Initial single-center experience with the use of the Covera™ Plus covered stent in combination with the Colt™ device in complex aortic repair

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Disclosure

Speaker name:
Giovanni Coppi

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

☑️ I do not have any potential conflict of interest
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The Colt™ device

- Off-the-shelf device (in progress)
- Cope with many anatomies

Courtesy of Jotec s.r.l.
The Covera™ Plus

- 0.035” Self-expandable, 8-9 F Introducer
- Dual-layer ePTFE encapsulation with Carbon impregnation
- Triaxial delivery system (two speed options) + radiopaque Tantalum markers

Diameter: 6 – 10 mm; **Lengths: 30 – 40 – 60 – 80 – 100 mm**

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Personal experience

♂, 78 aa
CAD + EF 30%, COPD
Previous EVAR & iliac- femoral
BP sx (2013)
Type II TAAA 9 cm

Refused by other Manufacturer
Personal experience

3 Modular Implant:
- Proximal segment E-xtra 42-30x230 mm
- E-Colt 33-16x167 mm
- Distal bridging graft 20-26x80 mm
Personal experience

- Spinal Drainage (Liquogard)
- Left axillary access

1. Deployment of proximal stent graft
2. Partial Deployment of COLT
3. Stenting of SMA (Covera 8x100 + 6x60 mm) LRA (Covera 6x100 mm), RRA (Covera 6x100 + 6x100 mm)
4. Complete Deployment of COLT + bridging stent graft
5. Stenting of Hepatic Artery (Covera 6x60 + 8x100 mm + Lifestream 9x58 mm)
### Personal experience: Apr. – Sept. 2018

<table>
<thead>
<tr>
<th>Pt.</th>
<th>Type of lesion</th>
<th>Diameter</th>
<th>Number of Stents (Covera)</th>
<th>Mean bridge length</th>
<th>Mean renal artery angle*</th>
<th>Renal tortuosity index*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type II TAAA</td>
<td>90 mm</td>
<td>8 (7)</td>
<td>88.4 mm</td>
<td>- 10°</td>
<td>1.2</td>
</tr>
<tr>
<td>2</td>
<td>Proximal pseudoan.</td>
<td>76 mm</td>
<td>5 (3)**</td>
<td>88.3 mm</td>
<td>- 15°</td>
<td>1.1</td>
</tr>
<tr>
<td>3</td>
<td>Pararenal AAA</td>
<td>85 mm</td>
<td>7 (7)</td>
<td>86.3 mm</td>
<td>- 12°</td>
<td>1.3</td>
</tr>
</tbody>
</table>

**One side branch did not open**  
4/6 cases: no precannulation of the target renal with the sheath  
Mean follow 2 months (min 30 – max 120 days): no stent occlusion or dislocation (1 death @ 64 days - Esophageal bleeding)

*All renal arteries measurement performed according to Sugimoto et al. Eur Journ Vasc Endovasc Surg 2016
Conclusions - 1

• Colt device: additional “off-the-shelf” solution in complex aortic patologies

• Covera stent-graft: good trackability and early patency rates...

• ... direct advancement in the target vessel possible (no need to previously insert the sheath)
Conclusions - 2

• Complex anatomies are treatable but:
• longer segments of proximal aorta need to be covered...
• ... longer bridging stents need to be used
• A broader use is needed to evaluate the role of both devices in endovascular complex aortic repair
Thank you for your attention...
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