20TH INTERNATIONAL EXPERTS SYMPOSIUM

CRITICAL ISSUES

in aortic endografting 2016

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Laser fenestrations for emergency repairs: real life or only in the movies?

Dr Dominique Fabre

MARIE LANNELONGUE HOSPITAL
PARIS-SUD UNIVERSITY, FRANCE

Disclosure

Speaker name:

Dominique Fabre.

Consultant for Kardiozis

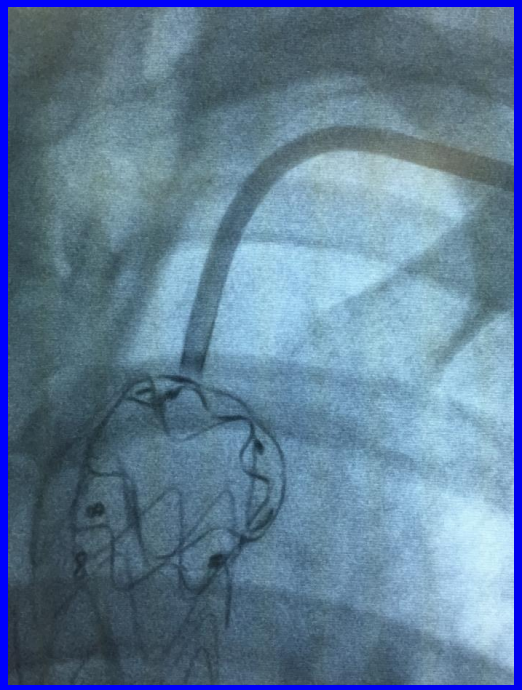
Background
Validity of Retrograde Laser fenestration

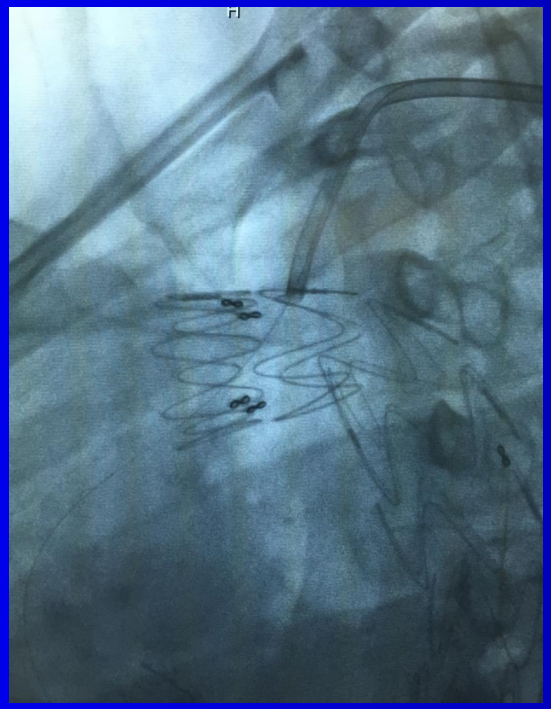
Retrograde LSCA
Feasible
Effective option
Acute thoracic aortic pathology
Excellent midterm patency

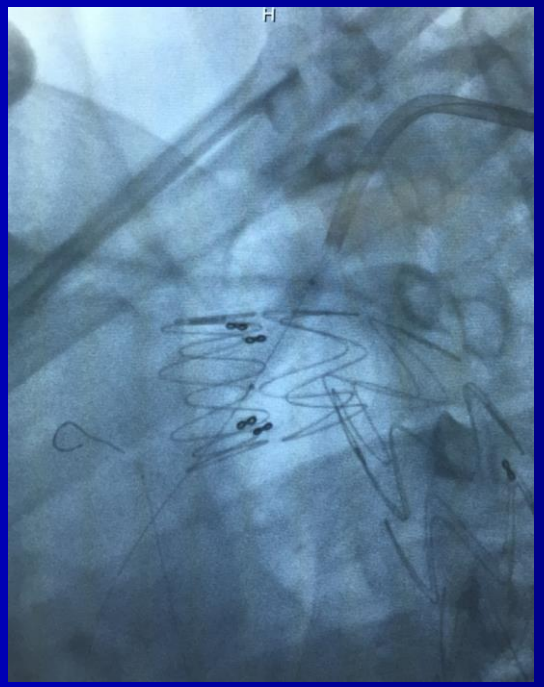
Panneton JVS 2013

Hôpital

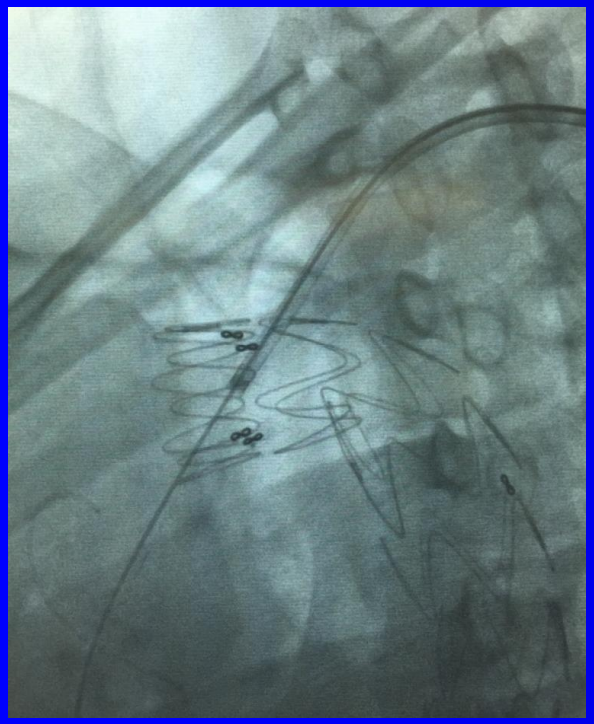
LSCA Retrograde Laser fenestration

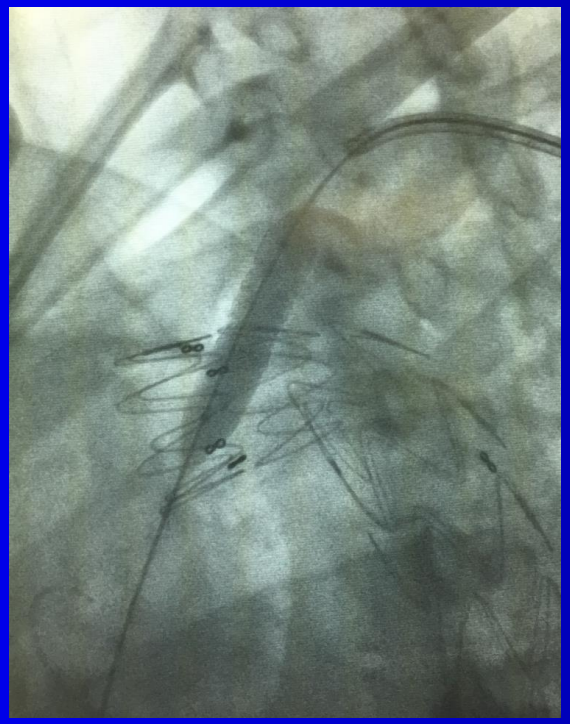


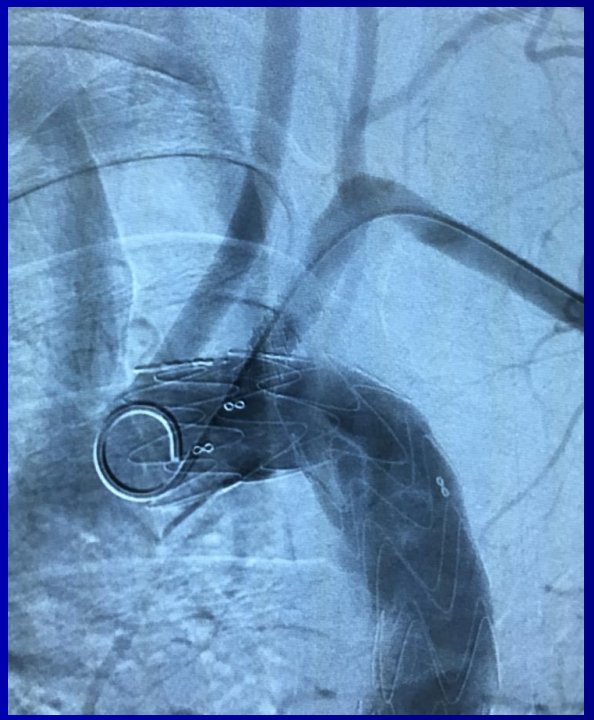




LSCA Retrograde Laser fenestration







Purpose

In situ Anterograde Laser Fenestration

for TAAA Pararenal AAA Type I EL

Off Label Procedure

Dedicated to patients unfit for:

