70TH ESCVS CONGRESS & 7TH IMAD MEETING

20 I 23 JUNE 2022

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# Iliac branch device: a possible solution for the preservation of the inferior mesenteric artery in complex aortic endovascular procedure

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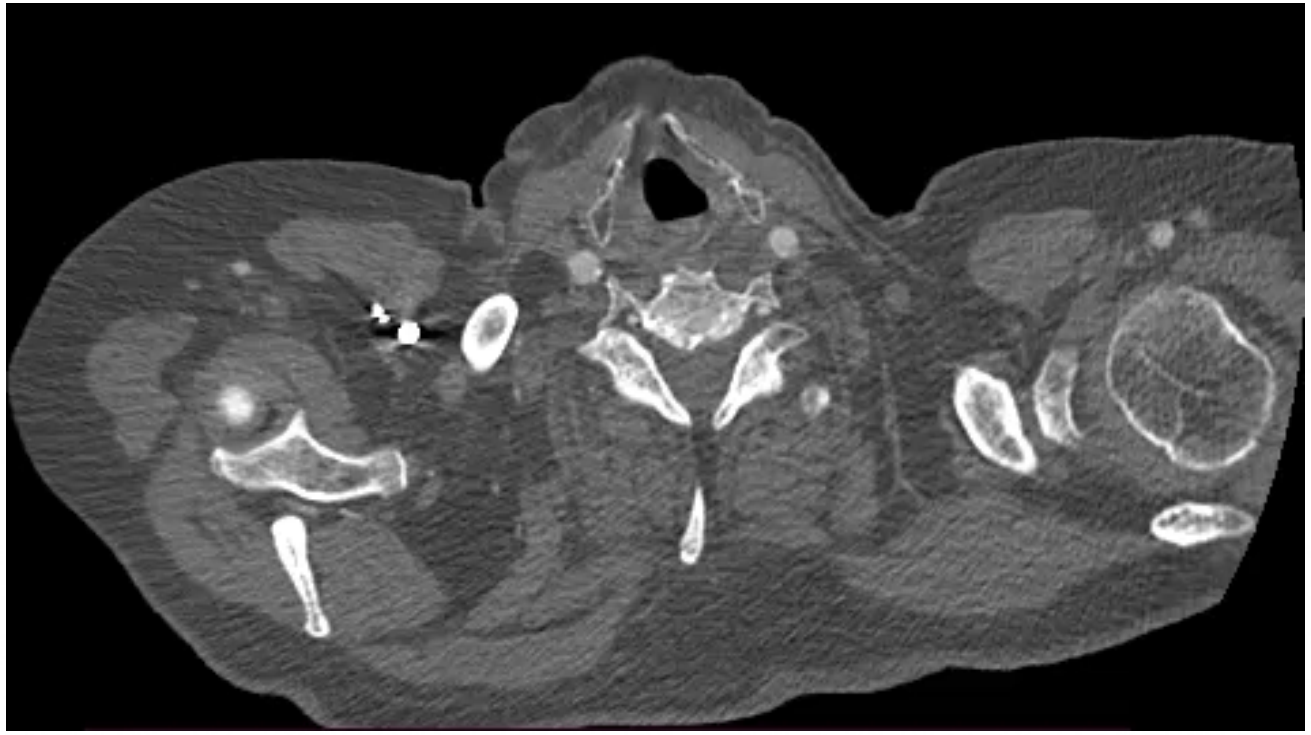
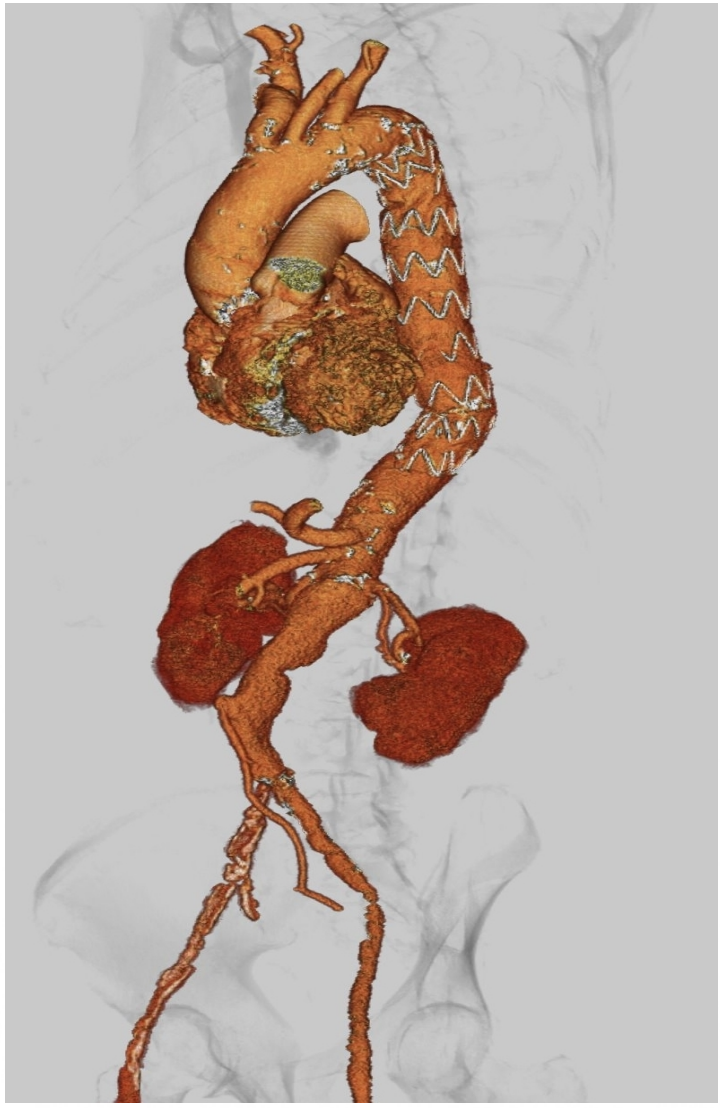
Speaker: Francesca Sodero, MD

