Proximal Extension after FEVAR

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FEVAR

- No doubt best endovascular option for “pararenal” AAA
- Not “immune” to extension of disease
- Not “immune” to wrong evaluation
Strategy in modern FEVAR

• Far more 3-4xFEVAR than 2xFEVAR
  – (2xFEVAR is out...)
  – SMA stenting safe and easy

• 4xFEVAR without stenting of the Celiac artery
  – (Needed?)
FEVAR Failure

• Due to Extension of Disease
  – Counter by starting higher/adding fenestrations/keeping later options open

• Misjudgement
  – Lateral View
  – Whole Thoracic Aorta
Patient #1 (F372)
Repair of previous FEVAR
Partial opening of graft...
Patient #2 (TAB312)
Overview

- 71 YO Male
- 2011
  - Juxtarenal AAA
    - Dmax: 54 mm
- Co-morbidity
  - CAD
Proximal Neck

→ Proximal neck length: 4-5mm, conical
Dilated Aorta

→ Dmax above Celiac trunk: 36-37mm...
Plan

• 3x FEVAR
3x FEVAR

Abdomen nach OP
Postop CTA

36mm
CTA @ 2 years

41mm
CTA @ 6 years

45 mm
Treatment Plan

- Redo F/BEVAR
  - 1x ↓ Branch for CA
  - 3x Fenestrations
Graft Plan

Diagram showing measurements and markings on graft plan.
Proximal Thoracic Components
Pre-Catheterisation with re-flaring
Catheterisation via Fenestrations
ANL Sheaths with Pre-Ballooning
Stenting of Renal Arteries
SMA & CA Stentig
Final Angiography
CTA @ 1 Month
Technique for Fenestrated Stent-Graft Implantation as a Proximal Extension to a Previous Fenestrated Endovascular Repair for Abdominal Aortic Aneurysm

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Proximal Extension of Disease after FEVAR (N=493)

- Repaired: N=3
- Died before repair: N=2
- In observation... : N=4
Suprarenal aorta does not seem to dilate significantly over time (5 studies)

Differences in stiffness, thickness between suprarenal and infrarenal aorta

Fenestrated EVAR has shown low rates of migration and type I endoleak, although AND following fenestrated EVAR has not been investigated adequately.
Take Home Message
Strategy in Nuremberg

- Standard EVAR only in good neck anatomy
  - Critical and Conservative Appraisal of CTA
- 2xFEVAR virtually abandoned....
- In dilated thoracic aorta 4x FEVAR

- Aggressive (selective) approach:
  - more durable results
  - easier repair in case of extension of disease....
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