16th international experts symposium **CRITICAL ISSUES** in a ortic endografting 2012



May 24 & 25

"The configuration of sidebranches is important to match anatomy".



Marcelo Ferreira, M.D. Rio de Janeiro - Brasil

Faculty Disclosure



Marcelo Ferreira

I disclose the following financial relationships

- •Consultant for COOK MEDICAL Company
- •Receive grant/research support from COOK MEDICAL Medical
- •Paid speaker for COOK MEDICAL Company
- •Major stock holder from "Whish I had".....





• Endovascular repair of the TAA has been done since 2001 after Tim Chuter pioneer work.

- Nowadays more that 2500 cases of Totally EV repair of TAA have been reported in the literature with this technique.
- Many surgical groups have change their practice using the Branched devices as their **FIRST OPTION** including ourselves.
- Very early was possible to note that an "Off the Shelf" devices would be possible.









JVascSurg.

Volume 48, Issue 6, Supplement, Pages 30S-36S (December 2008)



First 23 plans

- Anatomical coincidence of the visceral vessels.
 - *SB*₁*CT*
 - SB 2 SMA
 - SB 3 RR
 - SB 4 LR





Tim Chuter "Off the Shelf" Study

*88% patients eligible to a standard device



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J ENDOVASC THER. 2009;16:359–364







How to deal with those 15 -25 % cases

Also MORE COMPLEX !!

How to deal with special conditions :

- Previous arch surgery
 - Shaggy Aorta
 - Dissections
 - Connective diseases

IFACY FERNANDES DE ALMEIDA 0009655979 (73 y , 72 y)

Zoom: 119%Angle: 0 lm: 21/44 Uncompressed Position: FFS

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Image size: 512 x 512 View size: 611 x 487

WL: 193 WW: 351

Ira R

8/10/11 1:41:13 PM Made In OsinX

-- web 3D rmc

64123

45036842















<u>Freire</u>







10/6/11 12:40:06 PH Pade In OsirX

Overview - Overview

80





<u>Freire</u>

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Chronic type B. dissection with o3 previous Endovascular procedures







We got a plan !!







CRITICAL ISSUES

Now what!!

1- How positioning and deploy the device correctly?

2- How about branch orientation ?



Critical Maneuvers:

- 1- Right Axilar access Trough and trough PROTECTED.
- 2-12 F positioned as far as possible.
- 3- The nose of the Branched device creeping inside the 12F sheath.
- 4- Advance the stentgraft and simultaneously withdrawing the sheath, so you turn the stentgraft and the sheath in a single body.
- 5- Accept and understand the helical movement of the stentgraft- Do not fight against the patient's anatomy.





"Device driven by the sheath" DDBTS







Left Renal catheterization





Final Control July 2011









First control on AngioCT April 2012 – 9 months.



Abril 2012



First control on AngioCT April 2012 – 9 months.





April 2012 – 9 months. Preop x Postop CT











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<u>68 yo, Female</u>

<u>TAA Type II</u>

Previous Arch Surgery







<u>68 yo, Female</u>

<u>TAA Type II</u>

Previous Arch Surgery

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<u>"C" Branches</u> <u>First Draw</u>



From: Marcelo Ferreira <mmvf@uol.com.br>Subject: Angela Date: December 10, 2010 1:25:36 PM GMT-02:00 To: William Fitzsimons





<u>"C" Branches</u> Perspective inside the Aorta

<u>Celia Trunk</u>



















- Drawbacks of the branched technique for TAAA endorepair are always related to anatomy constraints.

- Angulation
- Spatial orientation
- Brach diameter
- Branch length

"Instead of fighting the anatomy, surgeons should try to reach it modifying the graft anatomy".





In conclusion

* Employing the "C" helical branch a paradigm is broken.

As can be seen from this picture **all visceral vessels** can be reached by **femoral access**!

* Specially useful when Arch manipulation is contra indicated or impossible.

<u>* CMD availability augment the scope of the Endovascular</u> <u>repair of the TAAs</u>







<u>Reflexion</u>

<u>It's all about planning</u> <u>Improvisation not always work</u>



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Thanks for your kind attention! Merci the votre attention!