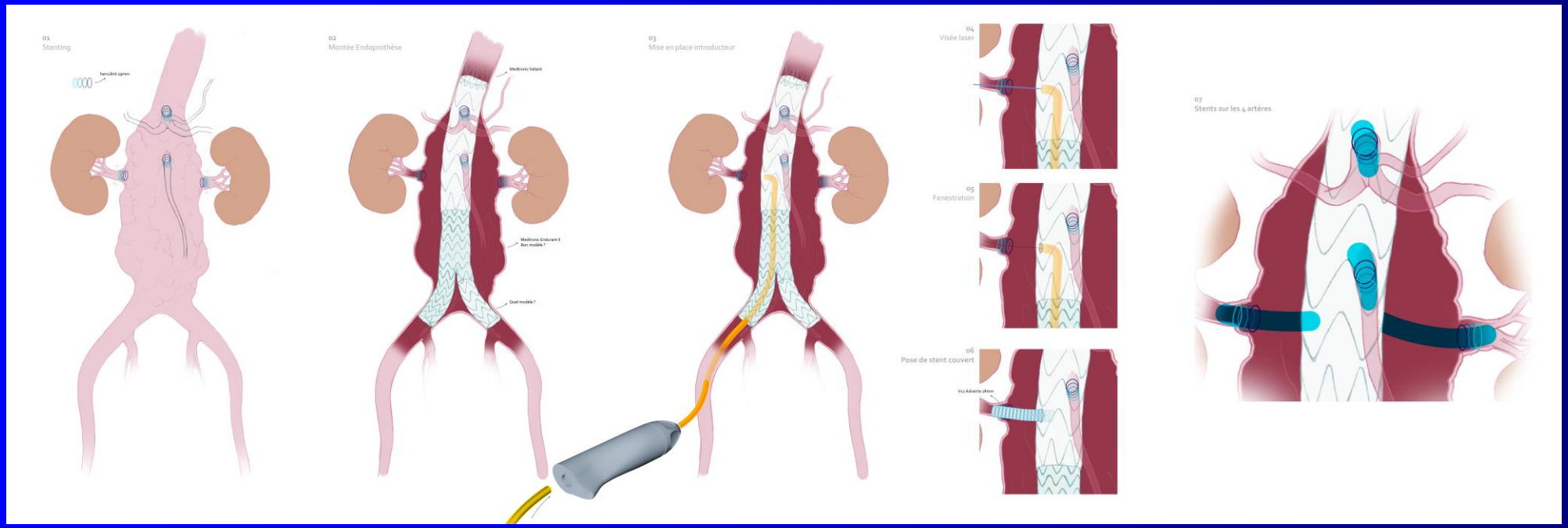
- Standart OR
- Standart FEVAR

Replace Parallel graft procedure

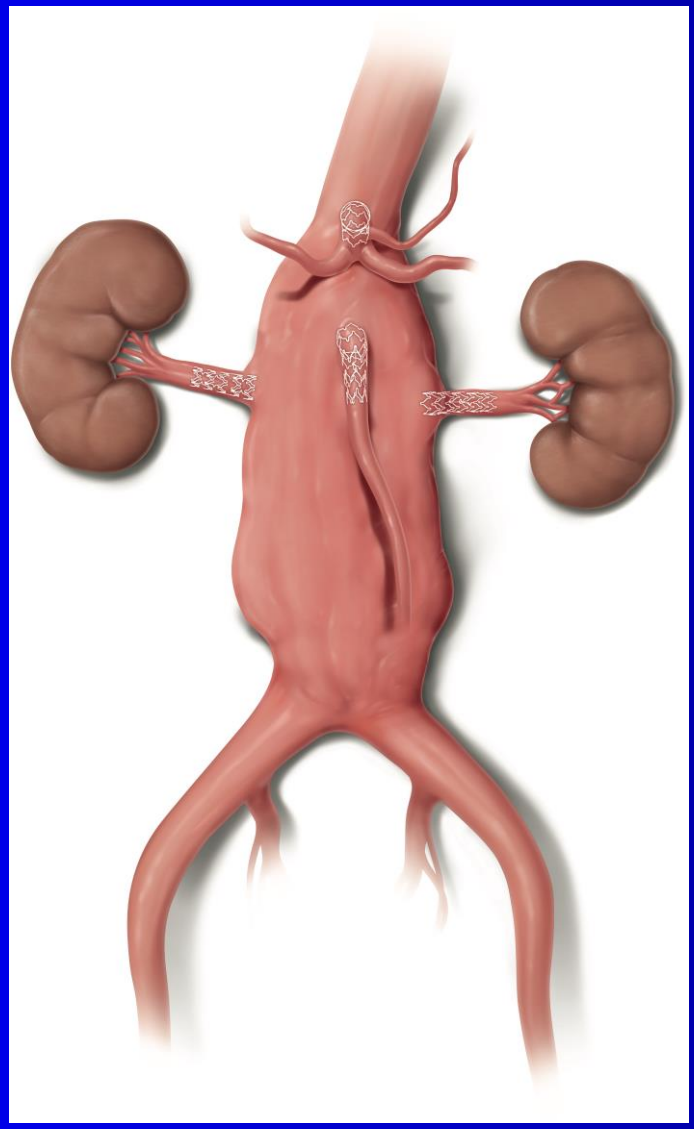
Anterograde Laser fenestration

The critical issue is : can we perform anterograde laser fenestration that is a blind approach?

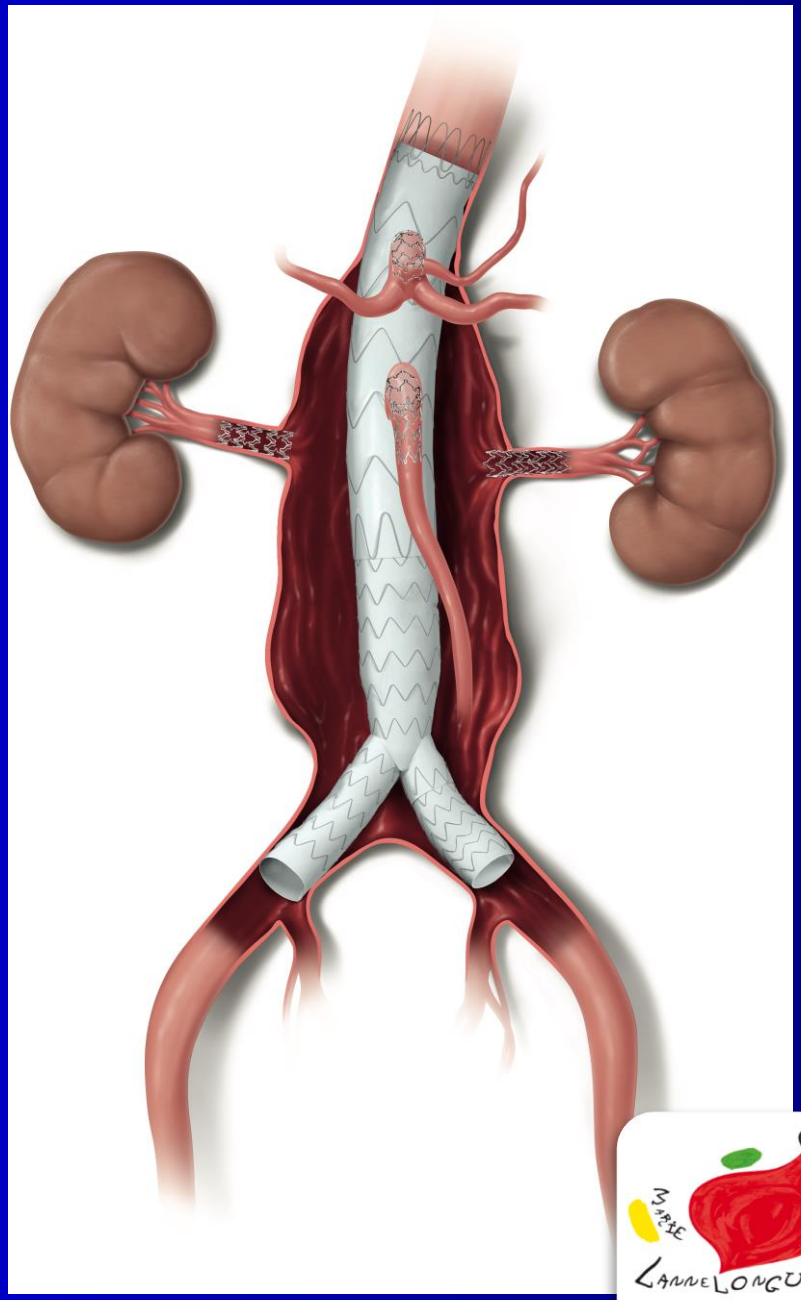
Technique for in situ anterograde Laser Fenestration



