



# Staged Complex Endovascular Repair of Ruptured Extent III Thoracoabdominal Aortic Aneurysm

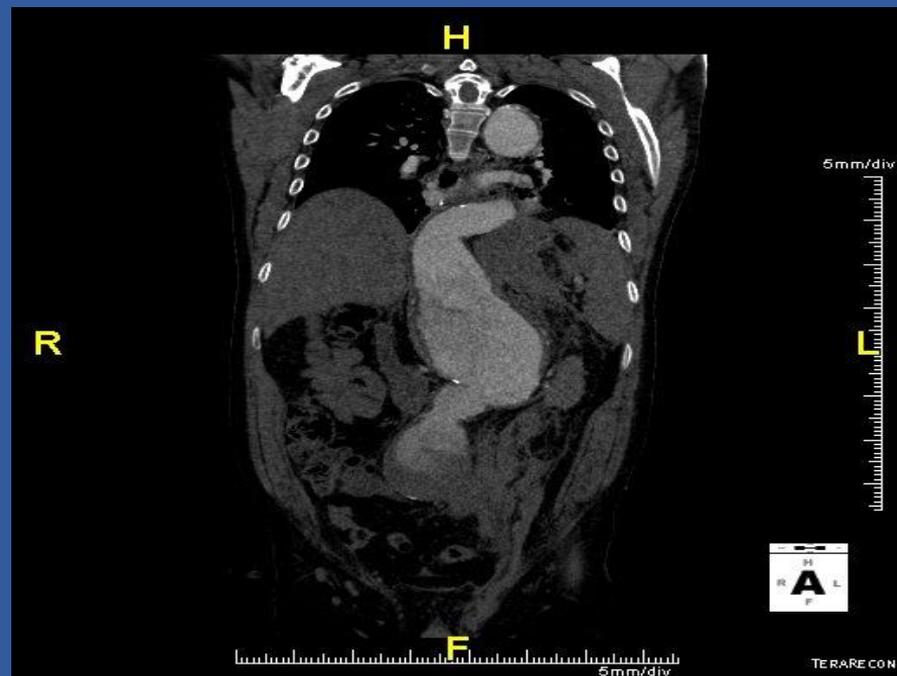
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# Introduction

- Emergency repair of ruptured TAAA is challenging.
- We describe successful staged endovascular treatment of ruptured extent III TAAA using a physician modified fenestrated endograft to exclude the proximal ruptured segment followed by standard EVAR to exclude the aneurysmal infrarenal aorto-iliac segment.

# Case Report

- A 49 year old man was transferred to our centre with a contained ruptured extent III TAAA.
- The aneurysm had a dumb-bell morphology with a 10cm diameter component involving the visceral and renal arteries which had ruptured and a 7.5 cm diameter juxtarenal component below a short tortuous segment of ectatic aorta.
- Numerous co-morbidities.



## First Stage

- The first stage was performed as an emergency.
- A proximal thoracic device, physician-modified 4-vessel fenestrated device and a distal thoracic cuff extending the repair into the infrarenal aorta and sealing in the tortuous ectatic pararenal aorta.
- The aneurysm was successfully excluded with perfusion of all four target vessels.
- The patient recovered from the first procedure without any complications and was discharged home.

## Second Stage

- Ten weeks later, the patient was admitted for elective repair of the infrarenal aorto-iliac aneurysm
- A standard bifurcated device extending into both external iliac arteries with sacrifice of the left internal iliac artery (IIA) aneurysm using a vascular occluder plug and preservation of the right IIA with an external iliac to internal iliac artery bypass.
- The patient made an uncomplicated recovery from the procedure.

# Follow Up



Post Second Stage CT Scan 3D  
Reconstruction

# Conclusion

- A staged endovascular approach is feasible in a haemodynamically stable patient with a ruptured TAAA provided a temporary distal seal can be obtained.
- Such an approach can limit the risks associated with extensive aortic coverage and a long complex procedure performed out-of-hours.