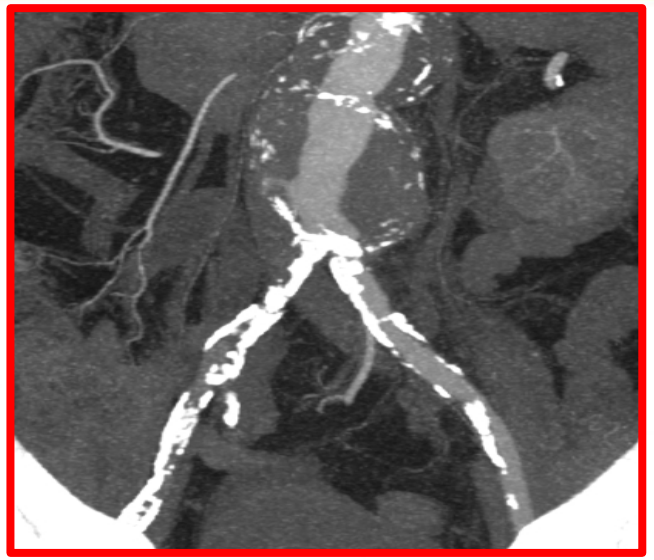
- ♂, 82 yrs
- former smoker, hypertension, myocardial infarction (E.F. 35%) treated with angioplasty and stenting of Cx
- TAVI
- Previous TEVAR for descending thoracic aneurysm (type B Safi)
- PAD (cat.III sec. Rutherford) with a previous endarterectomy of the left CFA
- **Pararenal aortic aneurysm (D max 64 mm)**

