Variations In AAA Juxtarenal Landing Zones And Their Suitability For Various Commercial Endografts: Which Graft Is Best In Which Circumstance

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Disclosure
Speaker name: Jan D. Blankensteijn

- I have the following potential conflicts of interest to report:
  - Receipt of honoraria and travel support
  - Gore and associates

Variations In AAA Juxtarenal Landing Zones...

Identifying and grading factors that modify the outcome of endovascular aortic aneurysm repair

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Alice &lt; 4</th>
<th>Bob = 2</th>
<th>Alice = 2</th>
<th>Alice &gt; 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>&gt; 29 mm</td>
<td>26 &lt; l &lt; 29 mm</td>
<td>23 &lt; l &lt; 29 mm</td>
<td>l &lt; 23 mm</td>
</tr>
<tr>
<td>Diameter (mm)</td>
<td>&gt; 28 mm</td>
<td>26 &lt; d &lt; 28 mm</td>
<td>23 &lt; d &lt; 28 mm</td>
<td>d &lt; 23 mm</td>
</tr>
<tr>
<td>Calcification/thrombus</td>
<td>≤ 12%</td>
<td>13% &lt; C &lt; 25%</td>
<td>26% &lt; C &lt; 50%</td>
<td>C &gt; 50%</td>
</tr>
</tbody>
</table>

Table E1. Definitions, grading, and categorization of an initial morphologic score

Variations In AAA Juxtarenal Landing Zones...

"HOSTILE NECK"

Severity = 3

- l < 18 mm
- d > 28 mm
- Angle > 120°
- Calc/Thromb > 50%
Variations In AAA Juxtarenal Landing Zones...

EVAR devices in EU:
- AFX Endologix
- Anaconda Vascutek
- AorFix Lombard
- Endurant Medtronic
- Excluder Gore
- Incraft Cordis
- Nellix Endologix
- Ovation Endologix
- Zenith Cook

Fen-EVAR devices in EU:
- Anaconda Fen Vascutek
- Zenith Fen Cook

Key decision drivers:
- Neck length
- Neck angle

Vascular Medicine

Predictors of Abdominal Aortic Aneurysm Sac Enlargement After Endovascular Repair

Andris Schauer, MD, Roy R. Greenberg, MD, Nathanael Herveline, MPH, William P. Robinson, MD, Mohamed H. Elsamni, MD, Robert Z. Goldberg, PhD, Luis Moviatu, MD

There are 10 types of people in the world:
Those who understand binary
And those who don’t.
Endograft design

Patient factors:
- reversed tapered angulation
- diameter

Non-patient:
- better imaging
- physician experience
- device repositionable

Inaccuracy length meas:
- Axial underestimates
- CLL overestimates

Opportunity
Opportunity

Why bother?

Multifactorial decision making

Sizing/Planning

- Simple sizing
- Aberrant anatomy

<table>
<thead>
<tr>
<th>Technique</th>
<th>Simple sizing</th>
<th>Aberrant anatomy</th>
<th>Morphol. Constraints</th>
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</thead>
<tbody>
<tr>
<td>EVAR</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>FEVAR</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>OTS-FEVAR</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CHIMPS</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

- Angulation aorta
- Angulation branches
- Orientation branches
- Distal branch disease
- Local pathology
Conclusions

In selected cases of a **hostile neck**:  
- Any of the current EVAR-devices can be used  
  (but stay within IFU, …ish)  
- This comes at an increased risk of type 1a endoleak  
  (and migration, reintervention, rupture)  
- Balance against downsides of Fen-EVAR or CHIMPS  
  (or against Open repair, if F-EVAR is not an option)  
- RCT?  
  (Long-term neck dilatation may determine outcomes)