

Right Anterior Minithoracotomy For Thoracic Endovascular Aortic Repair After Prosthetic Graft Replacement Of The Ascending Thoracic Aorta

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BACKGROUND

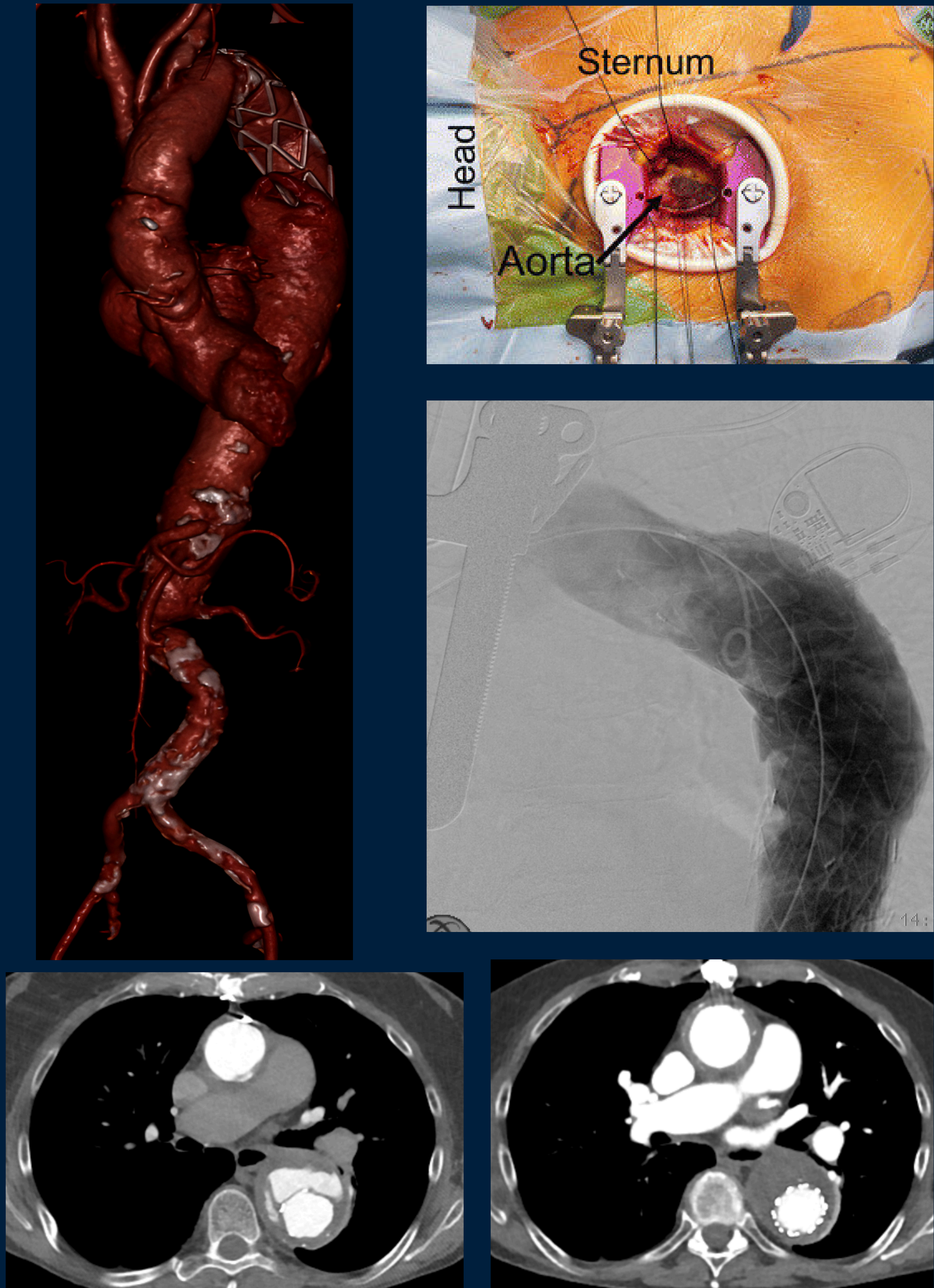
Standard Access Route: Common femoral artery for TEVAR.
Challenges: Peripheral arterial disease complicates this route in patients with comorbidities.
Alternative Route: Considering alternative access routes for TEVAR is essential.

CASE PRESENTATION

Patient Demographics:
3 patients (2 male)
Mean age: 62 years

Conditions Treated:
2 patients: Degenerative aneurysms of the descending aorta
1 patient: Penetrating aortic ulcer

Comorbidities:
Severe COPD in one patient
High-risk patients post aortic surgery for type A aortic dissection



METHODS

Study Period: December 2021 - June 2023
Procedures:
5 TEVAR procedures using ascending aortic prosthetic graft via right anterior thoracotomy (right third intercostal space)
Selection Criteria: Patients with contraindications for one-stage replacement of thoracoabdominal aortic aneurysm due to high surgical risk and comorbidities
Surgical Procedure
Approach: Right anterior thoracotomy for accessing the ascending aorta prosthetic graft
Deployment of stent-graft in the descending aorta

Post-operative Outcomes

- 1 30 days mortality: 0%
- 2 No endoleaks
- 3 26 weeks followup
- 4 No procedure related death in 6 months

RESULTS & DISCUSSION

Postoperative Outcomes:
• 30-day mortality: 0%
• No endoleaks observed
Median follow-up: 26 weeks using contrast-enhanced CT
Midterm follow-up (6 months): No deaths related to stent-graft implantation

CONCLUSION

Findings:
• Right anterior thoracotomy offers a viable access route for TEVAR when femoral access is compromised
• Effective for patients with peripheral artery disease and high-risk profiles post aortic surgery

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