The Usage of BX over SX covered Stents to Improve the Clinical Outcome in F/BEVAR

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- Bentley
  - Part of “Early Launch” Group of the BeGraft+
  - Consultant
Why stent?

Original Reason:
To guarantee option to re-catheterize the target vessel
(John Anderson)
Why Covered BE Stent?

• Pararenal AAA/TAAA
  – Fenestrations
  – Branches
• Patency
  – Mohabbat, Greenberg et al.
  – Personal experience (Groningen/Münster)
• Precise deployment
• Conformability
Purpose of Relining (with SE uncovered Stent)

- To prevent kinking in BE covered Stent (but also in SE covered Stent)

- To smoothen Transition with Target Vessel
Outcomes of Bridging Stent-grafts in F/B Grafting

• Overall: excellent

• No comparative studies

• Renal Arteries: Fenestrations seem to do better than Branches
Personal Strategy/Choices

• FEVAR
  – Advanta V12
  – BeGraft (27/28mm length)

• BEVAR
  – BeGraft+
  – VBX (79mm length)
Advanta V12 Characteristics

- V12 with flared end
- V12 with cone shape
Nürnberg Experience*
Advanta V12 Patency (N=1619)

98.8 ± 0.3% at 1 year
96.4 ± 0.8% at 5 years

*Only Pts treated and followed in NUE
Patient #2

- 61 YO Male Pt

- 3xFEVAR
  - RRA: Advanta 6x22
  - LRA: Advanta 7x22
  - SMA: Advanta 8x38 + 8x40 SE
SMA

1 Month

4 Years
RRA & LRA

1 Month

4 Years
BEVAR
BeGraft/BeGraft+
Kink Resistance

BeGraft
(8x57mm)

BeGraft PLUS
(8x57mm)
Use in F/B grafts

• BeGraft+ in Branches
  – High radial force, kink-resistant and flexible
  – Visibility ++

• BeGraft in Fenestrations
  – Visibility ++
  – Available in all diameters and lengths
    • Lengths: 22/23, 27/28, 37, 57
BeGraft\textsuperscript{+}
Nürnberg Experience with BeGraft\(^+\) (initially tested in „difficult anatomy“)

- **Patients:** N=67 (BeGraft\(^+\): N=118)
  - Branches in TAAA patients: N=97
  - IBD branches: N=21

- **Related Complications and Outcome**
  - Disconnection due to advancement of sheath: N=1
  - Occlusion: N=1 (1%) due to Transition Problem
Case Example #1

- 80 YO Female
- Type I TAAA
  - Dmax:90mm
- Comorbidity
  - CAD
- Plan: T-Branch
Target Vessels

6mm
5.5mm

4mm

4mm
RRA (BeGraft+ 5x58)

- Overlap in branch
  - Dilated with a 6mm Balloon
LRA (BeGraft+ 5x58 + SE 5x30)

- Overlap in branch
  - Dilated with **6mm Balloon**
SMA (BeGraft+ 6x58)

- Overlap in branch
  - Dilated with an 8mm Balloon
Case Example #2

- 78 YO Male
- Type IV TAAA
  - Dmax: 86mm
- Comorbidity
  - CAD
- Plan: F/BEVAR + IBD
Graft Plan

- 2 inner Branches (RAs)
  - Diameter: 6mm
- 2 Fenestrations
Right Renal Artery

4mm
RRA (BeGraft+ 6x58)

- Partial dilatation within target vessel (7-8 Atm)

- Balloon withdrawal
  - Complete dilatation within branch (10-11 Atm)
Case Example #3

• 74 YO Female
• Type IV TAAA
  – Dmax: 76mm
• Comorbidity
  – CAD
  – Diabetes

• Plan: F/BEVAR
Graft Plan

- 1 Inner Branch (celiac)
  - Diameter: 8mm
- 3 Fenestrations
Celiac (BeGraft+ 8x57)

- Partial dilatation within target vessel (7-8 Atm)
Celiac (BeGraft+ 8x57)

- Balloon withdrawal
  - Complete dilatation within branch (10-11 Atm)
Conclusions
BE Covered Stents in F/BEVAR

• Easy to handle
• Versatile
• Now available in all lengths and diameters

• Excellent Patency Rates
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