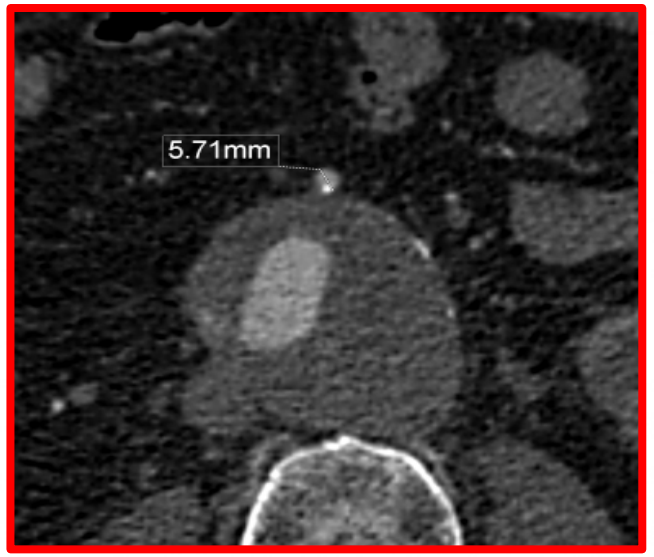




# Anatomical features:

- Patent subclavian artery
- Six couples of lumbars
- Left IIA occlusion
- Right CIA occlusion and EIA stenosis (70%)
- Patent IMA with diameter greater than 5 mm





# Complex Aortic Endovascular Procedure

1. pAAA
2. Previous TEVAR
3. Extensive aortic coverage
4. Occlusion of rCIA

**High risk of SCI**

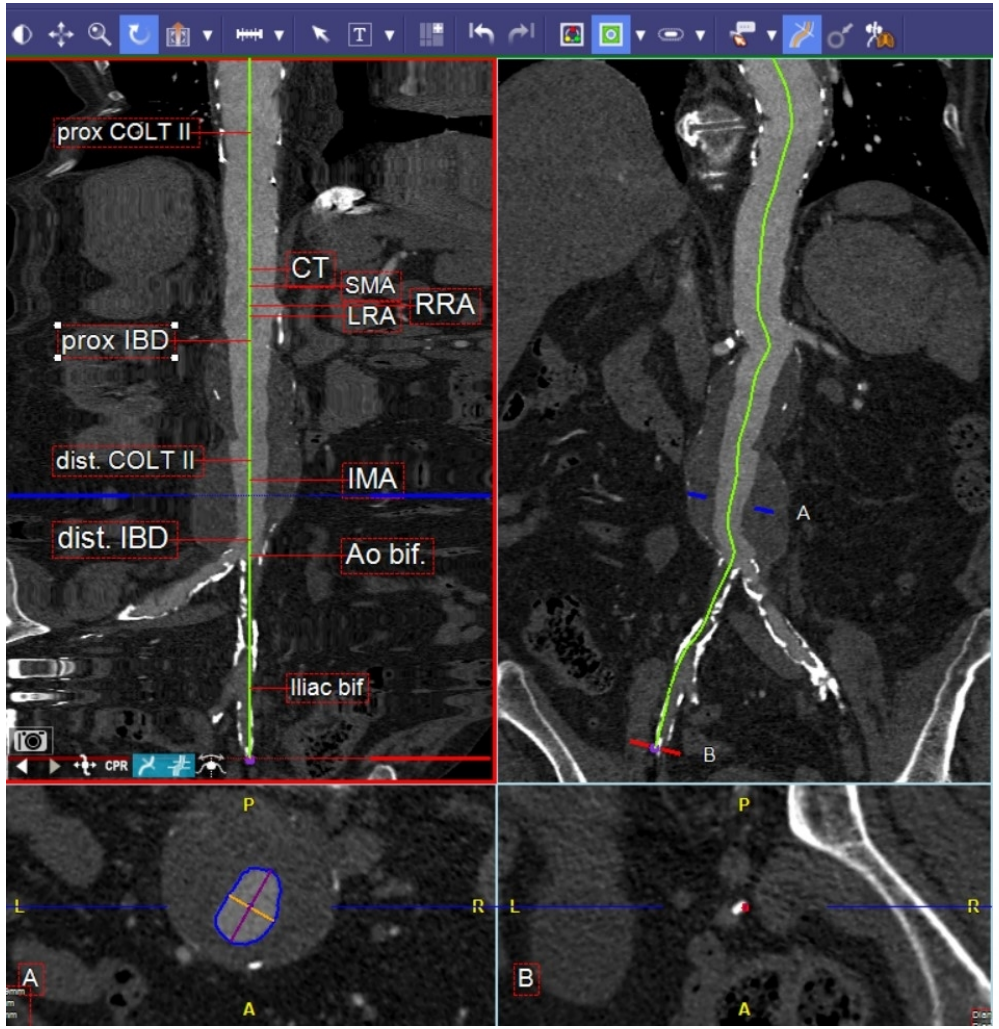

- Spinal fluid drainage
- Arterial pressure above 100 mm Hg
- Hemoglobin above 10 g/dL
- Transcutaneous oxygen measurement above 95%

