THE 24TH INTERNATIONAL EXPERTS SYMPOSIUM
CRITICAL ISSUES
IN AORTIC ENDOGRAFTING

DECEMBER 17 & 18 2021
PULLMAN CENTRE PARIS BERCY - PARIS FRANCE

Addressing thoraco-abdominal morphology with artificial landing zones

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Lyon 1

Disclosures

- Terumo Aortic
- Gore
- Medtronic

Juxta-Renal Aortic Aneurysm

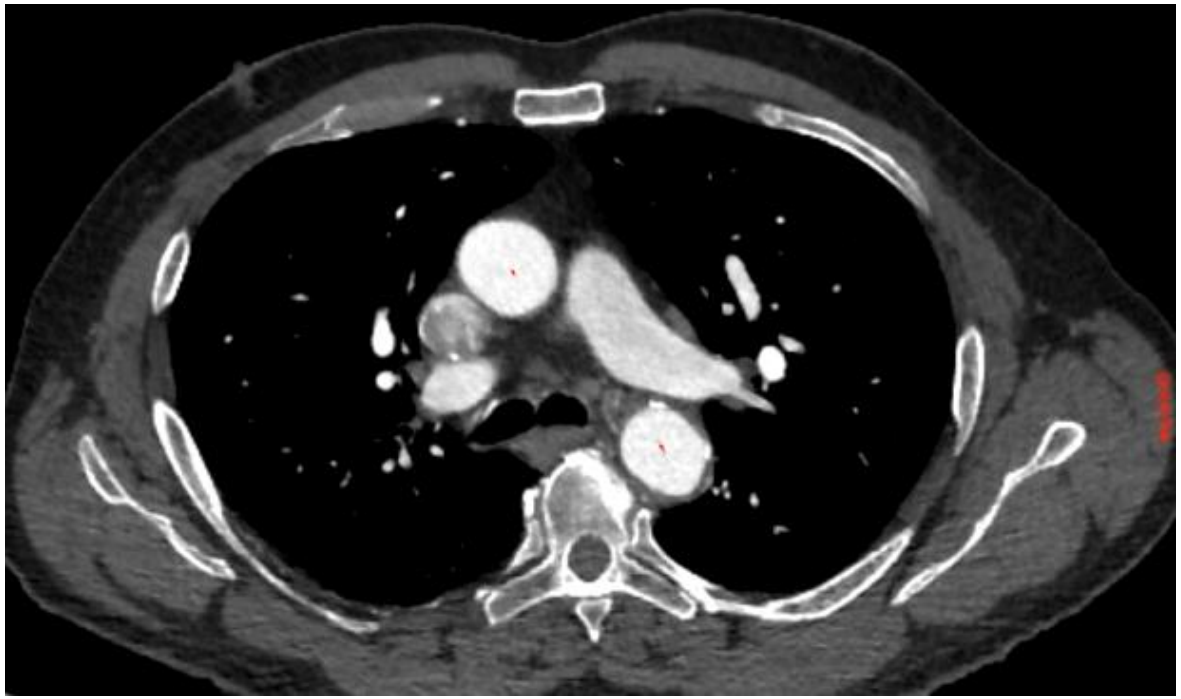
- 4fen CMD the most used endovascular strategy

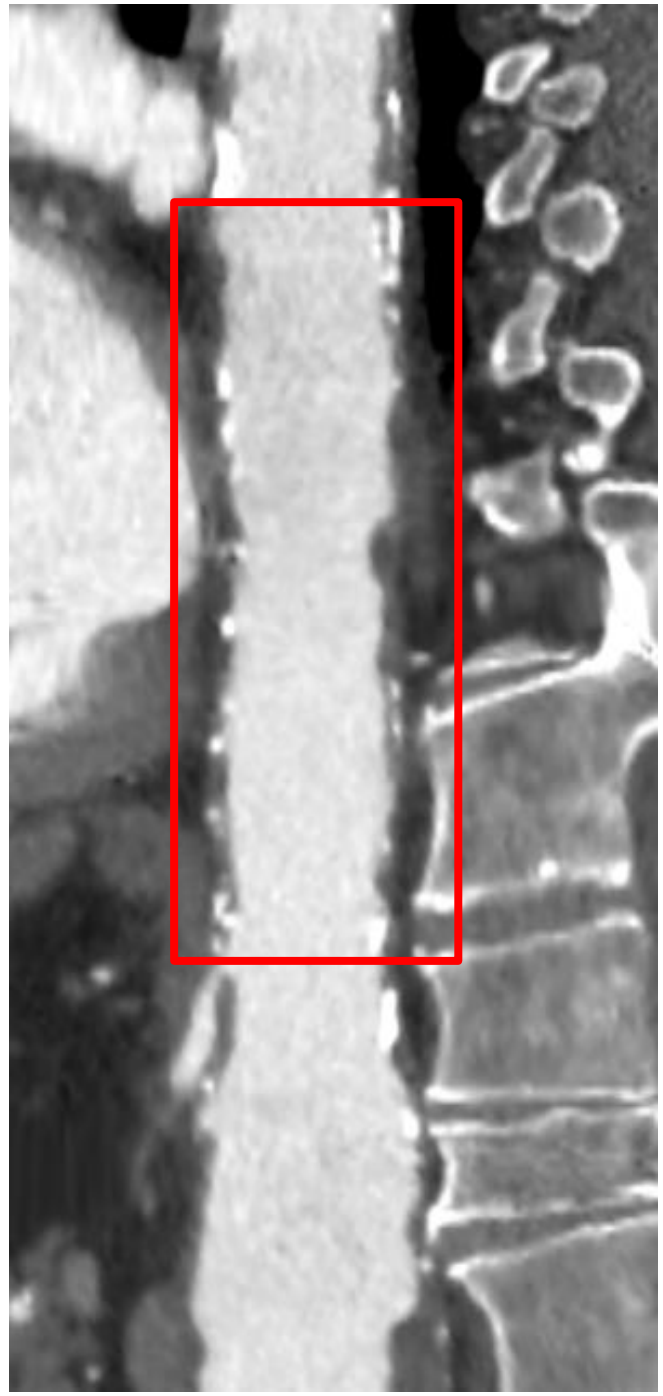
- Required healthy supraceliac landing zone for durable seal
    - Length 20-30 mm
    - Diameter < 32 mm
    - No thrombus
    - No diffuse calcification
    - No severe angulation

SUPRACELIAC PROX LANDING ZONE

Irregular
Thrombus +++

Efficient and durable sealing zone ?
How far should we go proximally ?