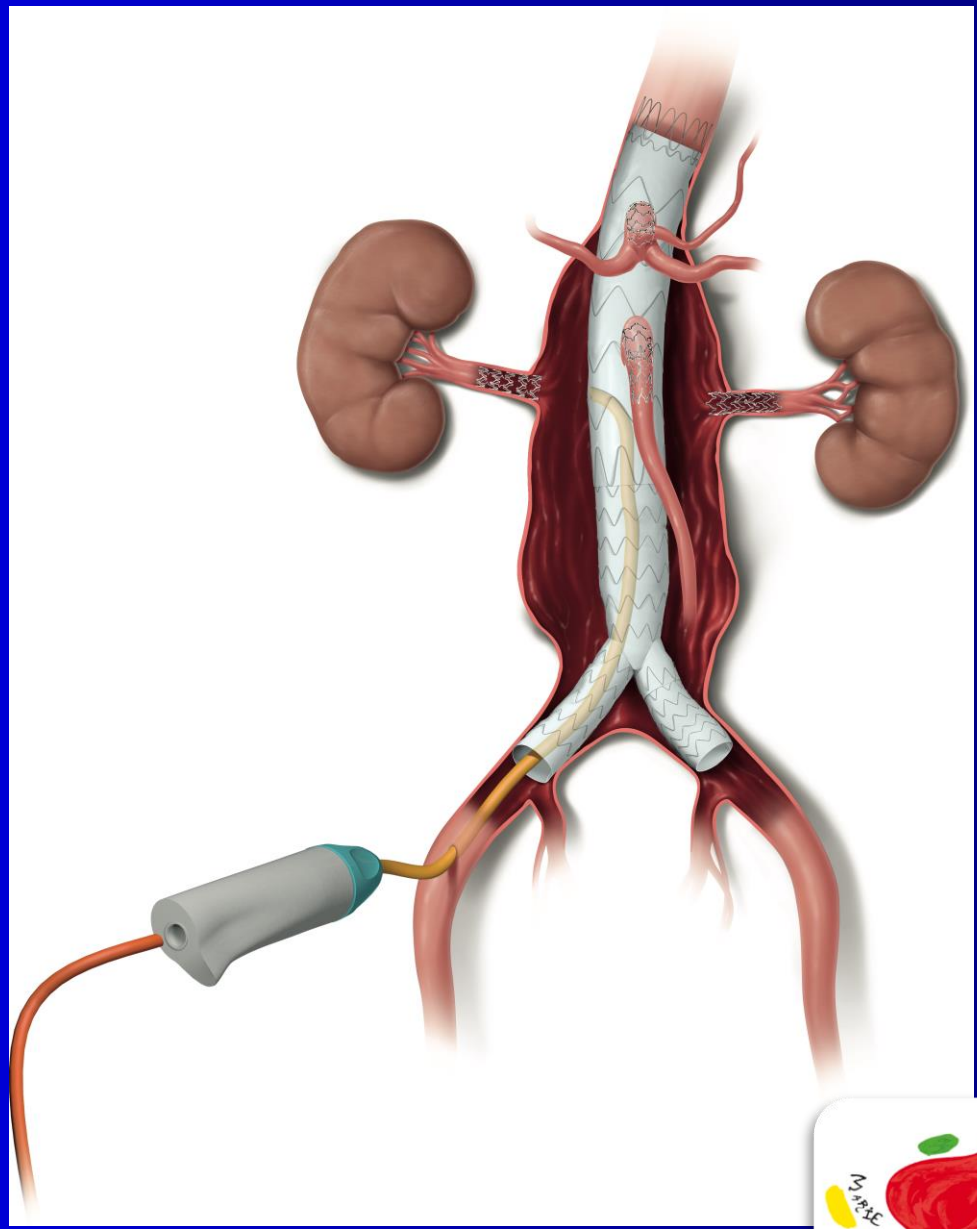
Pre stenting of each targeted arteries



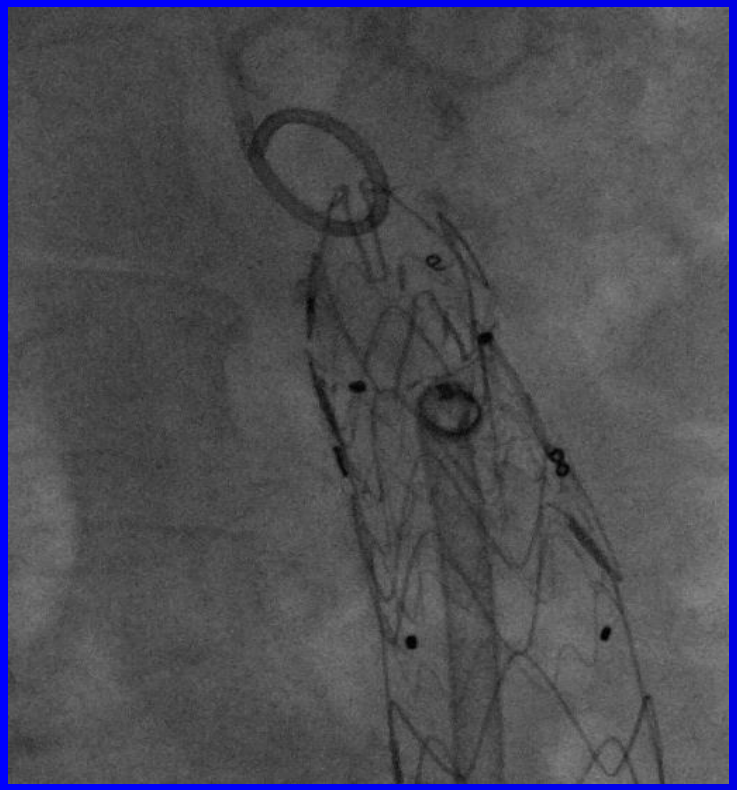
Stentgraft deployment at the level of the aneurysm



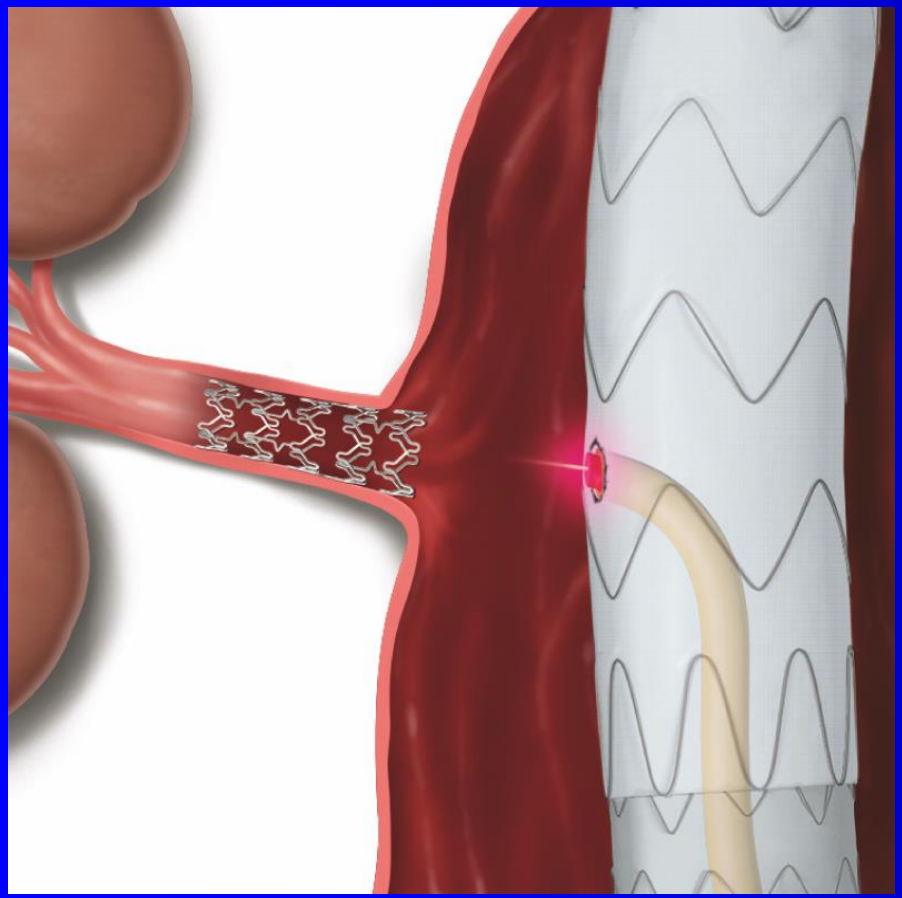
Aptus 16 Fr
Deployment
At the level of each
Targeted artery

