Demonstration (crazy arch case)
Type A dissection

Thomas Larzon MD, PhD
Dept of Cardiothoracic and Vascular Surgery
Örebro University Hospital, Sweden
Disclosures

I have the following potential conflicts of interest to report:

Educational Program       W.L Gore & Associates
Consultant               Covidien
Stockholder               LeMaitre
Clinical presentation @ regional hospital

- 57 Y.O. Woman
- History: Hypertension, Turner’s syndrome.
- No former heart disease.
- Sudden onset of chest pain that irradiated dorsally followed by nausea, paleness and sweating
Clinical presentation @ regional hospital

- In the Emergency Room: EKG with no specific changes but coronary infarction was suspected and aspirine and clopidogel was given
- Acute CTA was performed
Type A dissection with heart tamponade
Clinical presentation @ regional hospital

- Circulatory collapse
- US: beginning heart tamponade
Initial treatment @ regional hospital

• Subxiphoid pericardial window in the OR
• During transport to the helicopter ramp patient once again suffered circulatory collapse
• Back in the OR a stenotomy was performed
• Pulsative bleeding from the aortic root was controlled by a patch
• Helicopter transport with open chest to the tertiary center
Treatment @ tertiary center

- At arrival internal heart massage was performed due to ventricular fibrillation
- Support by heart lung machine in 7 minutes
- ECC with deep hypothermia (25º)
- Resection of the ascending aorta and implantation of a short ascending graft
Postoperative CTA
Postop care @ tertiary center

• Neurological intact
• Discharged to the regional hospital @ day 8
Postop care @ regional center

- Deterioration of organ functions
- Need for hemodialysis
- GI bleeding
- Decreased peripheral circulation (Ankle pressure=30mmHg)
- Transported back to tertiary center @ day 21
Preoperative CTA
Preop angiography and TEE
What is stupidity?

Stupidness = having or showing a lack of ability to learn and understand things

*Encyclopædia Britannica*
Stentgraft deployment
Postoperative examination

- No permanent increase of ABI
- Continued organ dysfunction @ day 25
Second Procedure Plan

- Aortic arch debranching to cover all entries proximal of the stentgraft
- No additional chest surgery
- Chimney technique to preserve the brachiocephalic trunk and the left carotid
- Left carotid-subclavian bypass
Second procedure
Second procedure
Second procedure
Second procedure
Second procedure

- Reversed Gore limb PXE121000 in the trunk
- Gore Viabahn 7x10cm with 8x5cm extension in the left carotid
Second procedure
Postop care @ tertiary center

- Improvement in general condition
- Discharged to the regional hospital @ day 32
Postop care @ regional hospital

- Gradually further improvement
- Free from dialysis
- Discharged to a rehab center @ day 51
- Discharged to home @ day 74
Follow-up CTA

postop

30-day
Follow-up CTA
Conclusion

• There are no short-tracks – Treat the proximal entry(ies) first
• Chimney technique is a feasible tool but type I endoleak is a problem
• Try to expand the sealing zone by coming close to the coronary ostiums
• The value of team approach