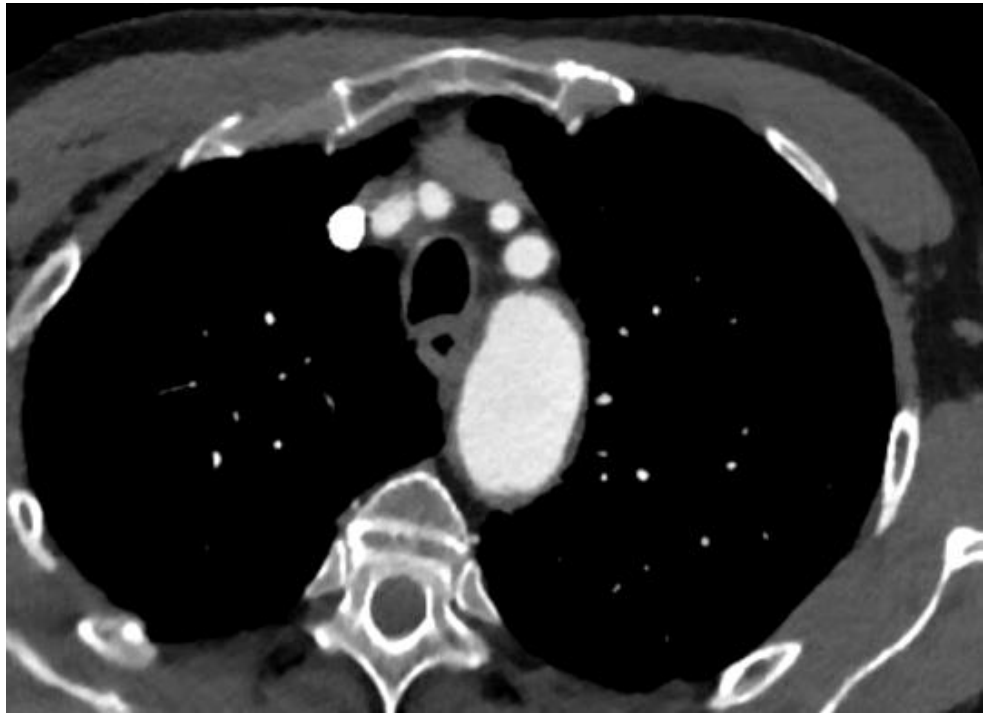


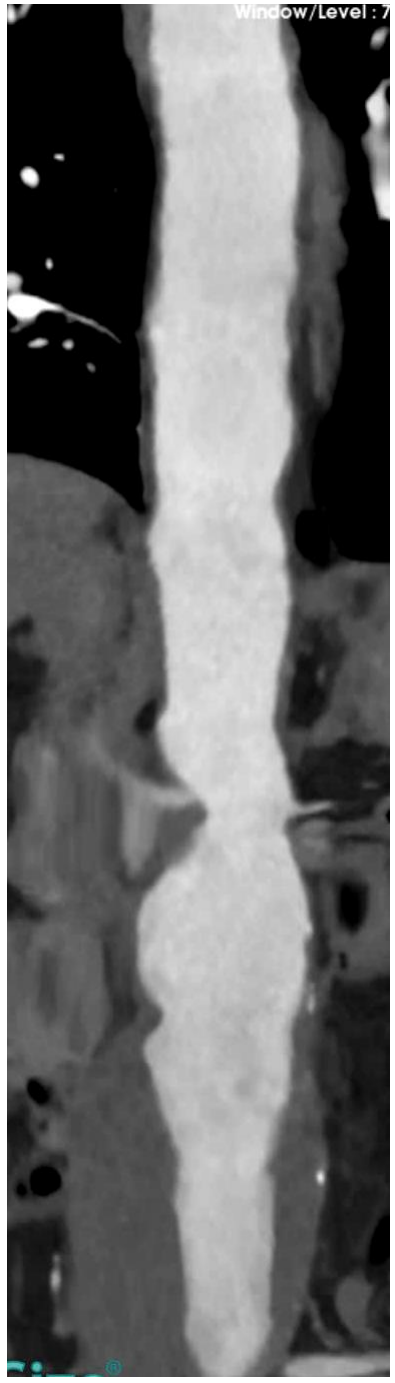


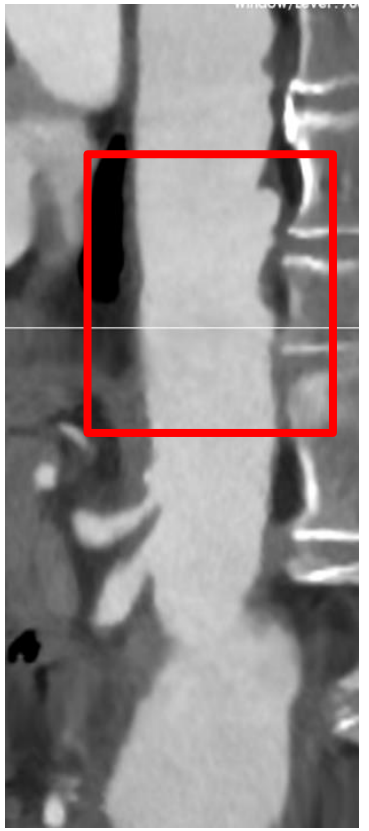
SUPRACELIAC PROX LANDING ZONE

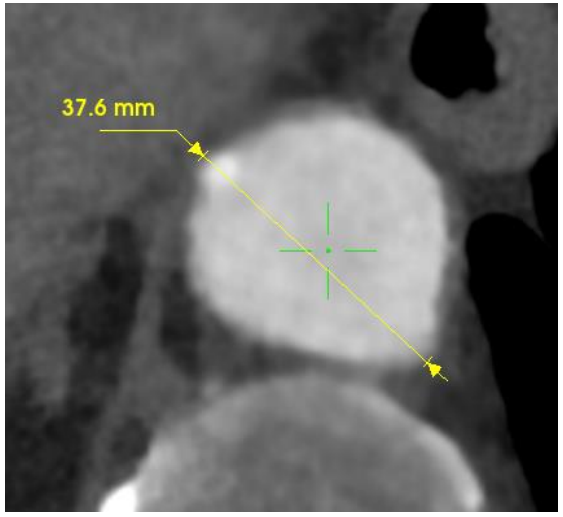
Large D>35mm
Thrombus

Efficient and durable sealing zone ?
How far should we go proximally ?

