A Place for Selfexpanding Stents and DCBs in the Treatment of the SFA

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Potential conflicts of interest

Speaker’s name: Andrej Schmidt

✓ I have the following potential conflicts of interest to report:

Consulting:
Abbott, Cook, ReFlow Medical, Spectranetics, Upstream Peripheral

Speakers honorarium:
Boston Scientific, Cordis, C.R.BARD, Intactvascular, Medtronic
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Endovascular Treatment of Femoropopliteal Lesions Today

Drug-coated balloons became an indispensable part of the treatment of fempop-lesions

DCBs are used to reduce or avoid stenting
Case from the Thunder-Trial (Tepe et al. NEJM 2008)

2 PTX-coated balloons; 5 x 100 mm and 4 x 40 mm

6 months 18 months
## DCB for Femoropopliteal Lesions „Leave Nothing Behind“

<table>
<thead>
<tr>
<th></th>
<th>N limbs</th>
<th>Stent-rate</th>
<th>Lesion-length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thunder-Trial</td>
<td>42</td>
<td>4.0 %</td>
<td>7.5 cm</td>
</tr>
<tr>
<td>Tepe et al. 2008</td>
<td></td>
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<tr>
<td>Italian Registry</td>
<td>105</td>
<td>12.3 %</td>
<td>7.6 cm</td>
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<tr>
<td>Micari et al. 2012</td>
<td></td>
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<tr>
<td>In.Pact SFA</td>
<td>220</td>
<td>7.3 %</td>
<td>8.9 cm</td>
</tr>
<tr>
<td>Tepe et al. 2014</td>
<td></td>
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</tr>
<tr>
<td>Levant II</td>
<td>316</td>
<td>2.5 %</td>
<td>6.3 cm</td>
</tr>
<tr>
<td>Rosenfield et al. 2015</td>
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</table>
In.Pact Global Study: DCBs for Treatment of Real-World Fem-Pop Lesions (n=1538)

- Long-lesion subgroup (> 15cm)  n = 164

- Lesion-length  26.4 ± 8.6 cm

- Provisional stenting  40.4 %
Spot-Stenting after DCB-Treatment

After DCB

29 months FU

stent
Will DCBs work in Calcified SFA-Lesions?

- 60 pts. With SFA-lesions
- CT-angio before DEB
- 1-year LLL

F. Fanelli et al., *Cardiovasc Intervent Radiol* 2014
Will DCBs work in Calcified SFA-Lesions?

F. Fanelli et al., *Cardiovasc Intervent Radiol* 2014

Conclusion: Calcium represents a barrier to optimal drug absorption.
Rate of dissections and residual stenosis is higher in calcified lesions.
2-Year Results of DCBs in the SFA

2-Year Results from the In.Pact SFA-Trial

N lesions: 220
Lesion length: 8.9 cm

Laird et al. JACC 2015
2-year results DCB in complex SFA-Lesions

- 288 fempop-lesions
- Lesion-length 24.0 cm
- In.Pact DCB
  + BMS in 23.3 %

Kaplan-Meier primary patency

- 1 year 79.2 %
- 2 years 55.4 %

Days FU
0 180 360 540 720
N at risk
288 246 209 157 103

Schmidt et al. *JACC Intervent* in press
Retrospective Comparison of different Treatment-Modalities of the SFA

Restenosis rates up to 40 months after treatment

<table>
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<tr>
<th>N Extremitites</th>
<th>Propensity matched cohorts</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS</td>
<td>432</td>
</tr>
<tr>
<td>DCB</td>
<td>390</td>
</tr>
</tbody>
</table>

284
Drug-Coated Balloon vs. Bare Metal Stent

Survival probability: primary patency

Lesion length (mm):
DCB 171 ± 108
BMS 159 ± 114

S. Steiner, submitted
Can results of DCBs or BMS be improved if used in combination?

**DCB + BMS vs. BMS**

**DEBATE-SFA trial:**
- Prospective, randomized
- 110 fempop lesions
- BMS (Maris) vs.
- BMS (Maris) + DEB

Liistro et al. *JACC Interv* 2013
Summary

DCBs can not be re-called from the treatment of SFA-lesions

Stents are indispensable, especially for the treatment of more complex fem-pop lesions

In practice, there is a lot of space for the combination of DCB and BMS.
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