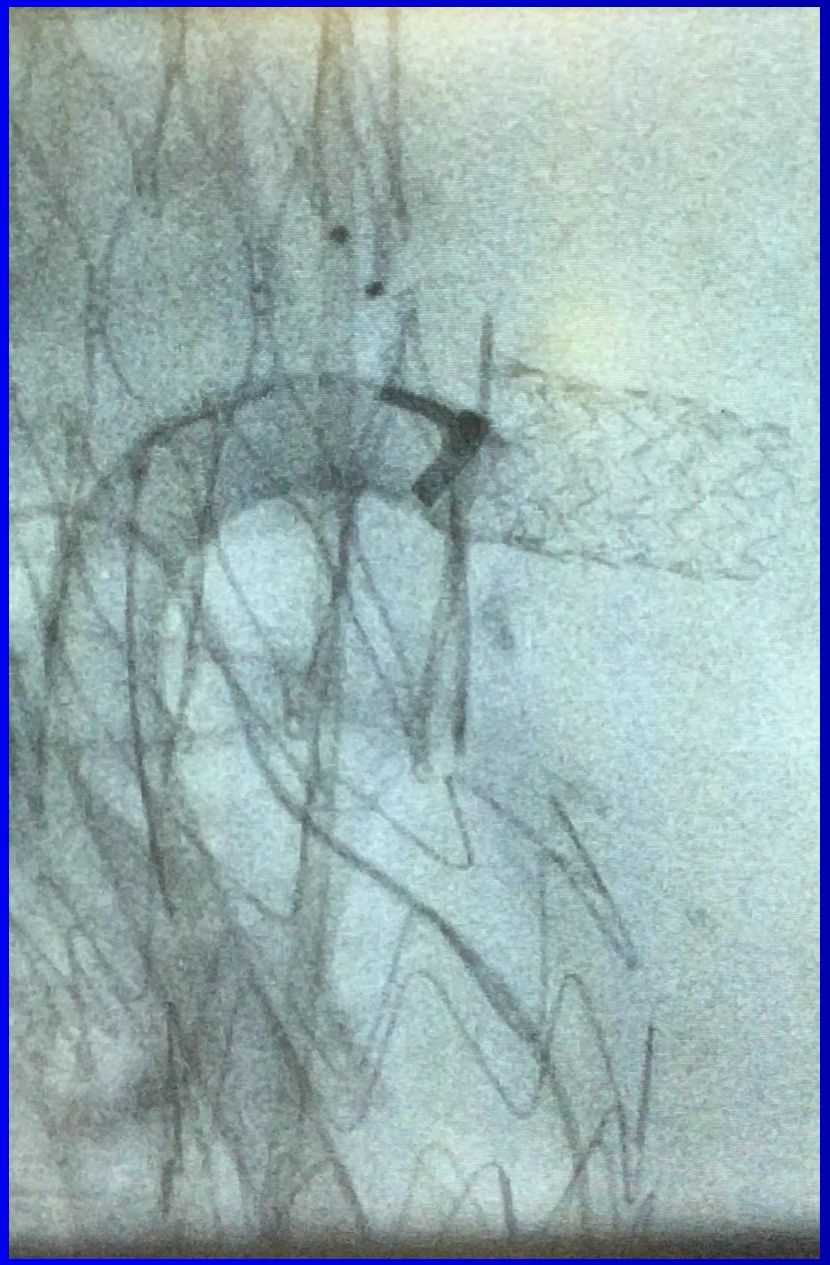


Two orthogonal views



Laser Fenestration
0.9 mm Monorail





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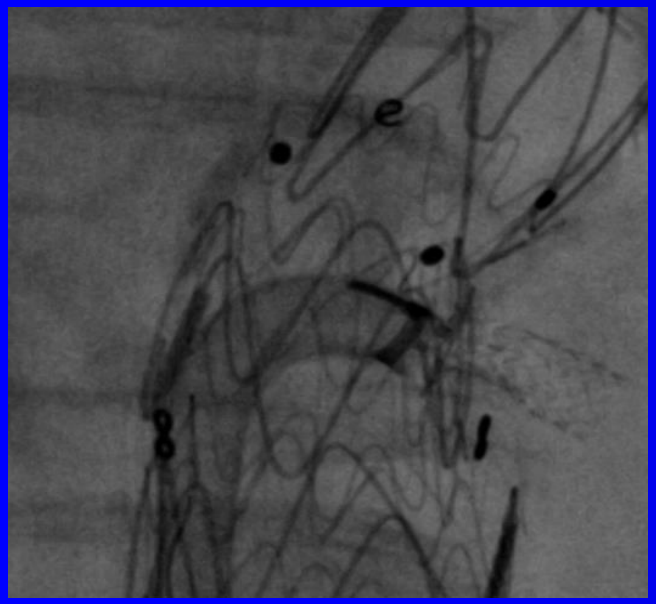



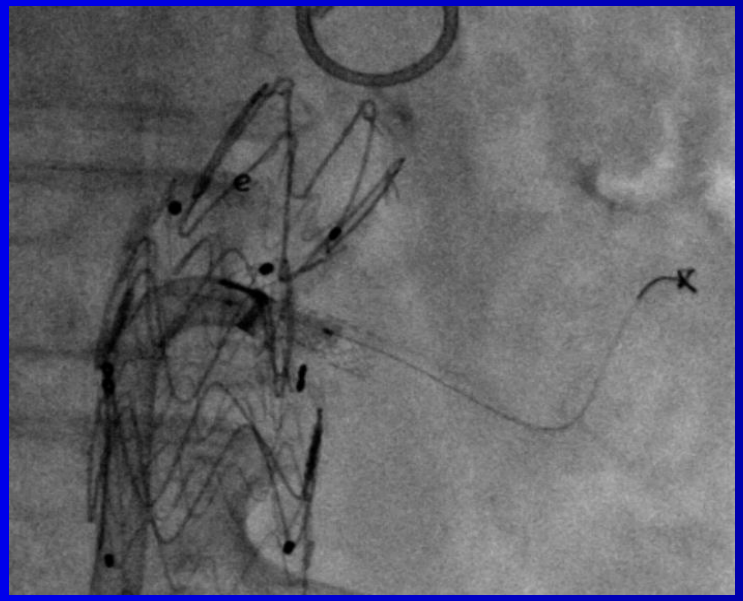
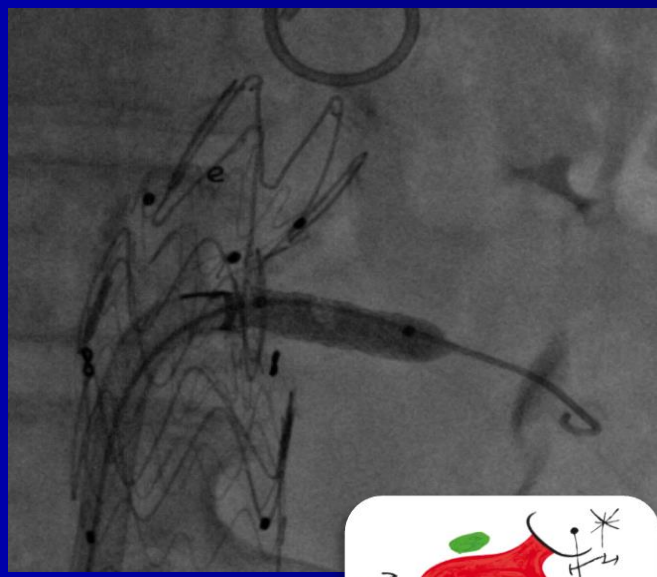
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Progressive dilation

