What treatment currently works best for long or complex SFA lesions?

Koen Deloose, MD

Type C lesions
- Multiple stenoses or occlusions totaling > 15 cm with or without heavy calcification
- Recurrent stenoses or occlusions that need treatment after two endovascular interventions

Type D lesions
- Chronic total occlusions of the SFA or popliteal artery (> 20 cm)
- Chronic total occlusion of popliteal artery and proximal trifurcation vessels

Disclosure slide

☐ I have the following potential conflicts of interest to report:
- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)
☒ I do not have any potential conflict of interest

pre-dilatation POBA
TASC C – D lesion

DCB - 3’

pre-dilatation POBA
TASC C – D lesion

DCB - 3’

REAL WORLD STUDY: IN.PACT GLOBAL: sub-cohort

Long Lesion sub-cohort > 150 subjects
Drug Coated balloons...

**REAL WORLD STUDY : IN.PACT GLOBAL : sub-cohort**

<table>
<thead>
<tr>
<th>Lesion baseline (164)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CTO</td>
<td>99/164</td>
</tr>
<tr>
<td>Severe Ca+++</td>
<td>32/164</td>
</tr>
<tr>
<td>Mean lesion length</td>
<td>26.40cm ± 8.61</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedural baseline (157)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-dil</td>
<td>141/157</td>
</tr>
<tr>
<td>Post-dil</td>
<td>61/157</td>
</tr>
</tbody>
</table>

Presented by D. Scheinert @ EuroPCR 2015, Paris, France

REAL WORLD STUDY : IN.PACT GLOBAL : sub-cohort

**pre-dilatation POBA TASC C – D lesion**

DCB - 3'

- FLD/RS>30%?
  - **YES**
  - Overload Ca++?
    - **VMI**
    - Popliteal?
      - **YES**
        - mission accomplished

**Drug Coated balloons...**

**REAL WORLD STUDY : IN.PACT GLOBAL : sub-cohort**

**Clinically Driven TLB**

- **6.0%** (8/134)
- **Primary Adverse Events**
  - **94.0%** (126/134)
- **Major Adverse Events**
  - **11.9%** (16/134)
- **Death (all-cause)**
  - **4.5%** (6/134)
- **Major Target Limb Amputation**
  - **0.0%** (0/134)
- **Thrombosis**
  - **3.7%** (5/134)
- **Any TLB**
  - **6.0%** (8/134)
- **Any TVR**
  - **6.0%** (8/134)

1. Any re-intervention within the target lesion(s) due to symptoms or drop of ABI of 20% or >0.15 when compared to post-index procedure baseline ABI
2. Composite of 30-day freedom from device- and procedure-related mortality and 12-month freedom from major target limb amputation and clinically-Driven TLB

**VMI Supera (Abbott Vascular)**

- **Low chronic outward force**
- **High radial resistive force**
- **Extremely high crush resistancy**

**9 kg of compression resistance**

**12 Month Data Across SFA Trials by Lesion Length**

**VMI Supera (Abbott Vascular)**

**Standard Nitinol Stents**

- **6.0 x 100 mm**

**Greater than 4x Compression Resistance**

**Supera 5.0 x 100 mm**

**Supera 6.0 x 100 mm**

©Medtronic Data on file
DCB + BMS modern generation...

No evidence yet, although more and more indications...

- 228 patients retrospective, propensity score analysis (lesions ~19cm)

Primary patency

Freedom from TLR

Presented by T. Zeller, @ LINC 2015, Leipzig, Germany

Real world study IN.PACT GLOBAL long lesions (Medtronic°)

Provisional stenting
- 15-25 cm: 33/99 (33.3%)
- > 25 cm: 30/57 (52.6%)

Waiting for the results of BIOLUX 4 EVER & DEBAS (Biotronik©)

Prospective multicenter studies studying the efficacy of combination DCB + BMS or vice versa... preliminary promising results...

Mean lesion length (mm)
Number 1yr PPR (%)
2yr PPR (%)
(Zilver PTX SAS TASC C & D)
226 135 77.6 na
(Zilver PTX SAS TASC C & D Japanese PMS LL)
186 703 81 na

Drug Eluting Stents? (Zilver PTX, Cook Medical°)

Safe, efficacy proven, very durable (TASC A/B)... but (too) short, highly priced, metallic implants

Where is the treatment place of...
**CONCLUSION**

- Initial DCB patency-results in long lesions seems excellent
- In case of scaffold-need VMI (Ca & politeal) or BMS are the candidates of 2015
- DES & Covered Stents show high safety & efficacy but struggle with health-economics & current “no metallic implant” concept
- Although importantly shrinking, there still remain some indications for bypass surgery