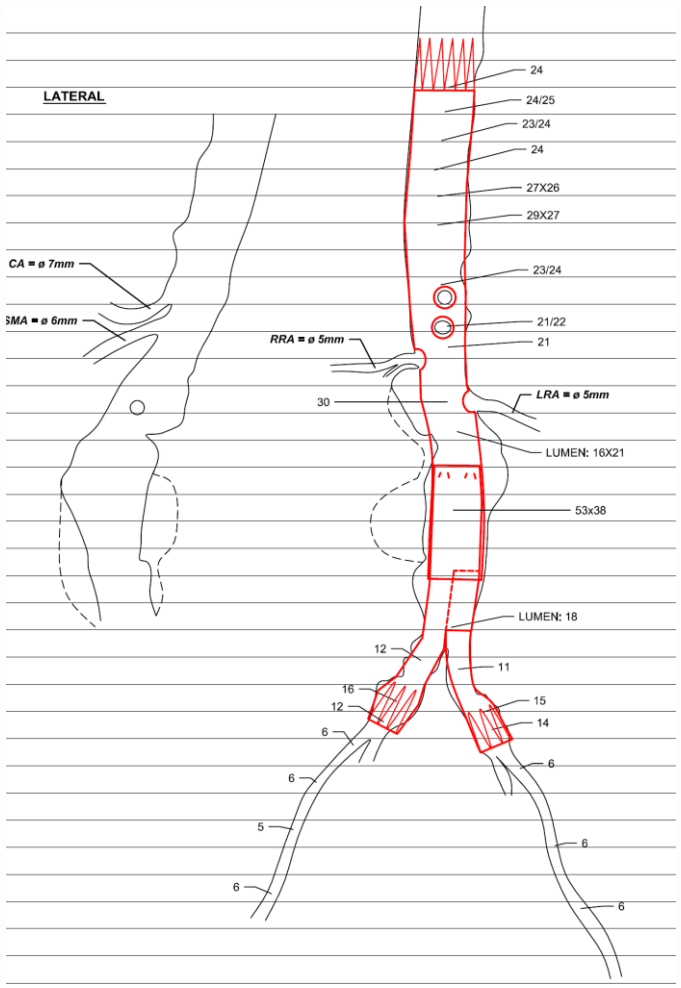


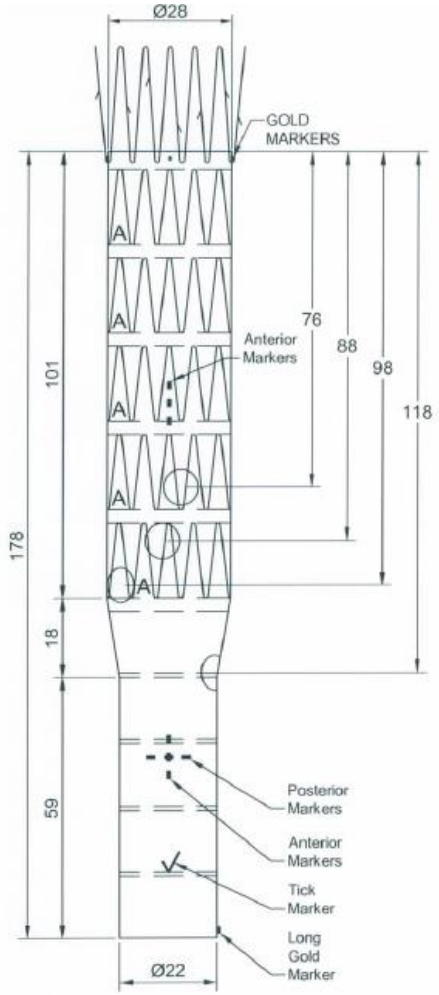


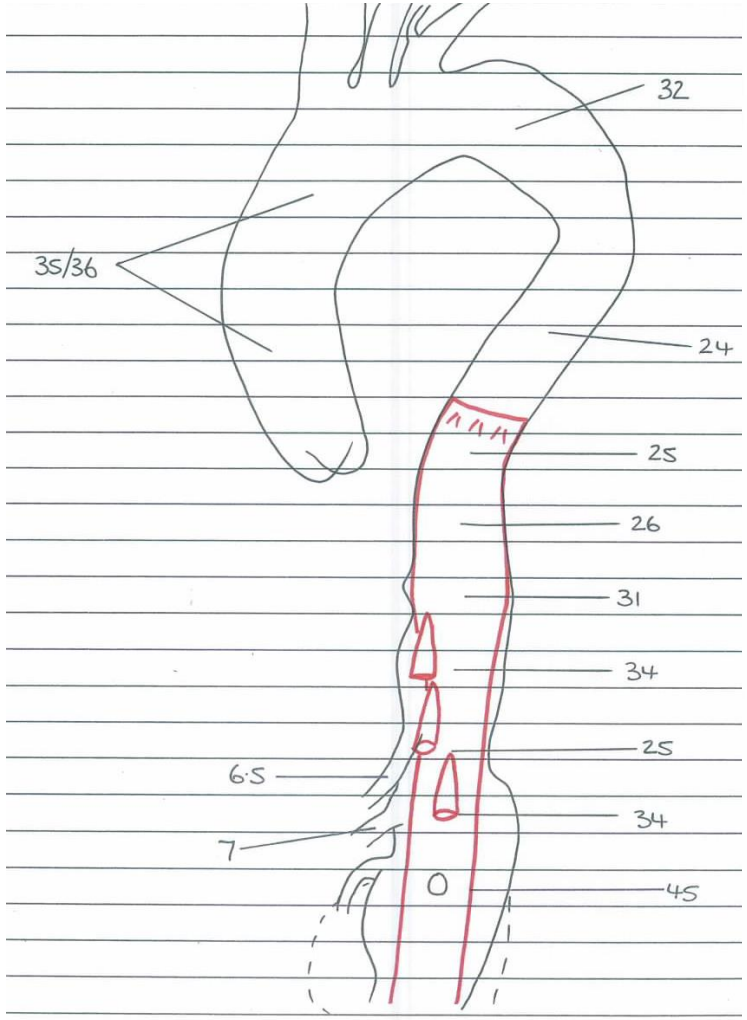


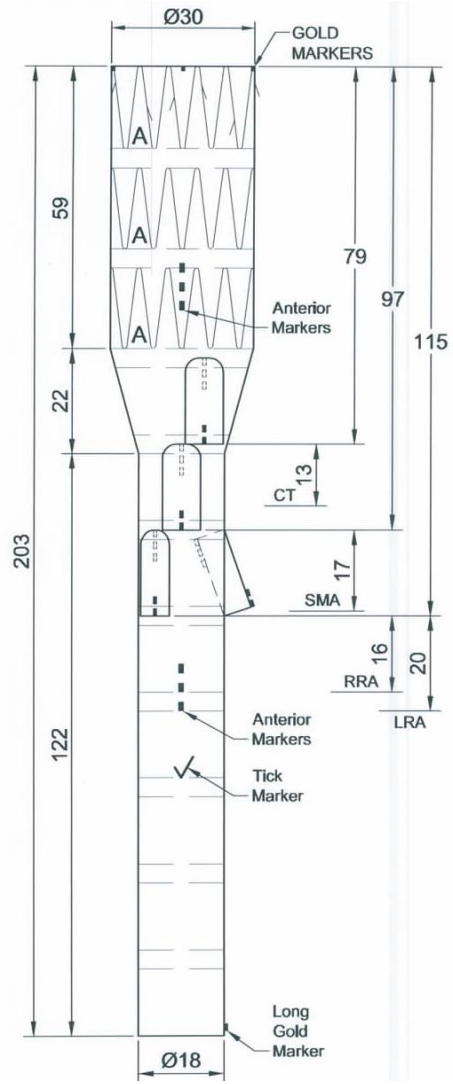


COOK Custom Made Devices