using

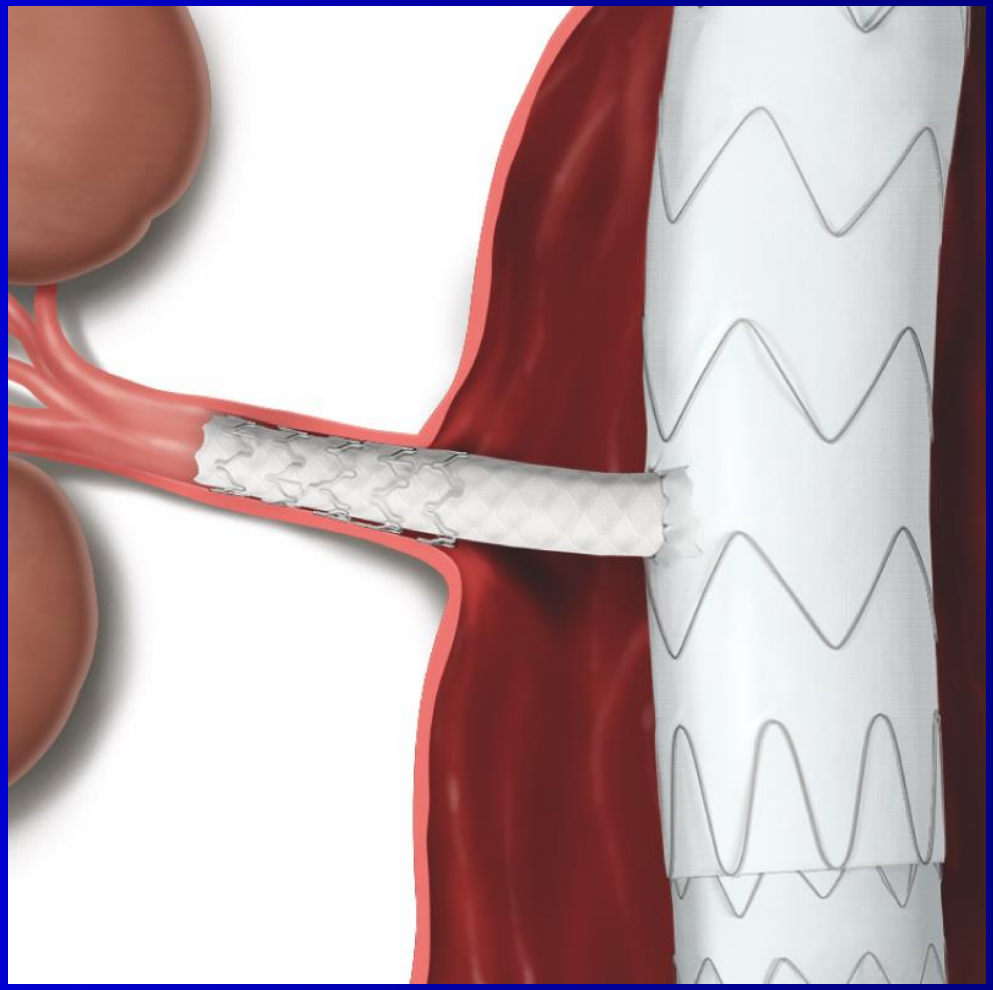
2mm baloon

Cutting baloon

4mm Baloon

Covered stent

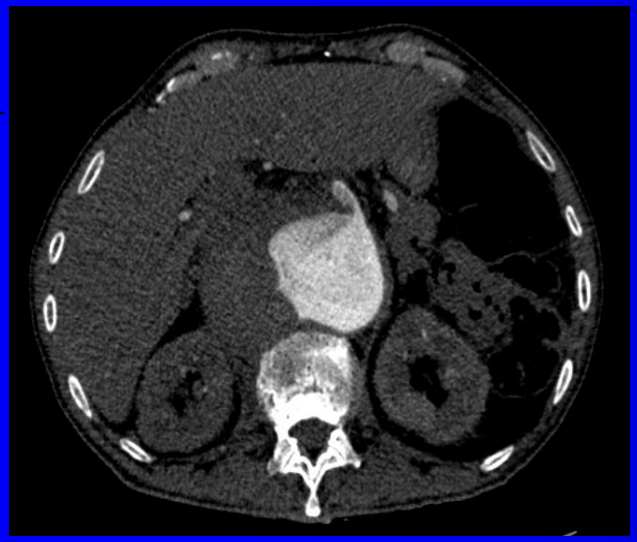
Flairing



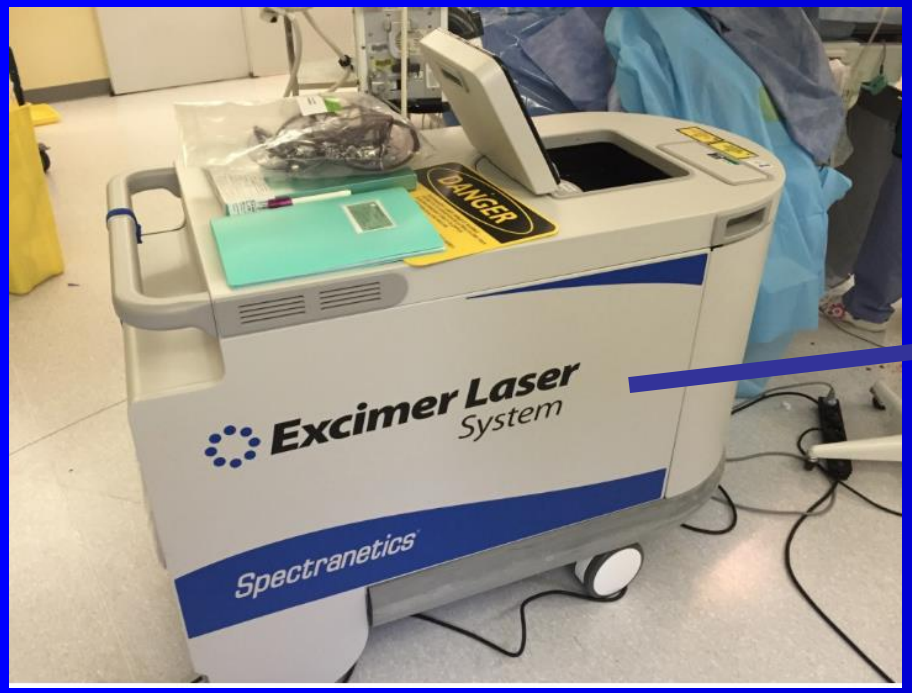
4 fenestrations
20’ minutes
For each artery

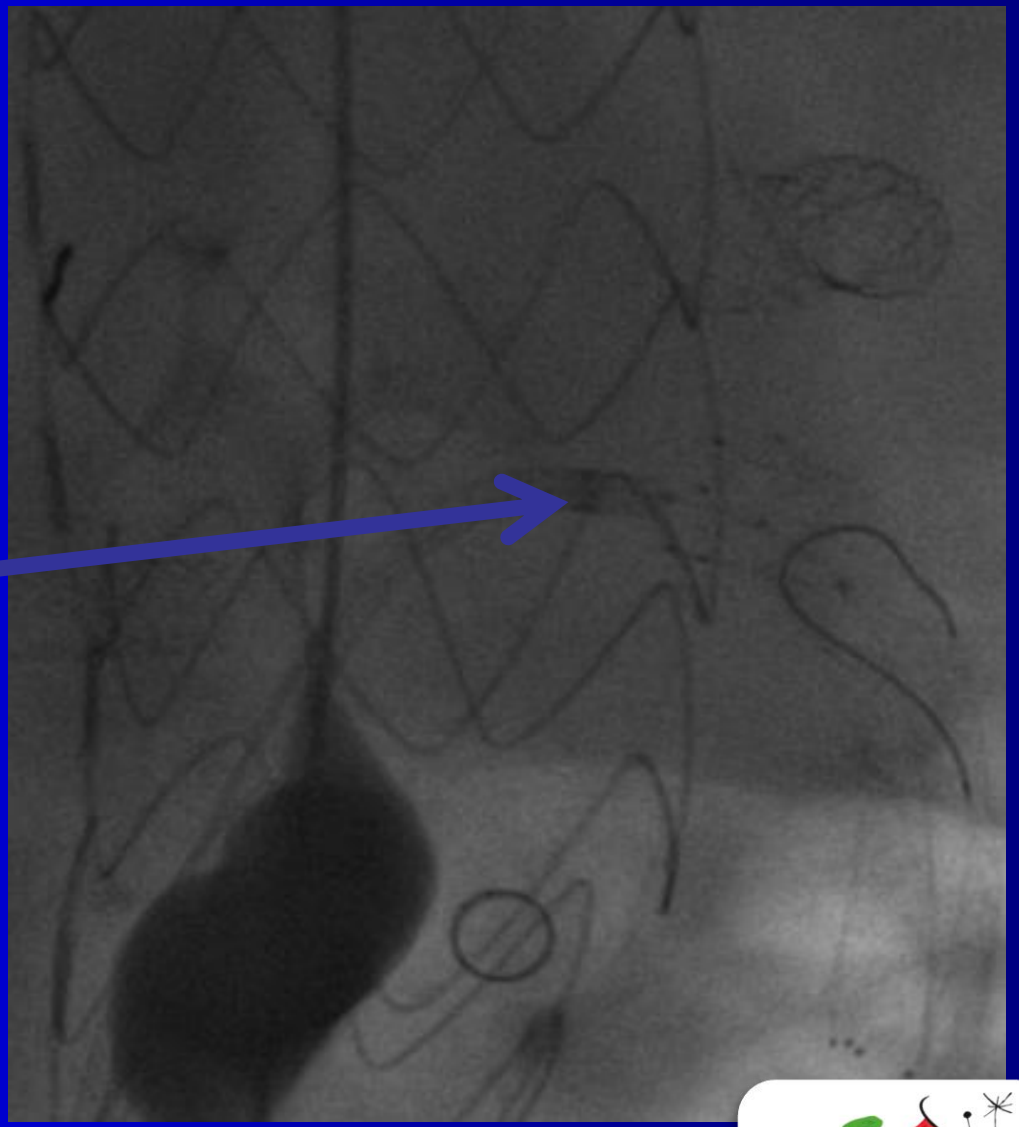
The first case
Ruptured Type V Crawford TAAA