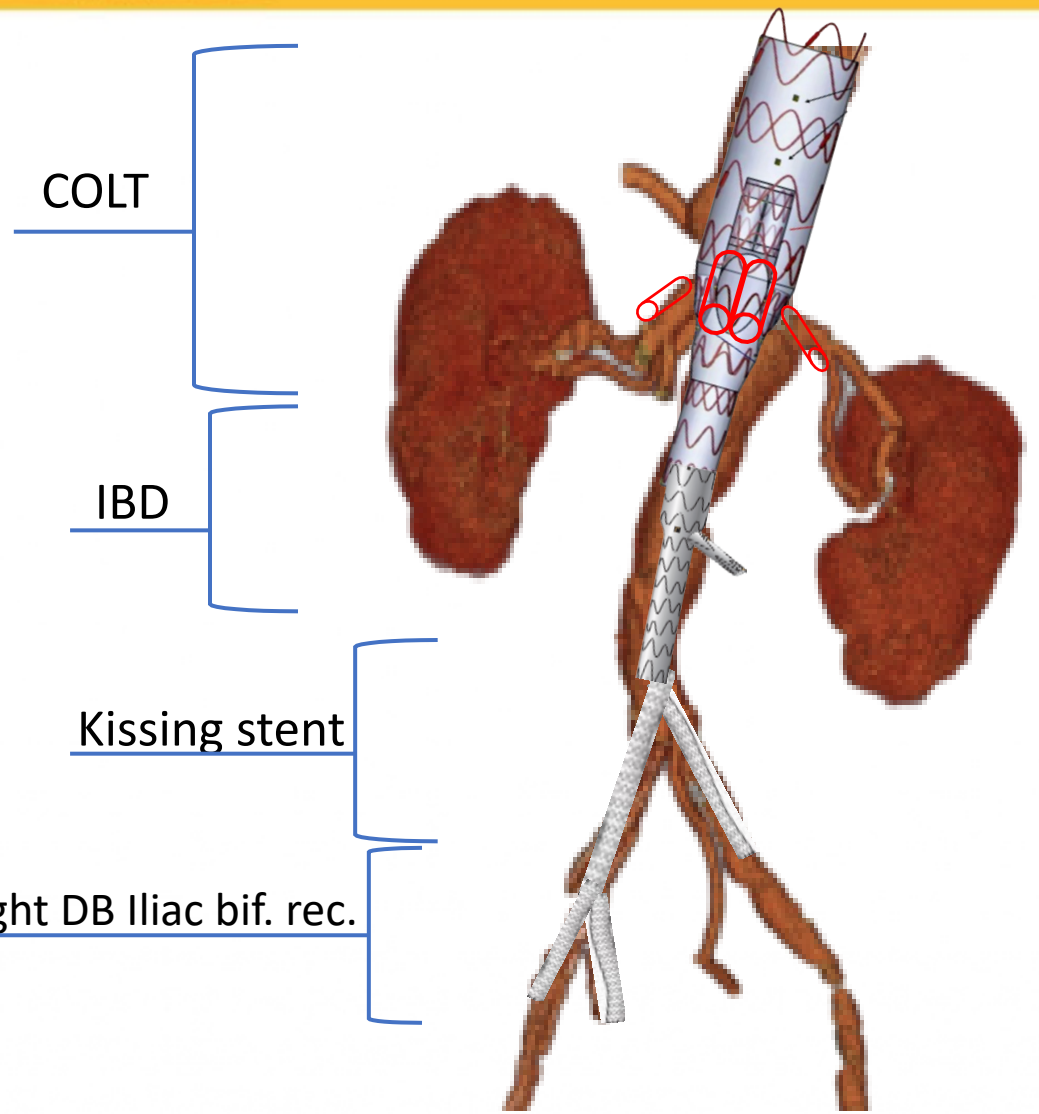
- Staged procedure
- Maintenance of PELVIC and SPLACNIC circulation

