

Optimizing Endovascular Treatment Of TAAAs With The COOK OTS t-Branch Endograft:

Technical Tips and Contraindications

Marcelo Ferreira (BRA)

EPICETUS
Neither should a ship rely on one small anchor, nor should life rest on a single hope.

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POTENTIAL CONFLICTS

PROCTOR FOR COOK MEDICAL- USA
PROCTOR FOR E.TAMUSSINO – BRASIL
PROCTOR FOR SCITECH – BRAZIL

The Vascular World is coming Together in New York in November 2024
And You're Invited!

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ENDOASCULAR TECHNIQUE – LITERATURE SUPPORT
First case – TAA – Tim Chuter 2001 – 23 YEARS OLD!!!!

MORE THAN A THOUSAND PUBLICATIONS ON PUBMED

VEITH SYMPOSIUM
Connecting The Vascular Community

J Vasc Surg. 2008 Dec;48(6 Suppl):30S-36S.
Branched devices for thoracoabdominal aneurysm repair: Early experience.
Ferreira M., et Al.

LET'S GO BACK 16 YEARS

INITIAL STEP FOR AN "OFF-THE-SHELF" DEVICE

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J ENDOASC THER 2009;16:454-456

How to Occlude a Side Branch on a Branched Stent-Graft Aneurysm Repair

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MAYBE CONSIDER THE VERY FIRST CASES OTS - 2009

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J Vasc Surg. 2016 Apr;33(4):930-42. doi: 10.1016/j.jvs.2015.10.095. Epub 2016 Jan 11.

Fenestrated and branched endovascular aneurysm repair outcomes for type II and III thoracoabdominal aortic aneurysms.

Eagleton MJ¹, Follansbee M², Woteki K², Mastracci T², Kuramochi Y².

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%

CMD X Off-The Shelf devices in bEVAR

10 year experience with endovascular thoracoabdominal aortic aneurysm (TAAA) repair using fenestrated and branched stent grafts. **Erie Verhagen 2015 – EJVES.**

WHAT THIS PAPER ADDS
 This is the largest series in Europe to report longer-term outcomes of endovascular thoracoabdominal aortic aneurysm (TAAA) repair using fenestrated and branched stent grafts. Although endovascular TAAA repair in expert hands is associated with high technical success rate, and remains safe and effective in the mid-term, complications are not rare. Correct patient selection, careful planning, team effort, and technical success are needed to provide the best possible outcome for the patients. The re-intervention rate is not low, but most re-interventions can be performed by endovascular means.

Conclusions
 Endovascular repair of TAAA with fenestrated and branched stent grafts in **high volume center**, appears safe and effective in the mid-term in a high risk patient cohort. A considerable re-intervention rate should be acknowledged, however.

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Systematic Review / Meta-analysis
Effectiveness of endovascular repair versus open surgery for the treatment of thoracoabdominal aneurysms: A systematic review and meta-analysis

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ALSO TRUE FOR TAAAs POS DISSECTIONS

- There is a paucity of relative data and there are **no randomized clinical trials** explicitly evaluating and comparing the mentioned techniques.
- Furthermore, most observational studies show **disparities in baseline patient characteristics between groups (elderly patients demonstrating greater comorbidities in endovascular cases)** as well as variability in study design.

HOW WE DO IT IN A ROUTINE BASE, especially for Pos Dissection TAA aneurysms

- Start implantation 2-3 cm above the branches (angiography, catheter, image fusion).
- **Implantation: Complete X Gradual: Especially for narrow aortas/dissections.**
- Lower limb ischemia time X ease of catheterization of each branch.
- We almost always prefer to finish one side and ALL THE BRANCHES and then close that side and leave the femoral against the side with a small sheath!
- Depending on the time spent after the CT and the SMA branches we complete an iliac axis and close the femoral artery.
- **REDUCES THE ISCHEMIA TIME OF LIMB ISCHEMIA 1/2, and also the inflammatory response.**
- **FINALLY WE DO THE RENALS or just THE CONTRA LATERAL ILIACA.**
- In large aneurysms we tend to do everything via the femoral route with deflector sheaths – learning curve

2011 the very first Chronic Dissections we treated with a CMD Branched Device

PERHAPS THE FIRST CASE OF LITERATURE

Control CT Scan April 2012 – 9 months.