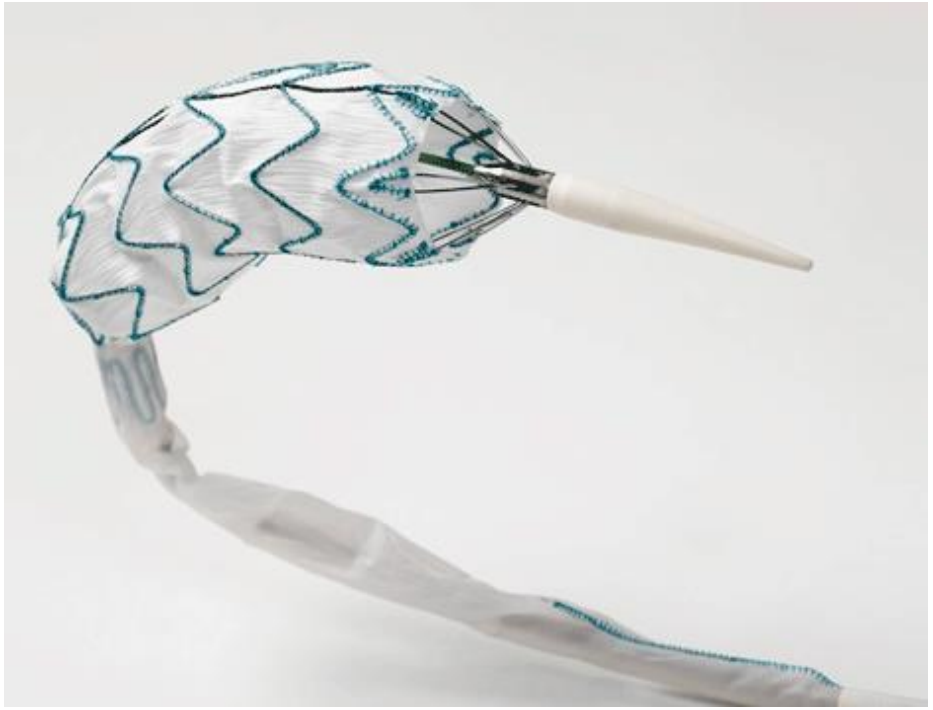


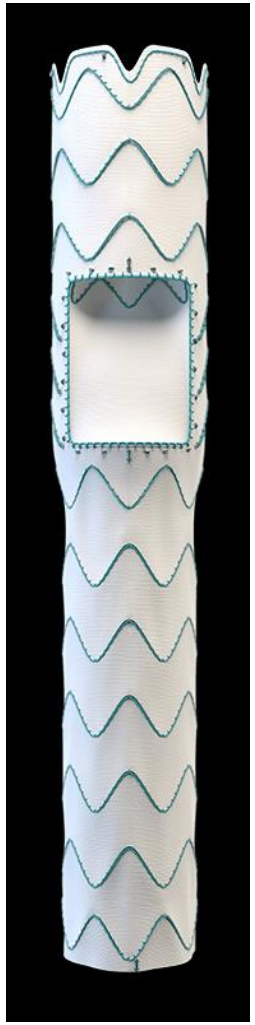






TERUMO AORTIC Custom Made Devices





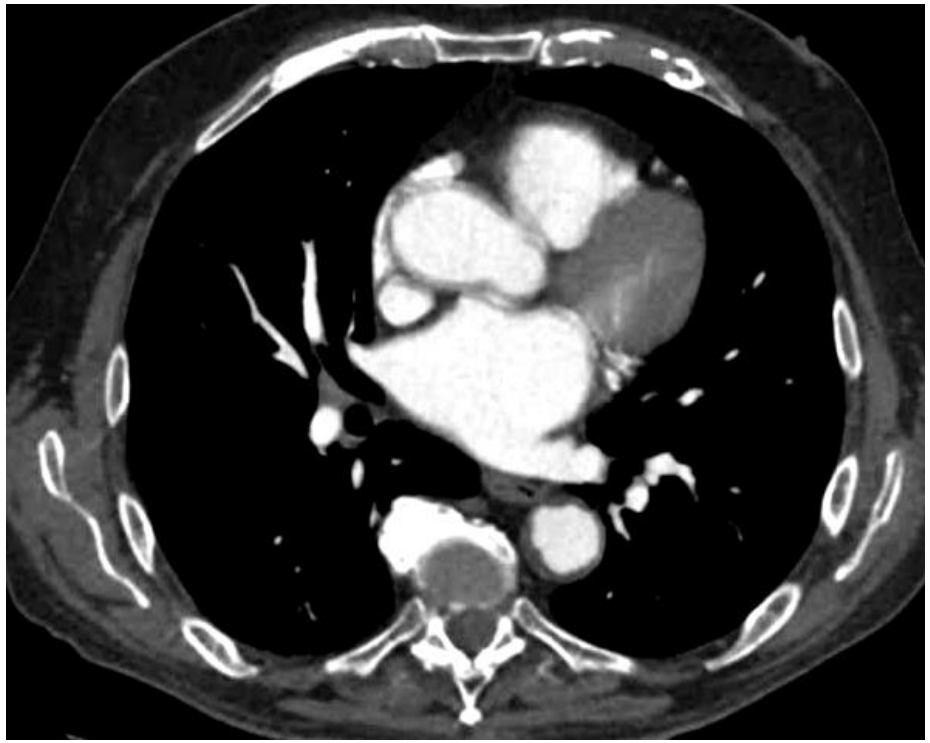
How to create a proximal landing zone for the Fenestrated Anaconda?