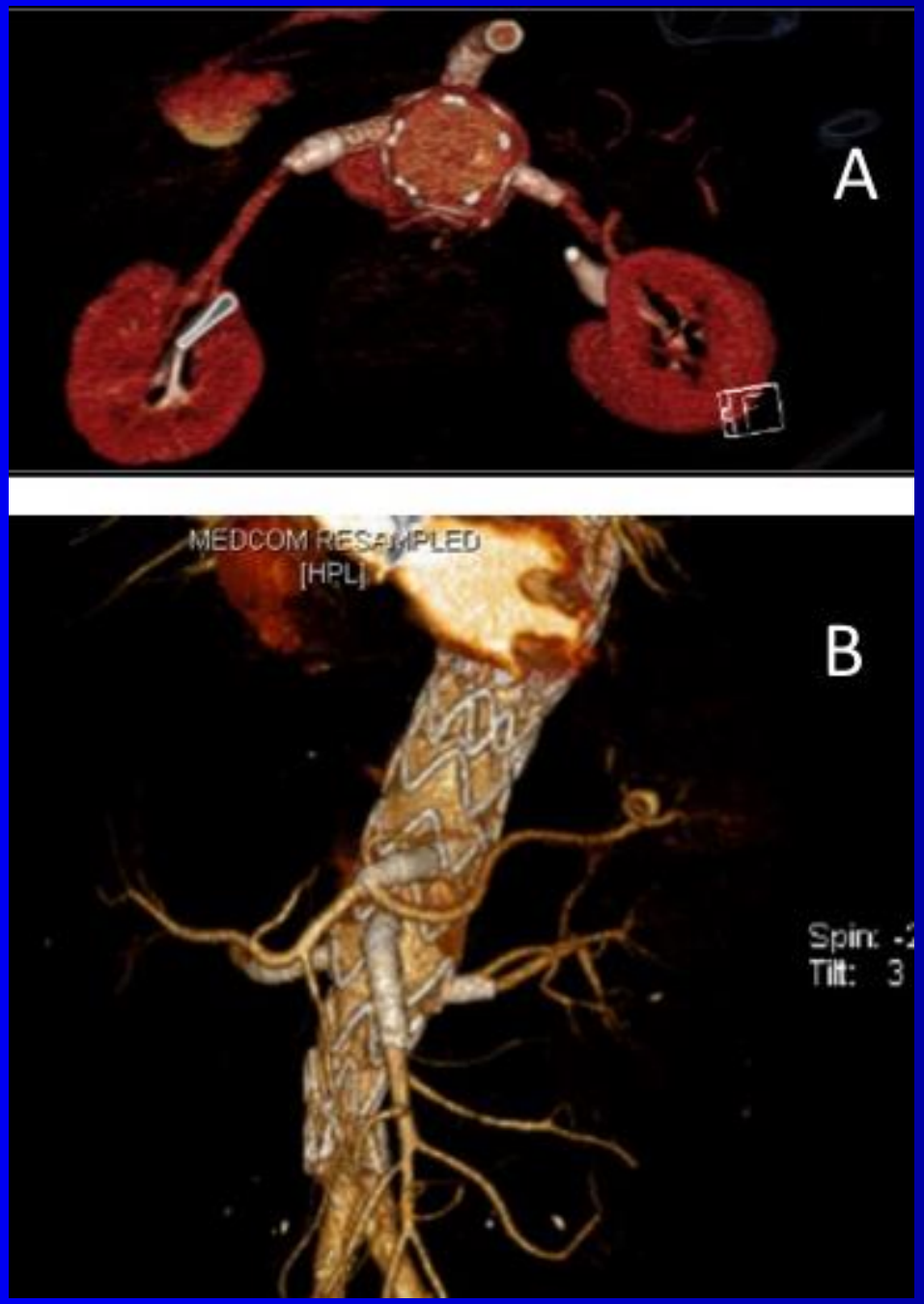
A



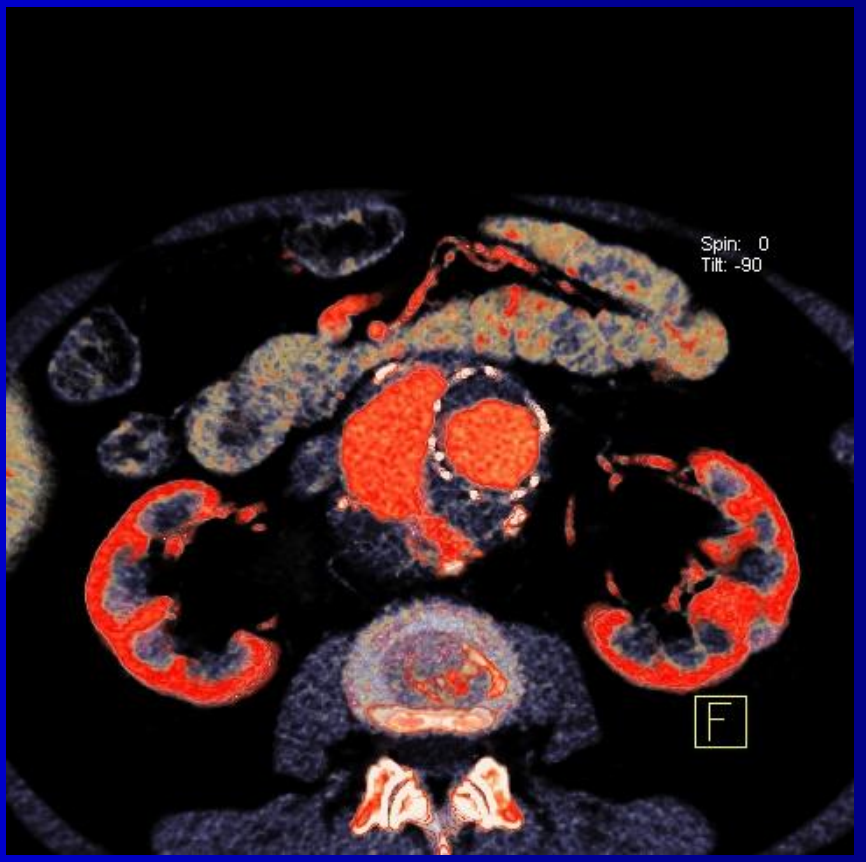
B


DANGER
Excimer Laser
System
Spectranetics




A
MEDCOM RESAMPLED
[HPL]
B
Spin: -2
Tilt: 3

Type I A Endoleak



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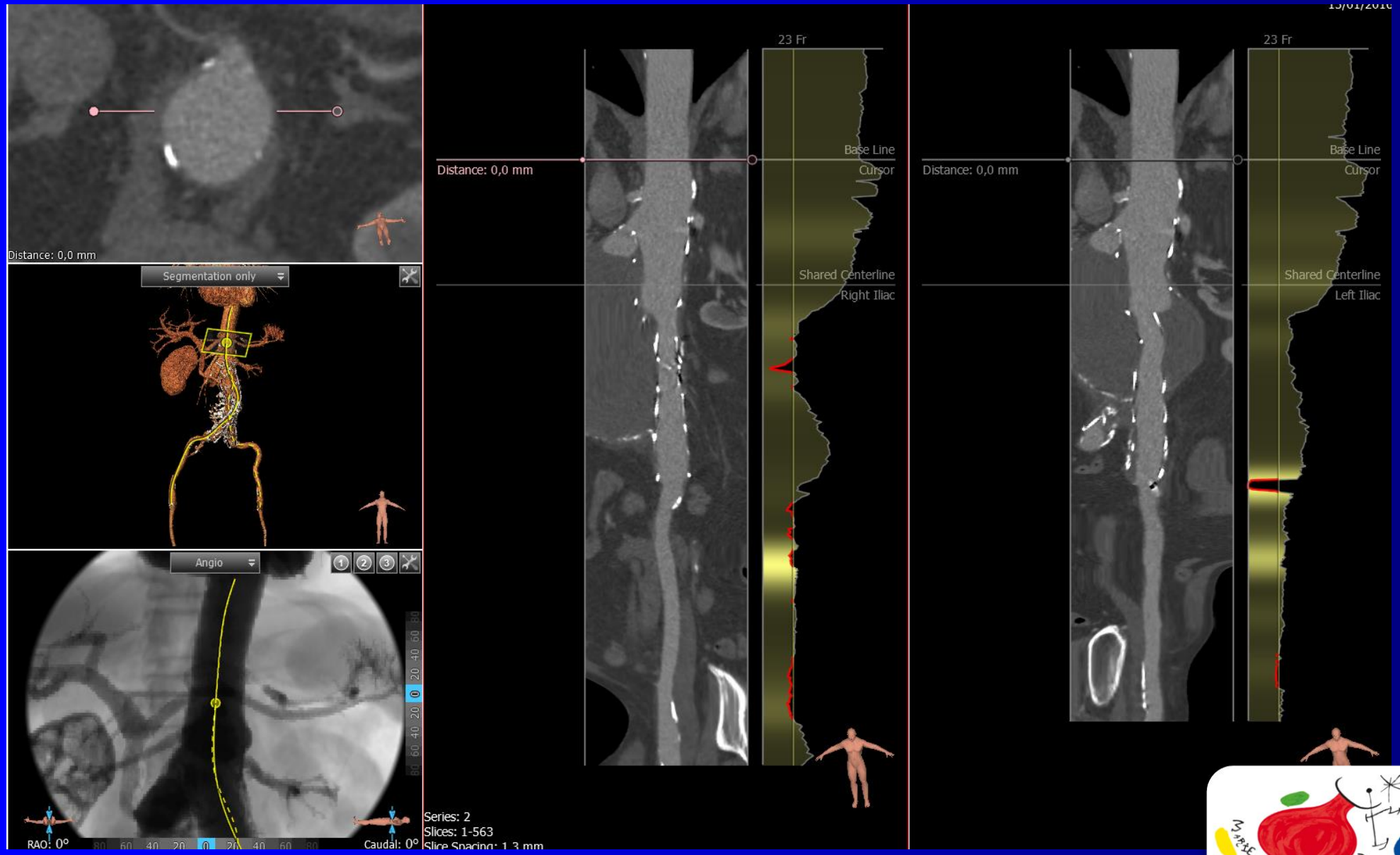
