Current And Future Concepts To Improve Outcome Of BTK-Interventions In CLI

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Disclosure

Speaker name: Ramon Varcoe
Consulting: Abbott, Boston, Gore, Covidien, Medtronic
Advisory Board: Abbott

CRITICAL LIMB ISCHAEMIA

- Tibial Involvement
- Multi-Level
- CTOs
- Calcification

GLOBAL TREND TOWARD Percutaneous revascularisation

- Less Invasive
- Reduced complication risk
- Shorter recovery
- Repeatable

IMPROVING OUTCOMES IN CLI

Limb Salvage

- Technical Success
- Patency
- Wound Care

preferred over
TECHNICAL SUCCESS

DEDICATED CTO DEVICES

CROSSING/RE-ENTRY DEVICES

- Long sheath (45 cm) positioned at or just below the knee
- Use local support for puncture site
- Retrograde wire passage, then through wire, then track catheter, then reverse wire

ANKLE LEVEL PUNCTURES
- All 3 vessels suitable
- Useful for long tibial CTOs
- Usually sheathless with support catheter

Retrograde Access
**PATENCY**

**Primary Patency**

<table>
<thead>
<tr>
<th>Percentage (at 12 months)</th>
<th>DES</th>
<th>BMS</th>
<th>DES</th>
<th>BMS</th>
<th>DES</th>
<th>PTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial</td>
<td>81</td>
<td>56</td>
<td>85</td>
<td>54</td>
<td>76</td>
<td>58</td>
</tr>
</tbody>
</table>

**POBA in BTK: Restenosis and TLR rates**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Restenosis Rate</th>
<th>TLR</th>
<th>PTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Patients 12m Angle</td>
<td>15.2%</td>
<td>7.5%</td>
<td>51.3%</td>
</tr>
<tr>
<td>22 Patients 6m Angle</td>
<td>16.0%</td>
<td>8.9%</td>
<td>51.3%</td>
</tr>
<tr>
<td>15 Patients 12m Angle</td>
<td>18.6%</td>
<td>8.9%</td>
<td>51.3%</td>
</tr>
<tr>
<td>67 Patients 12m Angle</td>
<td>19.6%</td>
<td>9.4%</td>
<td>51.3%</td>
</tr>
<tr>
<td>30 Patients 6m Angle</td>
<td>16.0%</td>
<td>9.4%</td>
<td>51.3%</td>
</tr>
<tr>
<td>34 Patients 3m Angle</td>
<td>19.6%</td>
<td>9.4%</td>
<td>51.3%</td>
</tr>
</tbody>
</table>

1. D. Scheinert, J Am Coll Cardiol 2012;60:2290–5
5. F. Liistro, TCT 2012 oral presentation
6. A. Schmidt, Catheter Cardiovasc Intervent 2010;76:1047-54
### IN.PACT in BTK: Restenosis and TLR rates

<table>
<thead>
<tr>
<th>Patients</th>
<th>12m Angio</th>
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<th>Patients</th>
<th>12m Angio</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 patients</td>
<td>23.0%</td>
<td>75 patients</td>
<td>21.5%</td>
<td>66 patients</td>
<td>38.9%</td>
<td>20 patients</td>
<td>23.0%</td>
<td>76 patients</td>
<td>27.4%</td>
</tr>
</tbody>
</table>

2. A. Cioppa – EuroPCR 2012
3. F. Liistro – TCT 2012

### POBA in BTK: Restenosis and TLR rates

<table>
<thead>
<tr>
<th>Patients</th>
<th>10m Angio</th>
<th>Patients</th>
<th>6m Angio</th>
<th>Patients</th>
<th>12m Angio</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 patients</td>
<td>41.9%</td>
<td>33 patients</td>
<td>48.2%</td>
<td>11 patients</td>
<td>82.9%</td>
</tr>
</tbody>
</table>

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5. F. Liistro, TCT 2012 oral presentation
6. A. Schmidt, Catheter Cardiovasc Intervent 2010;76:1047-54

### IN.PACT DEEP RCT

- 2014, JACC
- Prospective, multicentre, RCT
- 358 Patients with BTK disease & CLI
- DEB vs PTA
- Mean LL 10-13cm
- Independent, blinded CEC

### WOUND CARE


- Critical limb ischaemia
- 8 year single-centre experience at POWH (2004-2012)
- 344 limbs; 279 patients; 546 hospital admissions

### Our Own Experience

- Critical limb ischaemia
- 8 year single-centre experience at POWH (2004-2012)
- 344 limbs; 279 patients; 546 hospital admissions

Endovascular vs. Open Repair

- Major amputation reduced by 62% (7.7 vs. 20%; p<.001)
- Reduced theatre time (158 vs. 317min; p=.0001)
- Reduced LOS (15 vs. 32d; p<.001)
- Reduced ICU stay (2.3 vs. 23.7h; p=.033)

CONCLUSION

- TECHNICAL SUCCESS
  - CTO devices
  - Retrograde techniques
  - Persistence
- OPTIMISE PATENCY
  - Know your options
- MULTI-DISCIPLINARY WOUND CARE