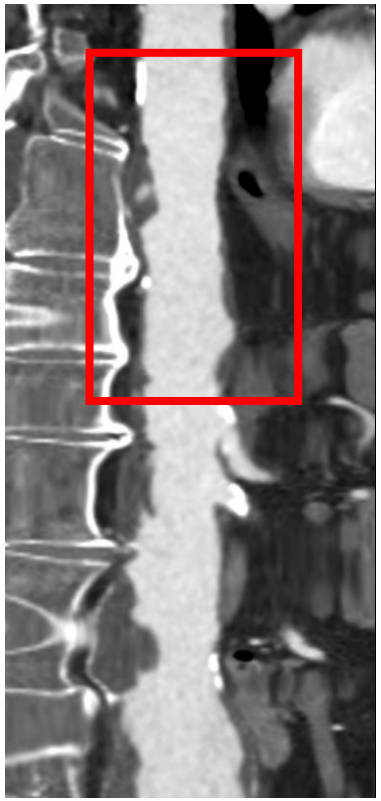
SUPRACELIAC PROX LANDING ZONE

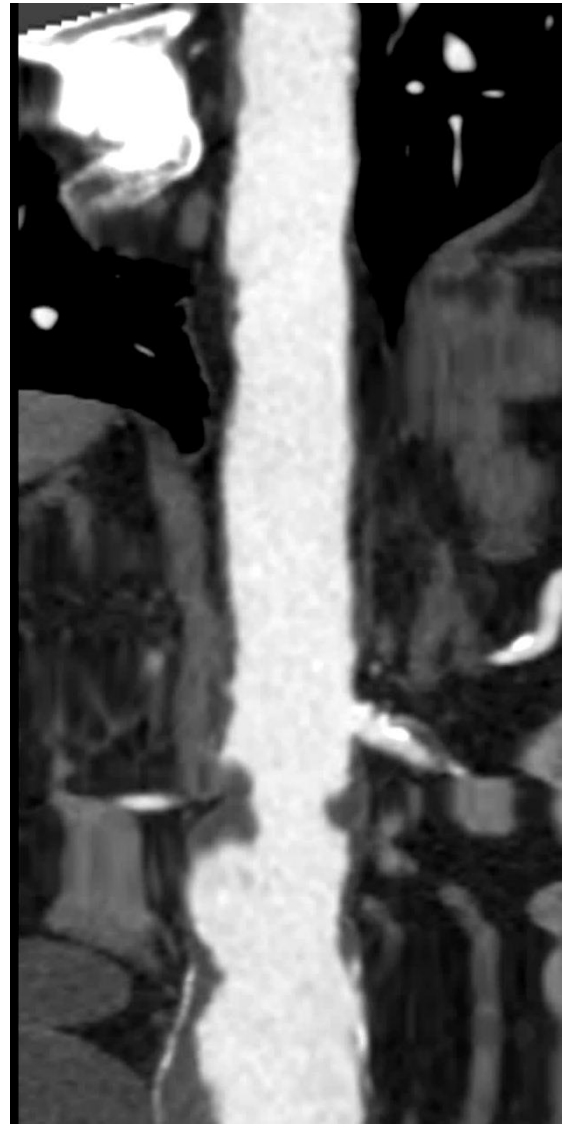
Irregular

Thrombus +++

Diameter < 32 mm

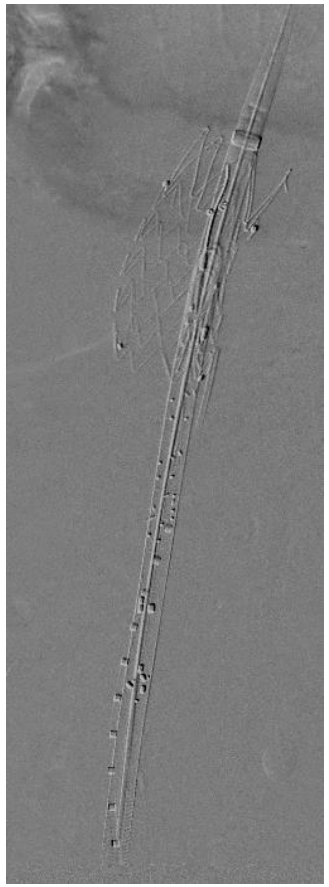


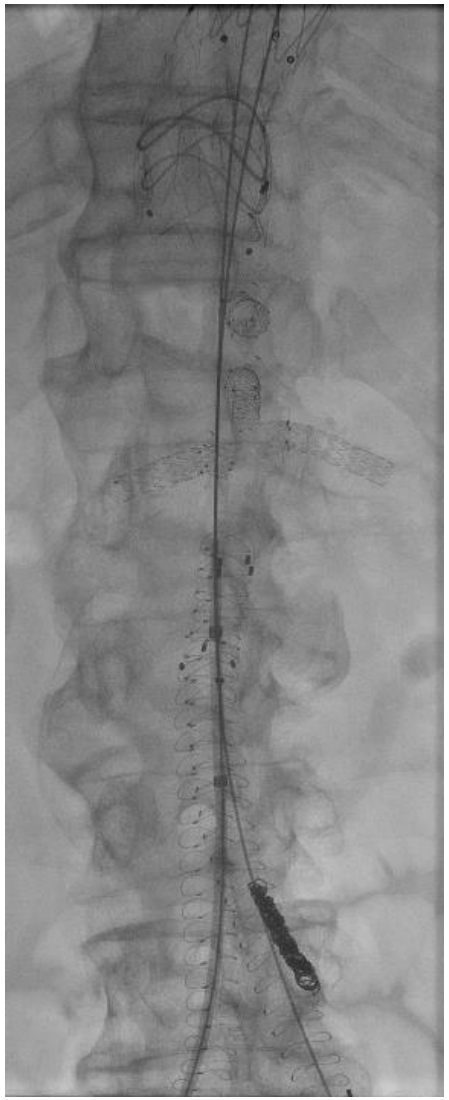


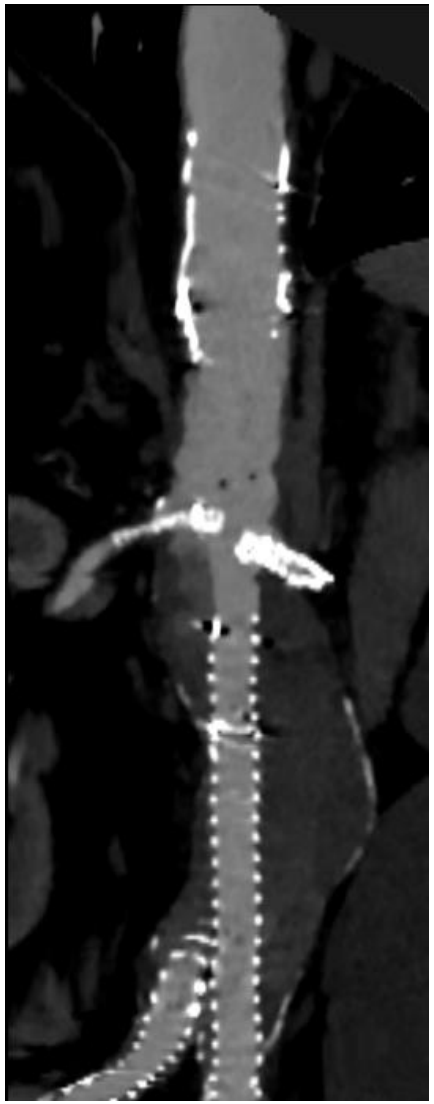


How to create a proximal landing zone for the Fenestrated Anaconda?