I DO NOT THINK YOUR DEVICE WILL OPEN INSIDE IT?

DURABILITY OF THIS FIRST CASE ENCOURAGE US TO MOVE FORWARD.

April 2011 to April 2018. 7ys.

03 COMMUNICATIONS BETWEEN THE 02 LUMENS
CT, SMA AND RR FROM THE FALSE LUMEN ONLY THE LEFT IN THE TL

PLANNING, PLANNING AND PLANNING IS THE KEY

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TORACO ABDOMINAL PORTION OF AORTIC DISSECTION

FALSE LUMEN TRUE LUMEN

RIGHT RENAL ARTERY AND BRANCH
SMA AND BRANCH
CT ARTERY
LEFT RENAL ARTERY
LEFT RENAL BRANCH

PLANNING, PLANNING AND PLANNING IS THE KEY

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CT SCAN CONTROL
OBSERVE THE CELIAC BRANCH GOING TO THE LEFT RENAL ARTERY

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Complex late Type B dissection
Multiple procedures mainly trying to put the visceral vessel into the TRUE LUMEN

CELIAK TRUNK FROM THE TRUE LUMEN
LEFT RENAL WITH A COVER STENT THROUGH THE DISSECTION TO THE TL
SMA WITH A COVER STENT

FENESTRATIONS??
X
BRANCHES??
X
INNER BRANCHES??

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ABSOLUTE INDICATION FOR A CMD DEVICE

Frank J. Veith, MD

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WORKS PERFECTLY, EXCEPT THAT THE PATIENT DEVELOP AN ARCH ANEURYSM two years later

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First 04 inner branches device done
05 years result = DURABILITY

2y Arch device with 02 branches 06 - total 06 INNER BRANCHES

T x T wire
 to go through angulated Aortas
 or through previous devices
 IS FUNDAMENTAL!!

AMAZING

"Planning the T-Branch" takes 5minutes!!

"Planning the T-Branch" takes 5minutes!!

ADVANTAGES
 - Can be modified.

Urgent Juxtarenal Aortic Aneurysm Repair With Modified Off-the-shelf Endograft to Preserve Intercostal Arteries and Branch Incorporation by Transfemoral Access

Marcelo Ferreira, MD¹, Mathew Mammari, MD², Rodrigo Cunha, MD³, Diego Ferreira, MD⁴, and Luis Fernando Capotorto, MD⁵ **BRA**

"Snare-Ride": A Bailout Technique to Catheterize Target Vessels With Unfriendly Anatomy in Branched Endovascular Aortic Repair

Marcelo Ferreira, MD¹, Adriano Katsargiris, MD², Eduardo Rodrigues, MD³, Diego Ferreira, MD⁴, Rodrigo Cunha, MD⁵, Guilherme Bialho, MD⁶, Gustavo Okorich, MD, PhD⁷, and Eric L. G. Verhoeven, MD, PhD⁸

OTS DEVICES DISADVANTAGES x CDM DEVICES

- 24 F, may make access difficult in some cases. (industry is working in a smaller Fr.)
- Only 04 branches. (now we can do CMD's with 5 branches and Inner branched for 02 vessels)
- All descending branches.
- Only one size and option diameter - 34 x 18mm (ALTHOUGH WE KNOW INDUSTRY IS WORKING IN NEW SIZES).

SIMPÓSIO aorta 2025

2025

Simpósio Aorta

Marcelo Ferreira (BRA)

SUMMARY OUR PERSONAL VIEW IS:

In our center Endovascular treatment of the TAA's is the **"Gold Standard!!"**

Treat TAA's After TBADs WITH AN OTS AND CMD DEVICES IS AN ACCEPTABLE TECHNIQUE AND OFFERS VERY GOOD RESULTS.

IMPOSSIBLE

**In centers with extensive experience and very well trained.

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