Clinical Experience with the New BeGrafts: Potential Advantages?

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Disclosures

• William Cook Europe/Cook Inc.
  — Consultant & Research grants
• Getinge
  — Consultant
• Bentley
  — Part of “Early Launch” Group of the BeGraft+
  — Consultant

Off-Label Use in F/B grafts

Why stent?

Original Reason:
To guarantee option to re-catheterize the target vessel (John Anderson)

Why Covered BE Stent?

• Pararenal AAA/TAAA
• Patency
  — Mohabbat, Greenberg et al.
  — Personal experience (Groningen/Münster)
    • Uncovered versus covered (Atrium)
• 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

**Timelines BeGraft peripheral**

<table>
<thead>
<tr>
<th>Year</th>
<th>BeGraft Peripheral</th>
<th>BeGraft Peripheral - modified design</th>
<th>BeGraft Peripheral PLUS</th>
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<tbody>
<tr>
<td>2013</td>
<td>Launch BeGraft</td>
<td>Launch BeGraft</td>
<td>Launch BeGraft PLUS</td>
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<tr>
<td>2014</td>
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<td>2015</td>
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**Performance: Radial Force (Circumferential Load)**

- Lifestream (8x58mm)
- Advanta V12 (8x59mm)
- BeGraft (8x57mm)
- BeGraft PLUS (8x57mm)

- High radial force and still being flexible
- Visibility ++

**Off-Label Use in F/B grafts**

- BeGraft+ in Branches
  - High radial force, kink-resistant and flexible
  - Visibility ++
- BeGraft in Fenestrations
  - Visibility, easy to flare
  - Available in all diameters and lengths
    - Lengths: 22/23, 27/28, 37, 57
Case Examples BeGraft+

Case Example #1

- 79 YO Male
- Type III TAAA
  - Dmax: 67mm
- Comorbidity
  - CAD
  - 2x Previous Laparotomy

- Plan: 4x BEVAR (2 stages)

BeGraft+ Celiac Trunk

BeGraft+ SMA

Case Example #2

- 69 YO Male
- Type IV TAAA
  - Dmax: 60mm
- Fem-fem crossover (right→left)

- Plan:
  - 2x Inner Branches for RAs
  - 2x Fenestrations (SMA, CT)
  - IBD right

Postop CTA
Renal Arteries

Right Hypogastric Artery

BeGraft\(^+\)
RRA (Inner Branch)

BeGraft\(^+\)
IBD right

Postop CTA

Nürnberg Experience with BeGraft\(^+\)
(initially tested in "difficult anatomy")

- Patients: N=32 (BeGraft\(^+\): N=57)
  - Branches in TAAA patients: N=42
  - IBD branches: N=15

- Outcome
  - Occlusion: N=1 (1.8\%) due to Transition Problem
Case Example BeGraft

Case Example #1

• 56 YO Female
• Type II TAAA
  – Dmax: 62mm
• Previous Ascending Repair & FET
• Comorbidity
  – CAD
  – COPD
  – Renal Insufficiency

Plan

• 1st Stage
  – TEVAR

• 2nd Stage
  – F/BEVAR
  • 1 Inner Branch
  • 3 Fenestrations

2nd Stage (F/BEVAR)
Nürnberg Experience with Be-Graft (length 27-28mm)

• Patients: N=28 (BeGraft: N=52)
  – All fenestrations

• Outcome
  – Technical issues: N=0
  – Occlusions: N=0
  – Endoleaks: N=0

Conclusions

• BeGraft and BeGraft+ clearly newer Generation Covered Stents that seem more „Fenestrated and Branched“ dedicated
  – Visibility +++
  – Flexible and Kink Resistant +++
  – All lengths available!!

  – Transition with Target Vessel (mainly in branches)?
    • Still a reason to reline sometimes?