Medtronic Aortic Extension







How to create a proximal landing zone for the Fenestrated Anaconda?

SUPRACELIAC PROX LANDING ZONE

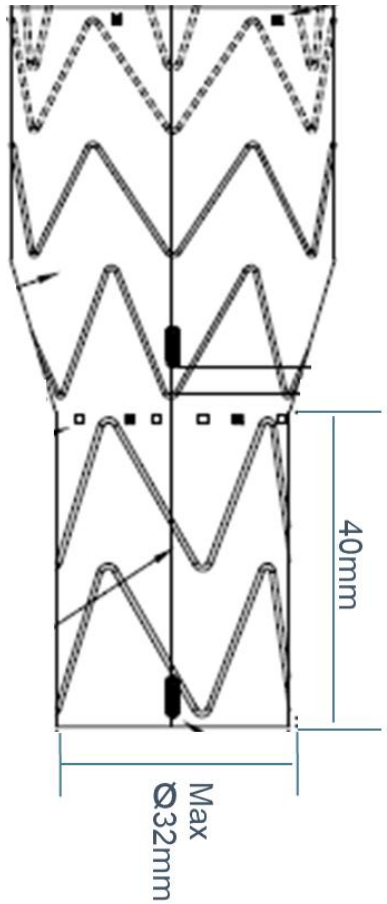
Irregular

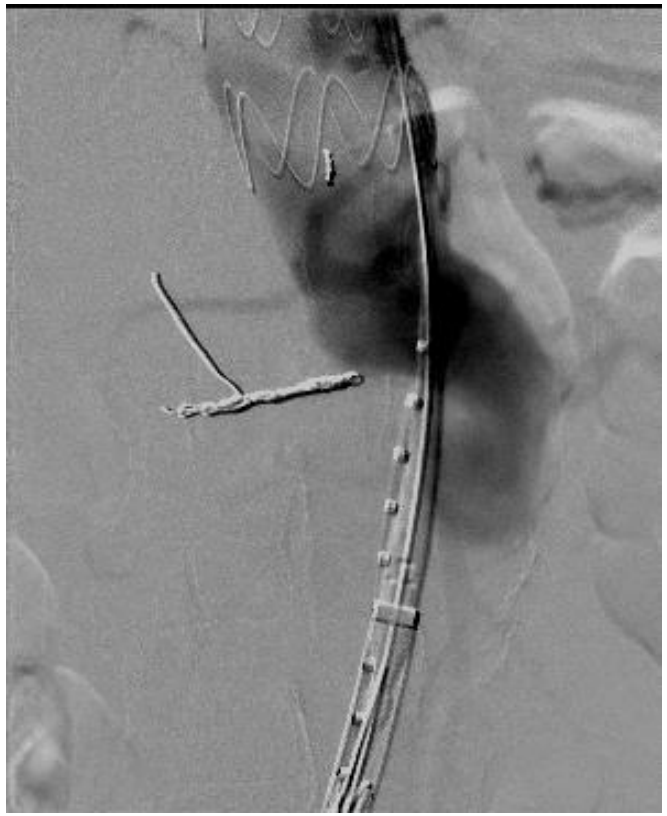
Thrombus +++

Diameter > 32 mm

How to create a proximal landing zone for the Fenestrated Anaconda?

CMD Tapered Relay





Thoraco-Abdominal Aortic Aneurysm

- 4 Branch or 2Br/2Fen CMD the most used endovascular strategy
- Staged procedures to avoid paraplegia
- Patency of the renal branch ?
- Endoleak at the fenestration ?

How to address TAA with Fenestrated Anaconda?

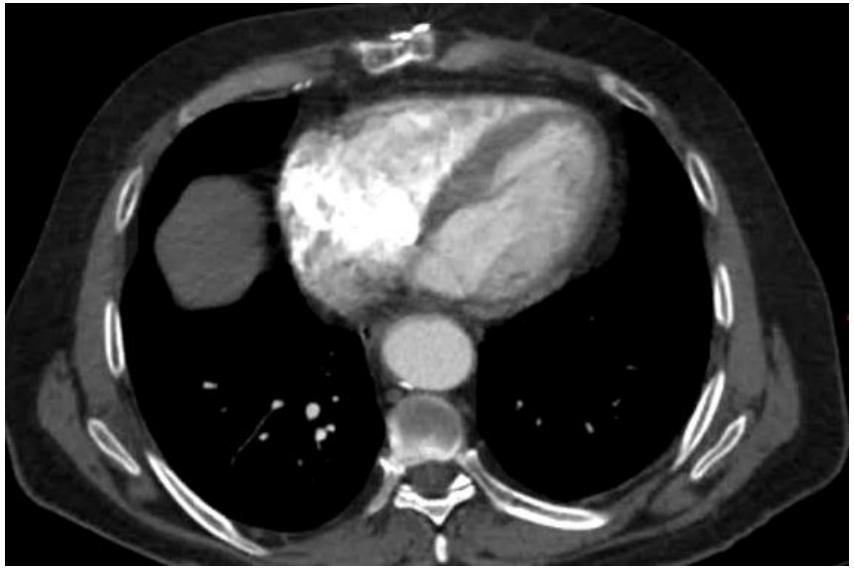
Para-renal AAA

MEDTRONIC AORTIC EXTENSION
4 FEN ANACONDA CUFF
BIFURCATED ANACONDA
GORE IBE X2

How to address TAA with Fenestrated Anaconda?

