Role Of Branched EVAR (B/EVAR) To Treat Visceral Segment TAAAs With Chronic TBADs: Challenges And How To Overcome Them

Challenges

FIRST: to know/understand the problem and who are your patients.

What are the Challenges? Already defined by title:

Chronic TBADs

Where are located these complications? Already defined by title:

Visceral Segment TAAAs

SECOND: Understand the anatomy of the problem.

We will find it in the CTScan

Third: Know the weapons you have to deal with it.

- CMD devices
- OTS devices
- Bare Stents
- Cover stents
- Plugs/Coils
- Hand made or modified devices

And also very important the “URGENCE” or not of the case!!
PERSONAL VIEW!!

The most specific feature in this pathology is the narrow true lumen of the aorta. This needs to be taken into account when deciding whether to use fenestrations or branches, and makes it difficult to decide on the orientation of both fenestrations and branches. Fenestrations require less true lumen space, but must be catheterized from below and require more accurate planning with regard to orientation. In addition, repositioning a fenestrated graft to catheterize the target vessels can be tedious in a post-dissection aneurysm. Branched grafts are easier to plan but the branches require extra room, both for correct deployment and downstream. This room usually is lacking in post-dissection aneurysms, but extra room can be created by deploying a tube graft first with a distal landing zone a few centimeters above the visceral branches of the aorta. This usually helps to expand the true lumen somewhat.

Possible advantages of each design

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<th>INNER BRANCHES</th>
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<th>INTENT BRANCHES</th>
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<tr>
<td>PRO</td>
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<tr>
<td>Less contact for sealing</td>
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<td>More flexibility</td>
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<td>Accept misalignment</td>
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<td>Can be used with RI or SE Stents</td>
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<td>More versatile to true anatomy</td>
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<td>AGAINST</td>
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<td>Less durability, specifically for renals??</td>
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<td>Needs more aortic coverage</td>
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<td>Needs an arm access</td>
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Fourth challenge: Residual lumen

It could have been done with a OTS device we proposed to him a CMD graft plan. 2011 the very first Chronic Dissections we treated with a branched device
Chronic dissection with aneurysmal degeneration of the Aorta.
05 previous endovascular procedures.

Complex late Type B dissection
Multiple procedures

First 04 inner branches device done
05 years result = DURABILITY
2y Arch device with 02 branches - total 06 INNER BRANCHES

More than 900 publications up now
First case Tim Chuter 2001 – 17y!!!!!!

Matt Eagleton & Tara Mastracci 2016
2004 - 2013 354p = 1305 B/F
Perioperative Mortality 7 - 3.5%

At 36 months, freedom from aneurysm-related death was 91% (95% CI, 0.88-0.95)
Branch patency primary + assisted 98%

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Final answer
• Use it selectively according to the anatomy and also to your own experience.
• Up to now there’s no evidence of superiority of each of the techniques/designs are better for TAA after Chronic dissections
• I personally go for BRANCHES.
• Does the Aortic lumen diameter is a limitation for Branches ? NO
• Branches are easier to plant ? YES
• Need to be re-apparel accurately ? NO
• We can also use the OFF-THE-SHELF endografts, also for acute cases ? YES
• The residual lumen diameter is not a contraindication to branches.
• DO NOT FORGET Open Surgery it is still a good option.
Thank you for your kind attention
Thank you Frank for accepting my talk recorded
I’ll very pleased to answer questions by email or WhatsApp

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