Strategies in challenging BTK procedures: ARROWGPSCath with Visio Valve to protect wire placement, reduce fluoroscopy-time and minimize contrast media

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Disclosure

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I have the following potential conflicts of interest to report:

☒ Consulting (Medtronic, Teleflex)
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☒ I do not have any potential conflict of interest
BTK recanalization should be performed using a **2-in-1 technique** using a **GPScath balloon** in order to limit the contrast volume.

GPScath balloon is an innovative multipurpose balloon that combine angioplasty and target injection system in one device.
GPScath balloon – 2 in 1 technique

A switch allows the control of a Visio Valve located proximal to the balloon.

In “balloon mode”, inflation of a high-pressure semicompliant angioplasty balloon is performed as with standard inflation device.

In “fluid delivery mode”, delivers fluids, such as contrast, without losing access or needing to adjust wire position. A selective antegrade angiography is possible with only 1-2 cc of contrast.
<table>
<thead>
<tr>
<th></th>
<th>GPS (38 lesions)</th>
<th>Control (31 lesions)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chronic total occlusions, n %</strong></td>
<td>6 (15.8)</td>
<td>2 (6.5)</td>
<td>ns</td>
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<tr>
<td><strong>Procedure, n %</strong></td>
<td></td>
<td></td>
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<tr>
<td>Intraluminal</td>
<td>33 (86.8)</td>
<td>29 (93.5)</td>
<td>ns</td>
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<tr>
<td>Subintimal</td>
<td>5 (13.2)</td>
<td>2 (6.5)</td>
<td>ns</td>
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<tr>
<td><strong>Need to change balloon, n %</strong></td>
<td>5 (13.2)</td>
<td>3 (9.7)</td>
<td>ns</td>
</tr>
<tr>
<td><strong>Balloons movements, n %</strong></td>
<td>1.5±2.0</td>
<td>2.1±1.3</td>
<td>ns</td>
</tr>
<tr>
<td><strong>Catheter exchange</strong></td>
<td>0</td>
<td>0.26±0.7</td>
<td>0.02</td>
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<tr>
<td><strong>Stent, n %</strong></td>
<td>16 (42.1)</td>
<td>10 (32.3)</td>
<td>ns</td>
</tr>
<tr>
<td><strong>Primary end-point, n %</strong></td>
<td>33 (86.8)</td>
<td>28 (90.3)</td>
<td>ns</td>
</tr>
<tr>
<td><strong>Mean Balloon diameter, mm±SD</strong></td>
<td>5.34±0.79</td>
<td>5.31±0.51</td>
<td>ns</td>
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<tr>
<td><strong>Mean Balloon length, mm±SD</strong></td>
<td>41.3±7.1</td>
<td>35.9±25.8</td>
<td>ns</td>
</tr>
<tr>
<td><strong>Time procedure, min±SD</strong></td>
<td>6.7±8.9</td>
<td>7.1±4.6</td>
<td>ns</td>
</tr>
</tbody>
</table>
Case

Female
69 yo
Diabetic
Chronic Renal failure
Forefoot
TEXAS III C ulcer
Case

GPScath balloon
2,5x150 mm
Case

"balloon mode" inflation at 15 atm of the occluded vessels

Tapered tip profil designed to cross the toughest lesions
Case
Case

Before

After
Case

Male
52 yo
Atrial Fibrillation
Hypertension

Rest pain
Rutherford IV

Occlusion of ATA, ATP and peroneal
Recanalization of ATA with a 0.014 Abbot Command guidewire supported by a GPScath ballon 2.5x80 mm

Angiographic control with 2 cc contrast medium
Case

Dilatation of the occluded ATA

Angiographic control from GPS cath balloon
Case
Conclusions

GPScath ballons allows to perform selective angiography reducing the amount of contrast for each control (1-2 cc x injection) and to reduce the procedure time with the 2 in 1 technique.

Building more evidence in the near future (Paris – Abano Terme)
THANK YOU FOR THE ATTENTION