Advantages And Limitations Of Lombard’s Altura Endograft Device To Simplify EVAR Procedures: A Multicenter Study

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Disclosure of Interest

• X I do not have any potential conflict of interest

ALTURA 14F Endograft

Device characteristics

‘D’ cross section parallel endograft
Eliminated need for cannulation
Re-positionable
Retrograde iliac deployment
3 proximal and 3 distal diameters
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‘D’ cross section parallel endograft
Eliminated need for cannulation
Re-positionable
Retrograde iliac deployment

3 proximal and 3 distal diameters

First in Human study

<table>
<thead>
<tr>
<th>Clinical Success</th>
<th>30 Days</th>
<th>1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Success</td>
<td>98% (56/57)</td>
<td>-</td>
</tr>
<tr>
<td>Freedom from Type I/III endoleaks</td>
<td>98% (54/55)</td>
<td>95% (50/52)</td>
</tr>
<tr>
<td>Freedom from rupture</td>
<td>100% (53/53)</td>
<td>100% (41/41)</td>
</tr>
<tr>
<td>Freedom from migration ( &gt; 5mm)</td>
<td>-</td>
<td>98% (40/41)</td>
</tr>
<tr>
<td>Freedom from conversion to open surgery</td>
<td>100% (53/53)</td>
<td>100% (41/41)</td>
</tr>
<tr>
<td>Freedom from sac-growth</td>
<td>-</td>
<td>100% (41/41)</td>
</tr>
<tr>
<td>Freedom from occlusion</td>
<td>98% (54/55)</td>
<td>98% (40/41)</td>
</tr>
</tbody>
</table>

First in Human Study: Follow-Up

<table>
<thead>
<tr>
<th>Follow-Up Window</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>N at Index Procedure</td>
<td>57</td>
</tr>
<tr>
<td>30 days</td>
<td>55</td>
</tr>
<tr>
<td>12 months</td>
<td>41</td>
</tr>
<tr>
<td>24 months</td>
<td>19</td>
</tr>
<tr>
<td>36 months</td>
<td>10</td>
</tr>
<tr>
<td>48 months</td>
<td>4</td>
</tr>
</tbody>
</table>

“D” Endograft Stability

Courtesy of Prof D Krievins

Manchester UK Experience

- 26 Patients April – October 2016
- Prospective enrollment in 2 Tertiary Vascular Centres
- Intention to treat as Day case EVAR (<24 hrs)
- Within Device IFU
- Proctored by Lombard
Manchester UK Experience

• 17/26 patients were Male
• Mean age of 75
• Mean BMI of 30 kg/m²

• 23 infra-renal AAAs, 3 Revision EVAR cases
• Median AAA diameter was 60mm (52-105mm)
• Access was percutaneous in 26 of 52 groins

Manchester UK Experience

• 100% procedural success
• No type 1 or 3 endoleak at 30 Day
• 17 discharged within 24 hours, remainder < 48hrs
• Completion Duplex AAA and Perc access before discharge
• No access complication

Manchester UK Experience

Median intraoperative contrast dose was 75ml of 50% concentrate Visipaque 270

• Median screen was 25 minutes (15-41)
• Median radiation dose for all cases was 4773 cGy/cm² (1480-10366)

D.D. 70 yr old

87 mm
15mm neck
60 angulation
Calcified R CIA

Restrictive airways disease
Low anaerobic threshold

Aortic component positioning

3 septal markers
Fabric level with 1st marker

Altura 14F stent graft

Accurate, rapid infra-renal EVAR
6 components
Rapid deployment
Short stay / Day case EVAR
Early term data encouraging
Ruptured EVAR
ALTITUDE REGISTRY
Aortic component repositioning

Iliac limb deployment

Retrograde
Start in External iliac and push into common iliac
2 cm overlap
2 cm seal zone

Completion

Pseudoaneurysm of aortic graft

Completion

8 weeks
Pseudoaneurysm of aortic graft

- Back pain
- 7 years post ABG bypass
- 54mm
- 2cm proximal
- <$2cm$ distal

Emboliisation of native iliac
Orientation of proximal components

Rotational angiography