Para-renal AAA

Previous EVAR



CMD Tapered RELAY

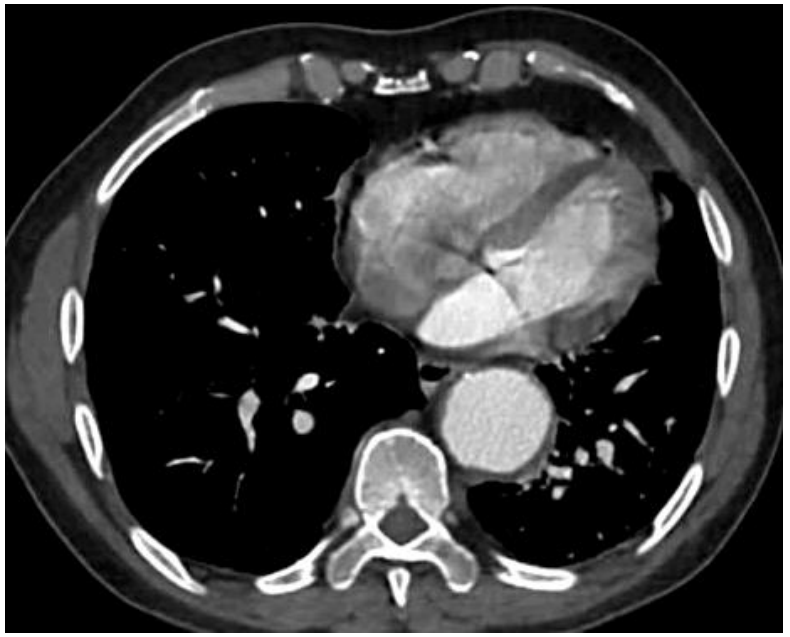
4 FEN ANACONDA

Aortouniliac SG

How to address TAA with Fenestrated Anaconda?

Type IV TAAA

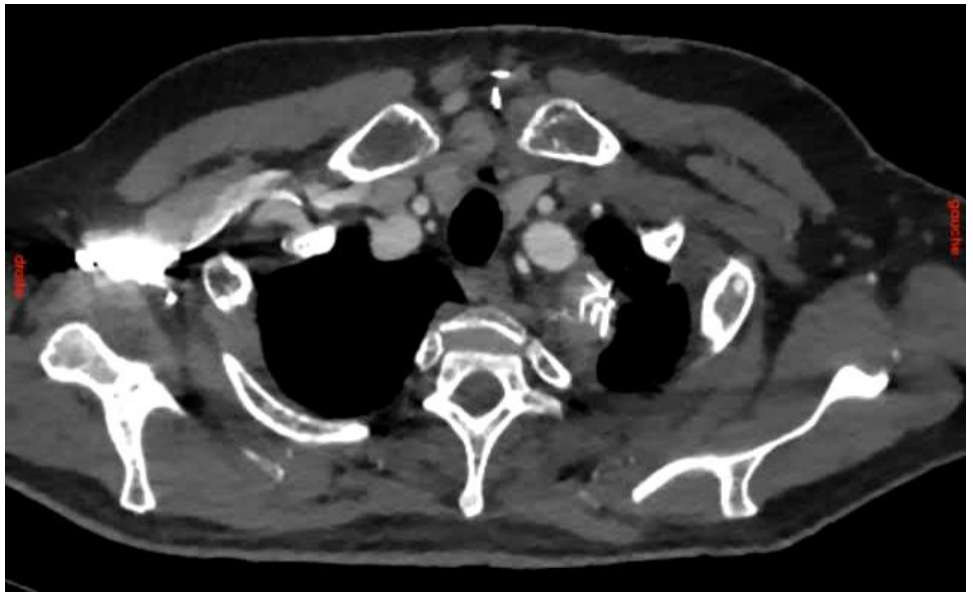
Solitary kidney



CMD Tapered RELAY
3 FEN ANACONDA
1 FEN LIMB

How to address TAA with Fenestrated Anaconda?

Type 2 TAAA
Previous Frozen Elephant trunk



RELAY
CT occlusion
3 FEN ANACONDA

How to address TAA with Fenestrated Anaconda?

Type 3 TAAA

RELAY
CMD RELAY 1 Branch for th CT
3 Fen Anaconda

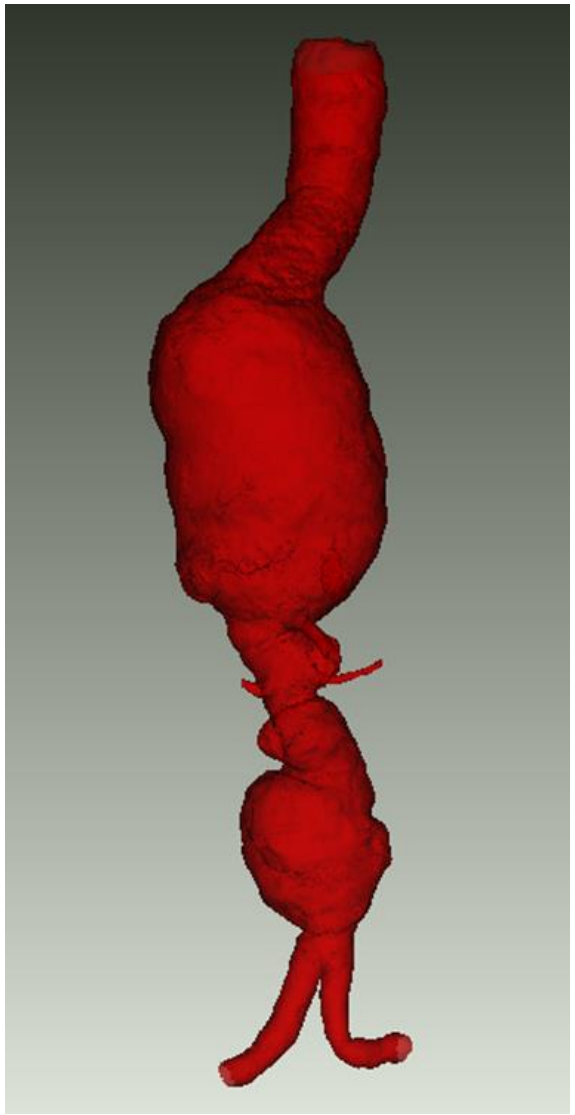
Courtesy Prof A Duprey / Prof JN Albertini

