Radial Access for Femoropopliteal Lesions: Tips and Tricks

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Shareholder in a healthcare company
☐ Owner of a healthcare company
☒ Other(s)
☐ I do not have any potential conflict of interest
Radial versus femoral access for coronary angiography and intervention in patients with acute coronary syndromes (RIVAL): a randomised, parallel group, multicentre trial

Sanjit S Jolly, Salim Yusuf, John Cairns, Kari Niemelä, Denis Xavier, Petr Widimsky, Andrzej Budaj, Matti Niemelä, Vicent Valentin, Basil S Lewis, Alvaro Avezum, Philippe Gabriel Steg, Sunil V Rao, Peggy Gao, Rizwan Afzal, Campbell D Joyner, Susan Chrolavicius, Shamir R Mehta, for the RIVAL trial group*

<table>
<thead>
<tr>
<th></th>
<th>Radial (n=3507)</th>
<th>Femoral (n=3514)</th>
<th>HR (95% CI)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major vascular complications at 30 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large haematoma</td>
<td>42 (1.2%)</td>
<td>106 (3.0%)</td>
<td>0.40 (0.28–0.57)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Pseudoaneurysm needing closure</td>
<td>7 (0.2%)</td>
<td>23 (0.6%)</td>
<td>0.30 (0.13–0.71)</td>
<td>0.006</td>
</tr>
<tr>
<td>Arteriovenous fistula</td>
<td>0 (0%)</td>
<td>5 (0.1%)</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Ischaemic limb needing surgery</td>
<td>1 (0%)*</td>
<td>0 (0%)</td>
<td>..</td>
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</tr>
</tbody>
</table>

Jolly et al. RIVAL trial, Lancet 2011

### Transradial PCI = 50%

Puymirat et al. Registre National ONACI Am J Cardiol 2013
PCI (2007 – 2012)
N = 2 820 274

Feldman et al. Circulation 2013
Technique

Right or left?

Balloon Stent

Puncture

Angiography catheter

Sheath
RIGHT OR LEFT?

LEFT

Less arch navigation
Less tortuosity
Gain 5 - 10 cm

But « inverted » installation
Puncture

Short 5/6 F introducer

Transradial access set 21G

Introducer 7 – 23 cm ➔ Use the longest

SPASM
Navigation

C2, Pig-Tail, Judkins right

260 cm 0.035 Terumo and Amplatz wires
Sheath

110 cm 5/6F introducer
Sheathless Guiding catheter

6 F
Sheath 2.52
Guiding catheter 1.98
Radial Artery 2.6 mm

7 F
Sheath 2.85
Guiding catheter 2.31

8 F
Sheath 3.22
Guiding catheter 2.64

Radial Artery 2.6 mm
Sheathless Guiding catheter

Sheathless PV Asahi
2.80 mm

120 cm 8.5F Guiding catheter

Radial Artery
2.6 mm
Technique
Technique

150 cm angiography catheters
Technique - SFA

400 cm 0.018” Plywire Optimed
Balloons Invatec Pacific 180 cm shaft
Stents Optimed Sinus-518 180 cm shaft
Avoid Pre-dilatation
Use the balloon/stent shaft
Hostile Groins + Kissing Stents
Bilateral SFA +/- Iliac lesions
Results

Percutaneous radial access for peripheral transluminal angioplasty

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Take Home Messages

- Start with **simple lesions**
- Avoid selecting **tall patients**
- Recognize and treat **spasm**
- Always **Follow your wire**
- Avoid **pre-dilatation**
- Put very **few contrast** in your balloon
- Ballons and stents are your **longest materials**
It’s just an issue of length...