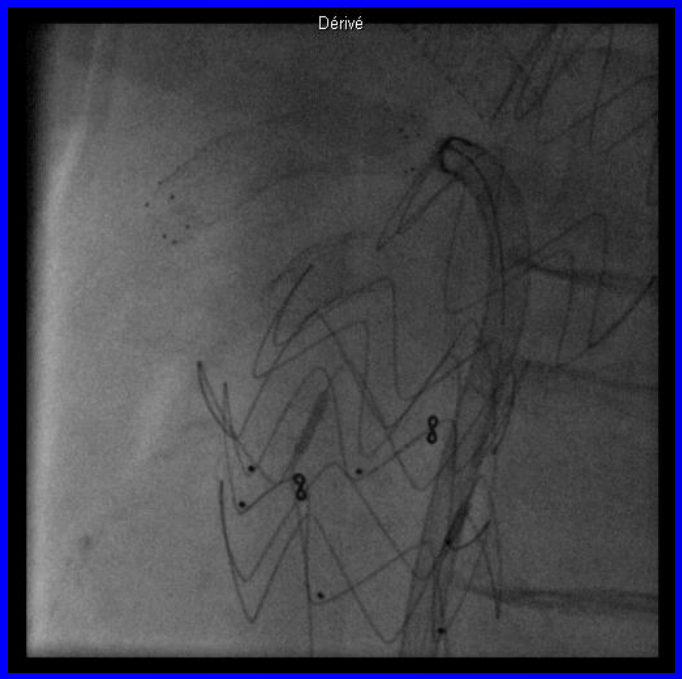
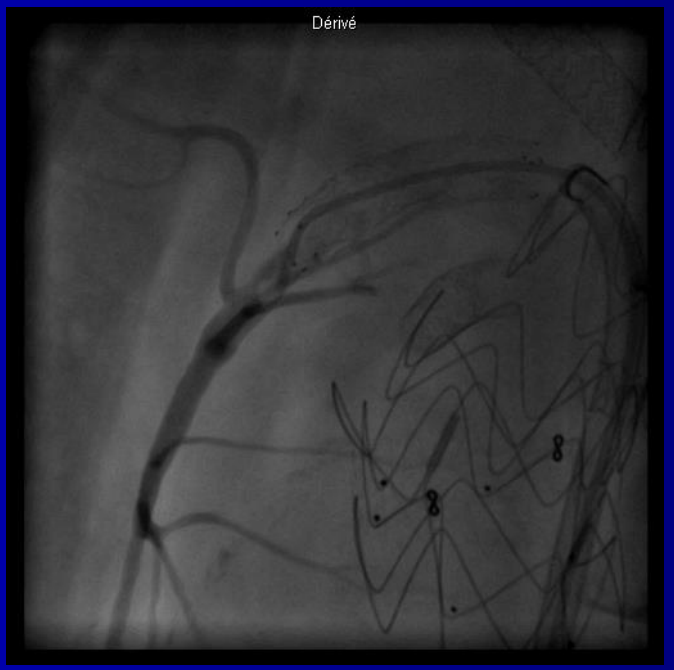

Distance: 0,0 mm
Segmentation only
Angio
RAO: 0°
Caudal: 0°
23 Fr
Distance: 0,0 mm
Base Line
Cursor
Shared Centerline
Right Iliac
Series: 2
Slices: 1-563
Slice Spacing: 1,3 mm
23 Fr
Distance: 0,0 mm
Base Line
Cursor
Shared Centerline
Left Iliac

