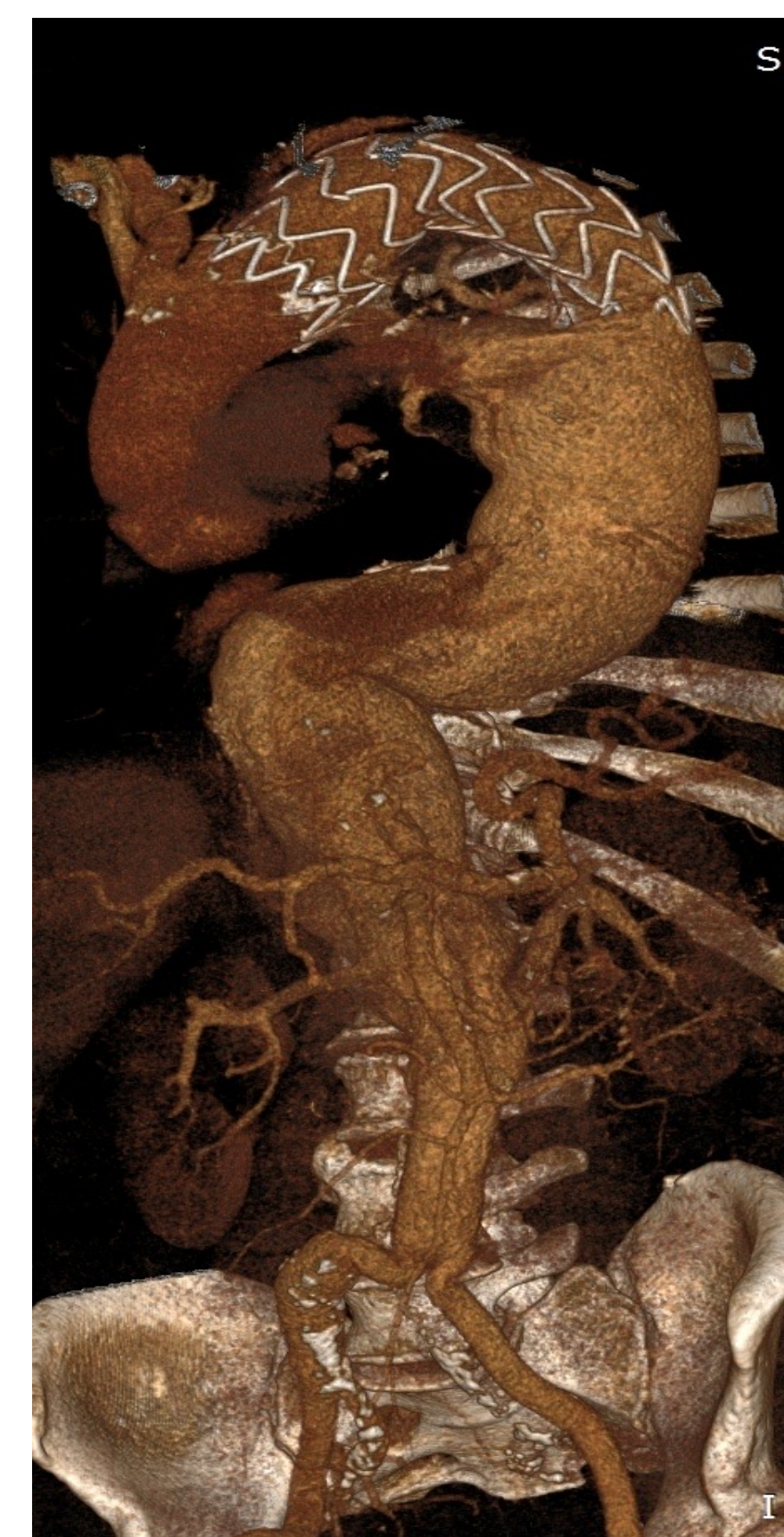
Patient

58 years old
MAS and chronic Stanford type B aortic dissection

- In 2017 he underwent:
- in March - subtotal debranching of the aortic arch,
 - in May - infrarenal abdominal aorta replacement,
 - in June - TEVAR

Methods

- ✓ In follow up patient have the type IA and IB endoleaks
- ✓ The aortic diameters of the patient grew negatively, and the maximum diameter increased 100 mm



Type IA endoleak



Type IB endoleak



A single-stage total aortic replacement was performed from the level of the sinotubular junction to the level of the infrarenal aorta prosthesis with brachiocephalic and visceral branches repair using moderate hypothermia 28 C, antegrade selective perfusion of the brachiocephalic and visceral arteries via thoracophrenolumbotomy in the 4th intercostal space.