Iliac Bifurcation Reconstruction

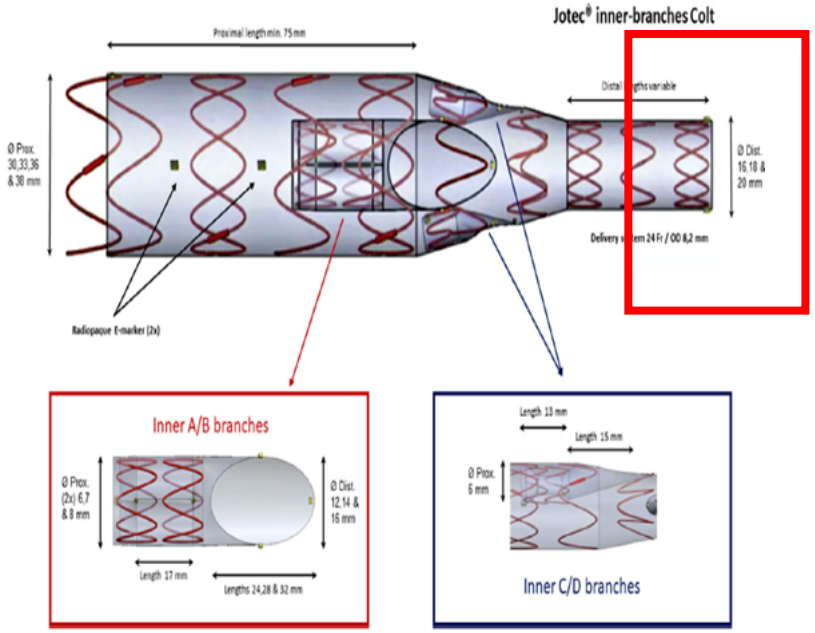
Iliac Branch Device

## Planning


prox COLT II
CT
SMA
LRA
RRA
prox IBD
dist. COLT II
IMA
dist. IBD
Ao bif.
Iliac bif
A
B
P
L
R
A
P
L
R
A
B
A


COLT
IBD
Kissing stent
Right DB Iliac bif. rec.

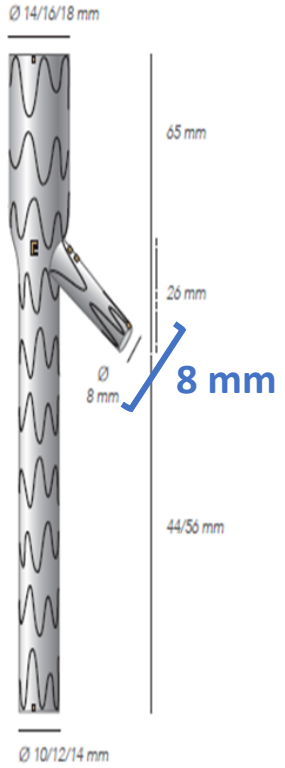
# Inner-branched CMD Jotec COLT 3618180




Distal diameter 18 mm

# E-liac stent graft system (by Jotec)

## Proximal diameter 18 mm




| Catalog No. | Ø Proximal (mm) | Ø Distal (mm) | Total length (mm) | Proximal length (mm) | Distal length (mm) | OD delivery system (F/mm) |
|---|---|---|---|---|---|---|
| 72IB1410L65L44* | 14 | 10 | 109 | 65 | 44 | 18/6.25 |
| 72IB1412L65L44* | 14 | 12 | 109 | 65 | 44 | 18/6.25 |
| 72IB1414L65L44* | 14 | 14 | 109 | 65 | 44 | 18/6.25 |
| 72IB1412L65L56* | 14 | 12 | 121 | 65 | 56 | 18/6.25 |
| 72IB1414L65L56* | 14 | 14 | 121 | 65 | 56 | 18/6.25 |
| 72IB1610L65L56 | 16 | 10 | 121 | 65 | 56 | 18/6.25 |
| 72IB1612L65L56 | 16 | 12 | 121 | 65 | 56 | 18/6.25 |
| 72IB1614L65L56 | 16 | 14 | 121 | 65 | 56 | 18/6.25 |
| 72IB1812L65L56 | 18 | 12 | 121 | 65 | 56 | 18/6.25 |
| 72IB1814L65L56 | 18 | 14 | 121 | 65 | 56 | 18/6.25 |