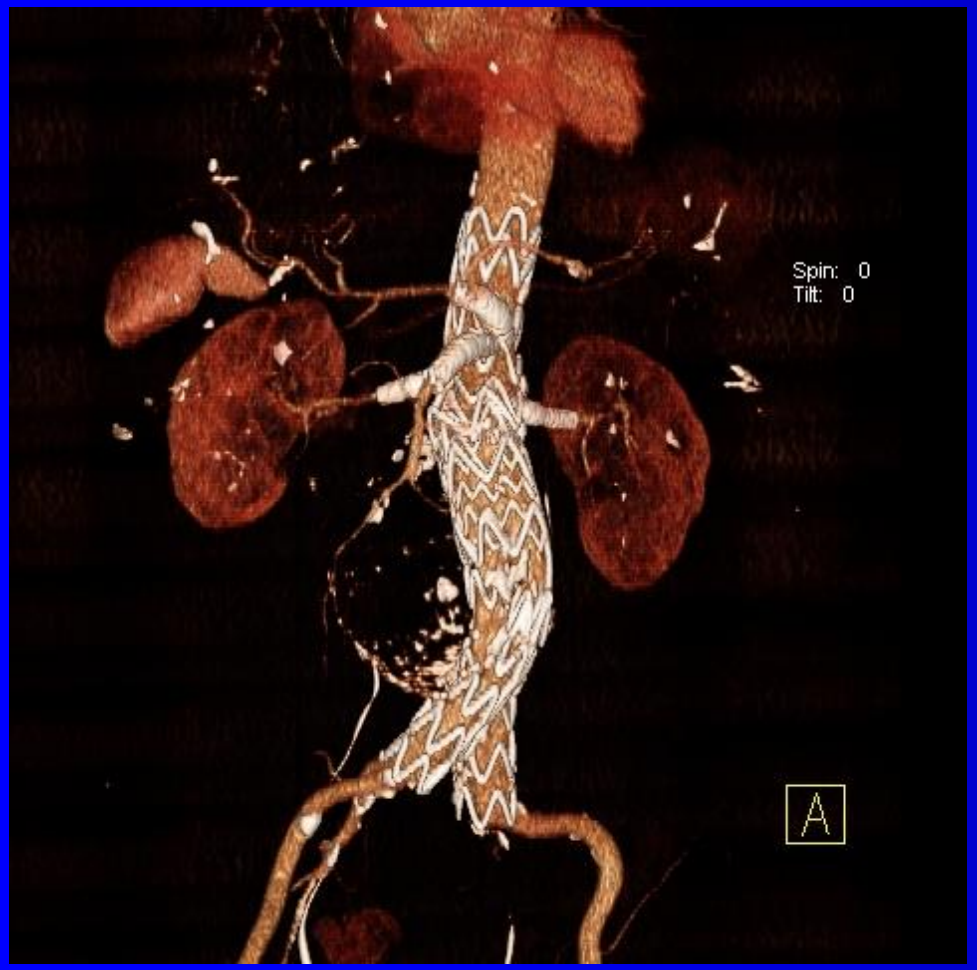
SMA Laser Fenestration

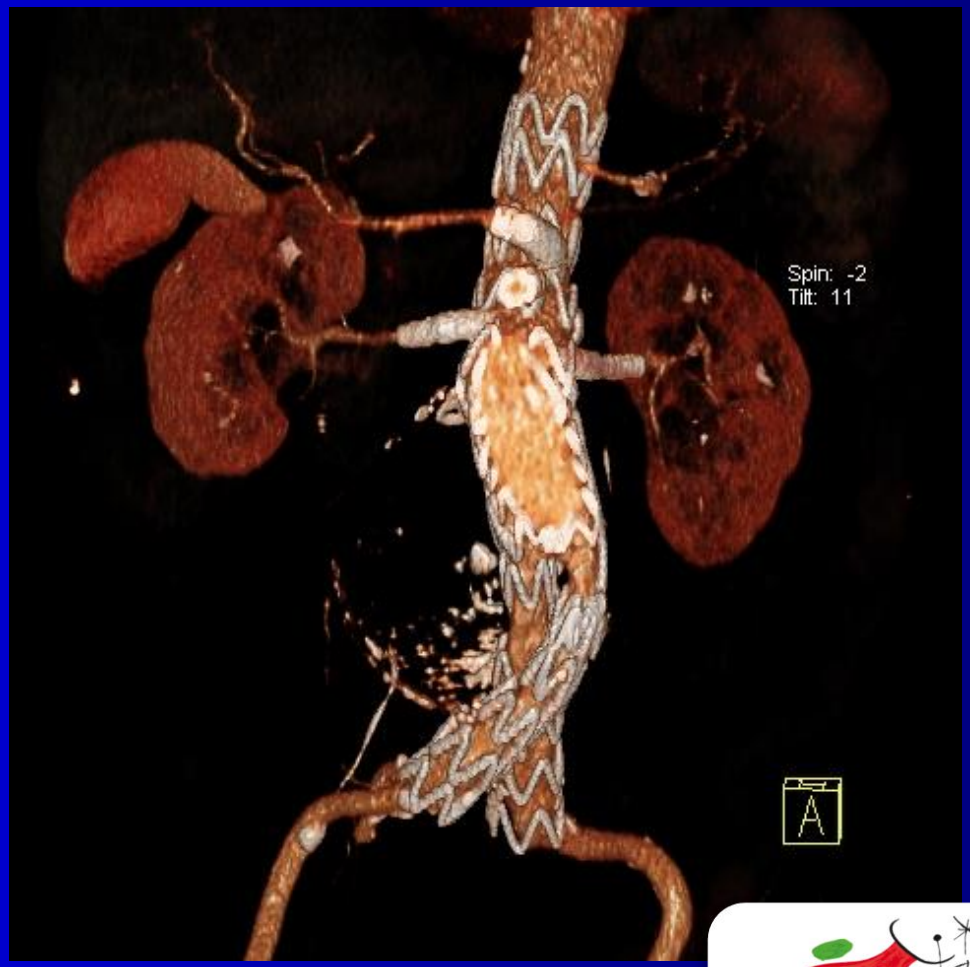





Dérivé

Hôpital





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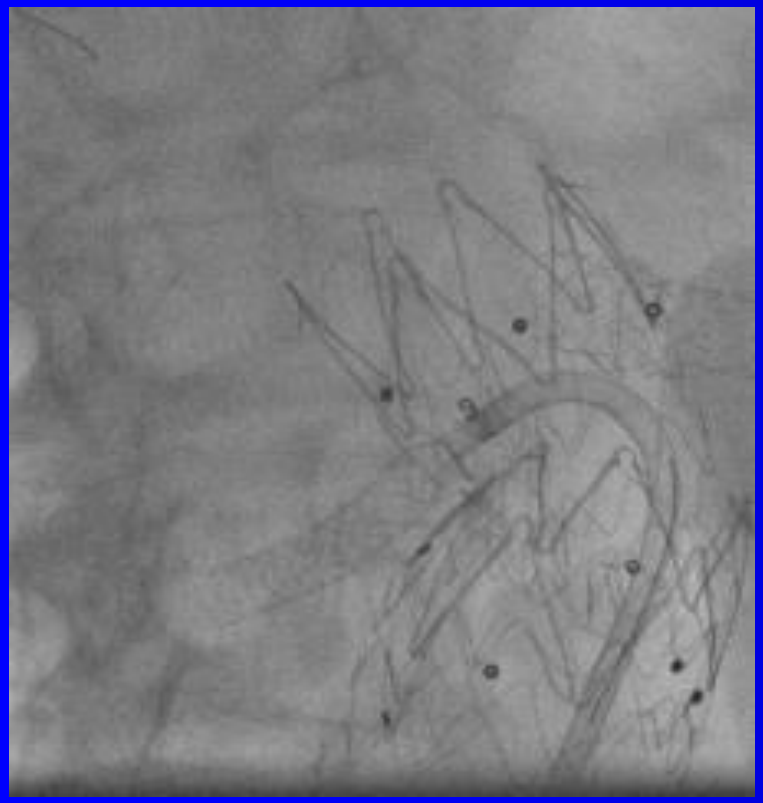
Major angulation



Clinical Datas

11 patients: 9 Men / 2 women

Mean age: 75 years (+/- 11)

Pathology:

- 3 Crawford Type V TAAA
- 4 Pararenal AAA
- 4 Type I Endoleak

Number of Laser fenestrations: 29

Number of fenestration / patient: 2.6

Technical success: 100%

Follow-up

There were no fenestration-related complications.

A secondary procedure, at one week, was required to treat a type III endoleak between the two thoracic grafts for one of the TAAA.

CT scan control at 3 and 6 months were satisfactory, without any endoleak or stent occlusion.

The mean follow-up is 5 months

Conclusion

LfEVAR is an off-label technique that could offer an alternative-option for high risk patients.

The real difficult challenging part is the blind anterograde approach.

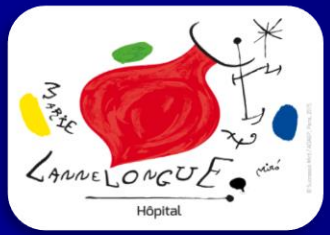
The first important point to falicitate the LfEVAR is the use of a preliminary stenting before fenestration.

This technique could maybe be replaced by fusion imaging.

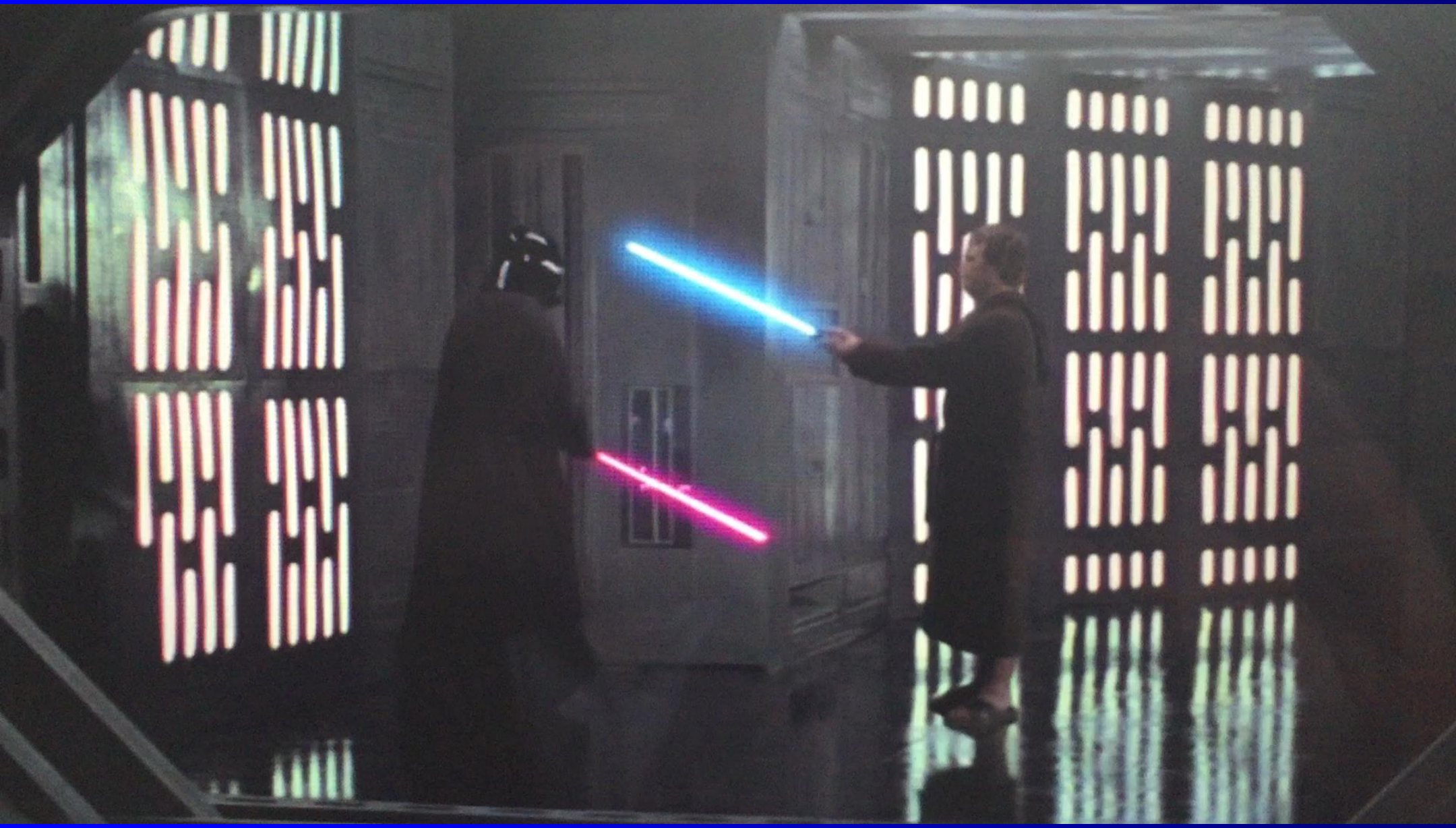
The second point is the stability of the Aptus that falicitate catheterization.

We described the first LfEVAR with an anterograde laser fenestration in the emergencyt treatment of TAAA or pararenal aneurysmal disease.

Mid-term and long-term results are needed to confirm and validate this off-label approach.



Stephan Haulon's Office




Marie Lannelongue
Centre Chirurgical