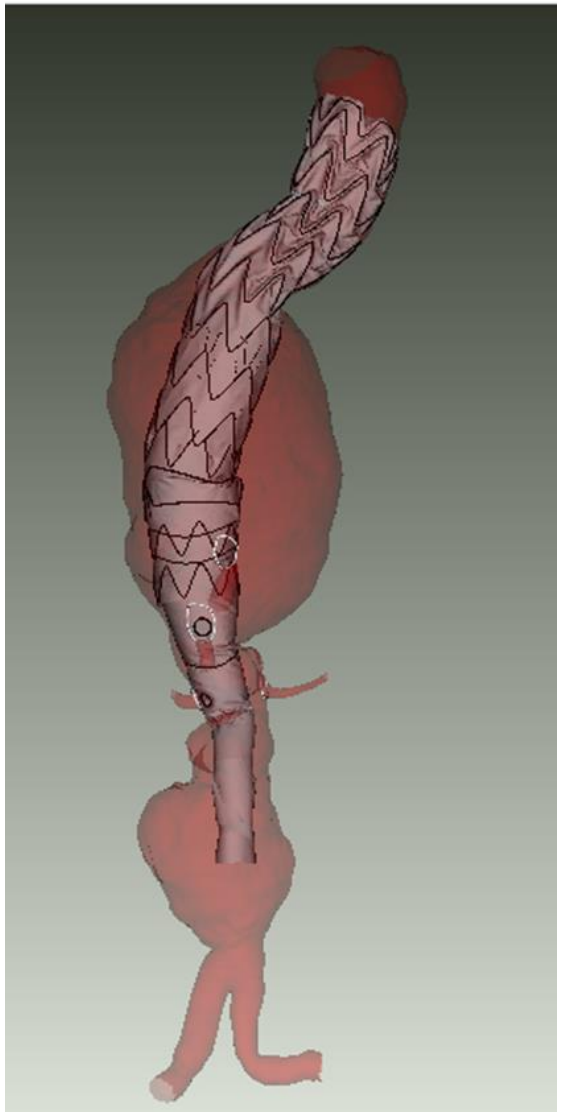
Numerical Simulation

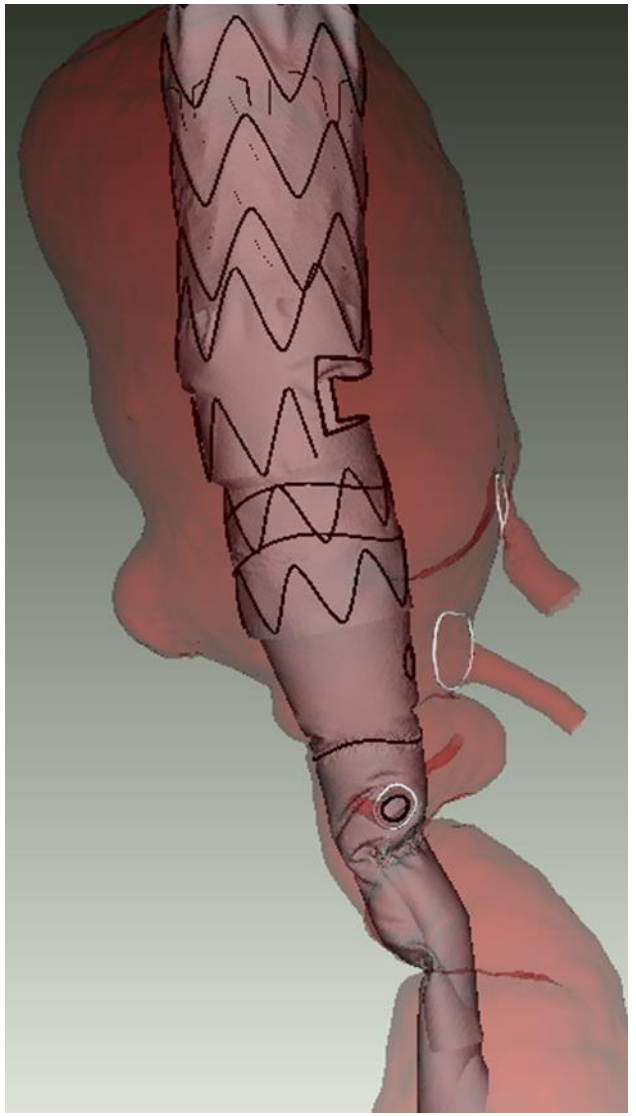
Assessment of fenestrated Anaconda stent graft design by numerical simulation: Results of a European prospective multicenter study

Miriam E. Kliewer, MD,[a] Marine Bordet, MD,[b] Bertrand Chavent, MD,[c] Michel M. P. J. Reijnen, MD,[d,e] Nicolas Frisch, MD,[f] Dominique Midy, MD,[g] Patrick Feugier, MD,[h] Antoine Millon, MD,[b] Jan-Willem Lardenoije, MD,[d] Afshin Assadian, PD, MD,[a] Jürgen Falkensammer, PD, MD,[a] Christian Muller, MD,[f] Jean-Pierre Favre, MD,[c] Sabrina Ben-Ahmed, PD, MD,[c] *and* Jean-Noel Albertini, MD,[c]
Vienna, Austria; Lyon, Saint-Etienne and Pierre-Bénite, France; Arnhem, and Enschede, The Netherlands; and Metz, Bordeaux

J Vasc Surg 2021



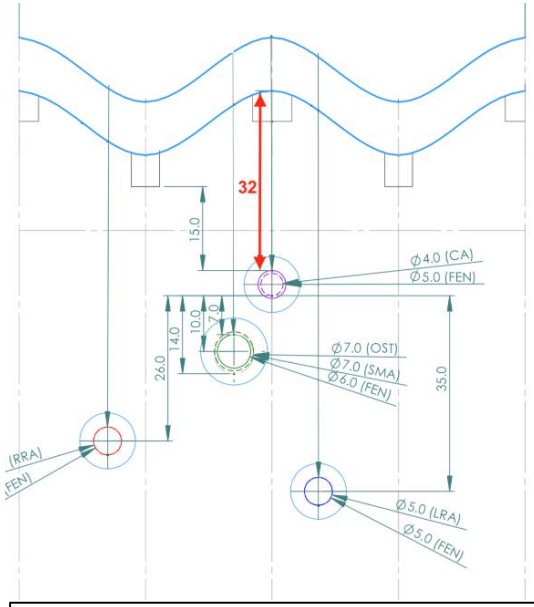




2 years postop CT

FENESTRATED ANACONDA IN TAAA

- Required artificial landing zone
  - Aortic Extension
  - CMD Tapered RELAY
  - Standard TEVAR
- Overlap > 30 mm
- Preclinical Results of Pull-out Testing have shown good stability



Assessment of Pull-out Forces in TEVAR and ANACONDA FEVAR Combination and Early Clinical Results: Creation of a Proximal Landing Zone for FEVAR in Patients with Extent I and Extent IV TAAAs

Jürgen Falkensammer,[1,2] Fadi Taher,[1] Markus Plimon,[1] Miriam Kliewer,[1] Corinna Walter,[1] Elisabeth Pelanek,[1] and Afshin Assadian,[1] Vienna, Austria

Conclusions

- New solutions available for TAA
- Multiple Combinations
  - Custom Relay branch / Custom Relay
  - Custom fenestrated cuff / aortobiiliac Anaconda
- Numerical simulation is key to anticipate
- Long term results still needed