Operation time was 8.5 hours



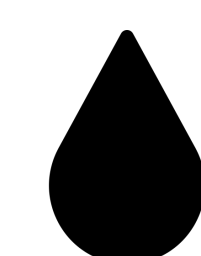
Myocardial ischemia was 47 minutes



CPB time was 220 minutes



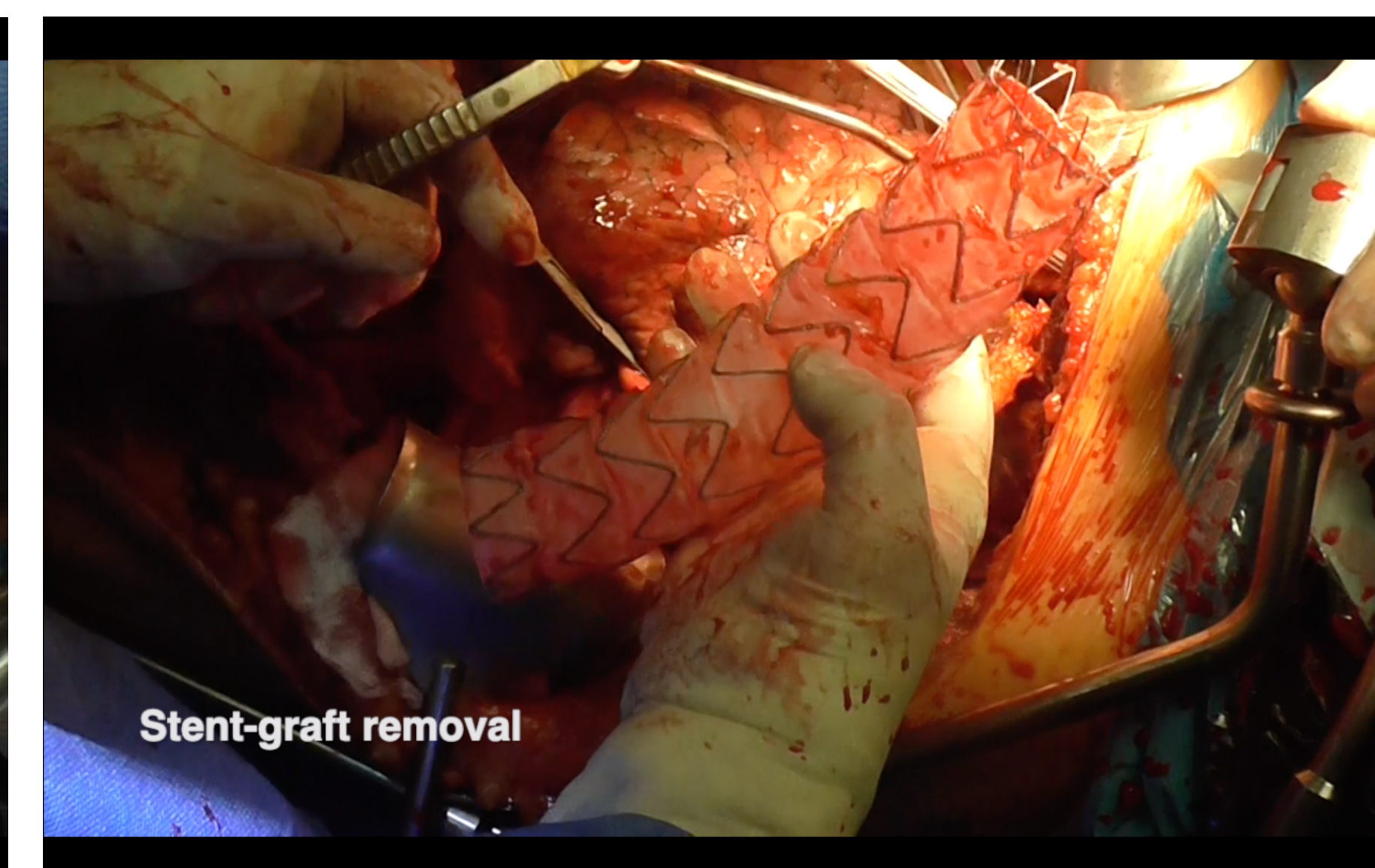
Circulatory arrest was 24 minutes



Intraoperative blood loss was 3500 ml



Thoracoabdominal aorta exposure



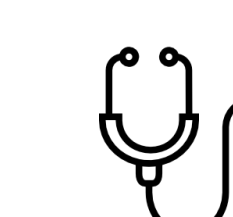
Stent-graft removal



ICU stay was 6 days



Hospital stay was 18 days



Moderate respiratory failure symptoms and a superficial wound infection in the thoracotomy access were present



4 years FU without re-intervention



Conclusions

- ✓ In patients with MAS, it is possible to replace the total aorta simultaneously using thoracophrenolumbotomy instead of the staged approach. By using this approach, radical replacement can be done in one stage and the risk of repeated interventions on the aorta can be minimized

The authors declare no relevant conflict of interests regarding this poster