5 French transradial percutaneous bifurcation interventions with conventional devices

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TransRadial Intervention

ADVANTAGES

- Higher patient’s comfort
- Early discharge
- Reduced bleedings
- Better outcomes
Radial artery inner diameter

6 Fr introducer
sheath diameter
Slender TRI in Japan

Development and availability of many new miniaturised materials in Japan

- long dilators
- 0.010 inch guidewires
- 4 Fr guiding catheters
- very low profile balloons

Effective and safe complex slender TRI
Need for slender TRI in Europe

- Low probability of a radial artery allowing complex PCI
- High probability of a radial artery allowing complex PCI

Nurse Letizia  
Doctor Sgueglia
Slender TRI in Europe

5 Fr GC vs. 6 Fr GC
Rakhit RD et al. Invasive Cardiol 2002;14:670-674

Standard GC used sheathless

Dedicated sheathless GC

- Non-complex lesions
- Radial artery trauma
- Limited availability
- Steep learning curve
“Real progress happens only when advantages of a new technology become available to everybody”

Henry Ford
Aim of the study

To explore how to extend the advantages of slender TRI to the treatment of lesions simultaneously involving two coronary branches using the non-dedicated devices normally available in every catheterization laboratory.
Methods

- 5 Fr introducer sheath and 5 Fr guiding catheter
- only conventional devices:
  - workhorse 0.014” coronary guidewires
  - regular semi-compliant and non-compliant balloons
  - market leader drug-eluting stents
- bifurcation lesions of increasing complexity
Methods

- 5 Fr introducer sheath and 5 Fr guiding catheter
- Only conventional devices (workhorse 0.014” coronary guidewires, regular balloons, market leader drug-eluting stents, etc.)
- Increasing complexity of bifurcation lesions
Inspirational paper

Foin N. et al. JACC Cardiovasc Interv 2012;5:47-56
Patients characteristics (n=50)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male gender</td>
<td>36 (72%)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>65±10</td>
</tr>
<tr>
<td>Active smoking</td>
<td>16 (32%)</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>21 (42%)</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>19 (38%)</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>16 (32%)</td>
</tr>
<tr>
<td>Family history of CVD</td>
<td>11 (22%)</td>
</tr>
<tr>
<td>Unstable presentation</td>
<td>24 (48%)</td>
</tr>
<tr>
<td>True bifurcation</td>
<td>36 (72%)</td>
</tr>
<tr>
<td>LAD</td>
<td>23 (46%)</td>
</tr>
<tr>
<td>LCX</td>
<td>14 (28%)</td>
</tr>
<tr>
<td>CDX</td>
<td>8 (16%)</td>
</tr>
<tr>
<td>LMCA</td>
<td>5 (10%)</td>
</tr>
</tbody>
</table>
Main results

- Procedural success: 49/50 (98%)
- Major procedural complication: 0/50 (0%)
- Upgrade to 5 to 6 French guiding catheter: 1/50 (2%)
- SB stenting after MV secured: 1/50 (2%)

XI European Bifurcation Club meeting - Athens, Greece - 25th & 26th September 2015
Learning points

**PROBLEM...**
Poorer guiding catheter support

**...SOLUTION**
KISS
Keep It Super-Smooth

- Radial access
- Gain expertise
Keep It Super-Smooth

• Radial access

• Guiding catheter

  • Gain expertise
  • Design & technology
  • Deep intubation
  • Shape selection

Launcher GC

ADROIT GC

JL 3.5 Heartrail GC
Keep It Super-Smooth

- Radial access
- Guiding catheter
- Guidewires

- Gain expertise
- Design & technology
- Deep intubation
- Shape selection
- Anchor wire
- Stiff wire
- Hydrophilic wire

3 guidewires + 3.5 mm ZES
Keep It Super-Smooth

- Radial access
- Guiding catheter
- Guidewires
- Stent

- Gain expertise
- Design & technology
- Deep intubation
- Shape selection
- Anchor wire
- Stiff wire
- Hydrophilic wire
- MV predilation
- High trackability
- Round struts
Conclusions

• 5 Fr bifurcation intervention with non-dedicated devices is feasible, safe and effective, over a wide range of bifurcation anatomy and complexity

• careful methodology is of paramount importance to increase success and avoid complications
Backup slide