Non stock item

* also suitable for aorto-iliac aneurysms

# Two staged procedure

- **First step (bilateral surgical femoral access):**

- Crossing of rCIA occlusion

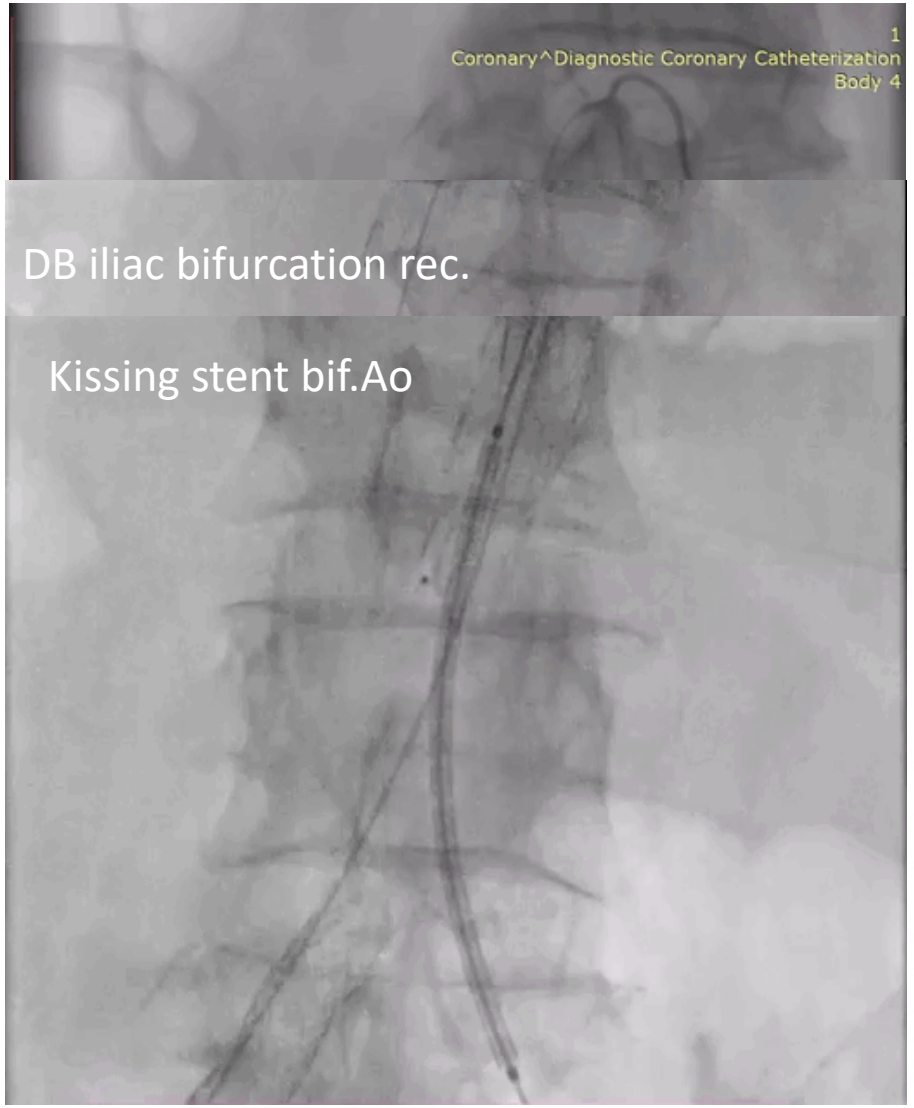
- Stenting of rCIA (11x79 mm VBX) and endoconduit with 24 Fr introducer sheath

- Deployment of inner-branched CMD stent-graft (36x18x180 mm)

- Deployment of iliac branch device (E-liac 18x14x65 mm)

- Double barrell of right iliac bifurcation reconstruction (11x79 mm VBX stent in CIA, 8x59 mm VBX stent in IIA, 8x59 mm VBX stent EIA)

- Kissing stent of aortic bifurcation (two 11x79 mm VBX stents)



- **Second step (percutaneous left brachial access):**

  - connection of TVVs:

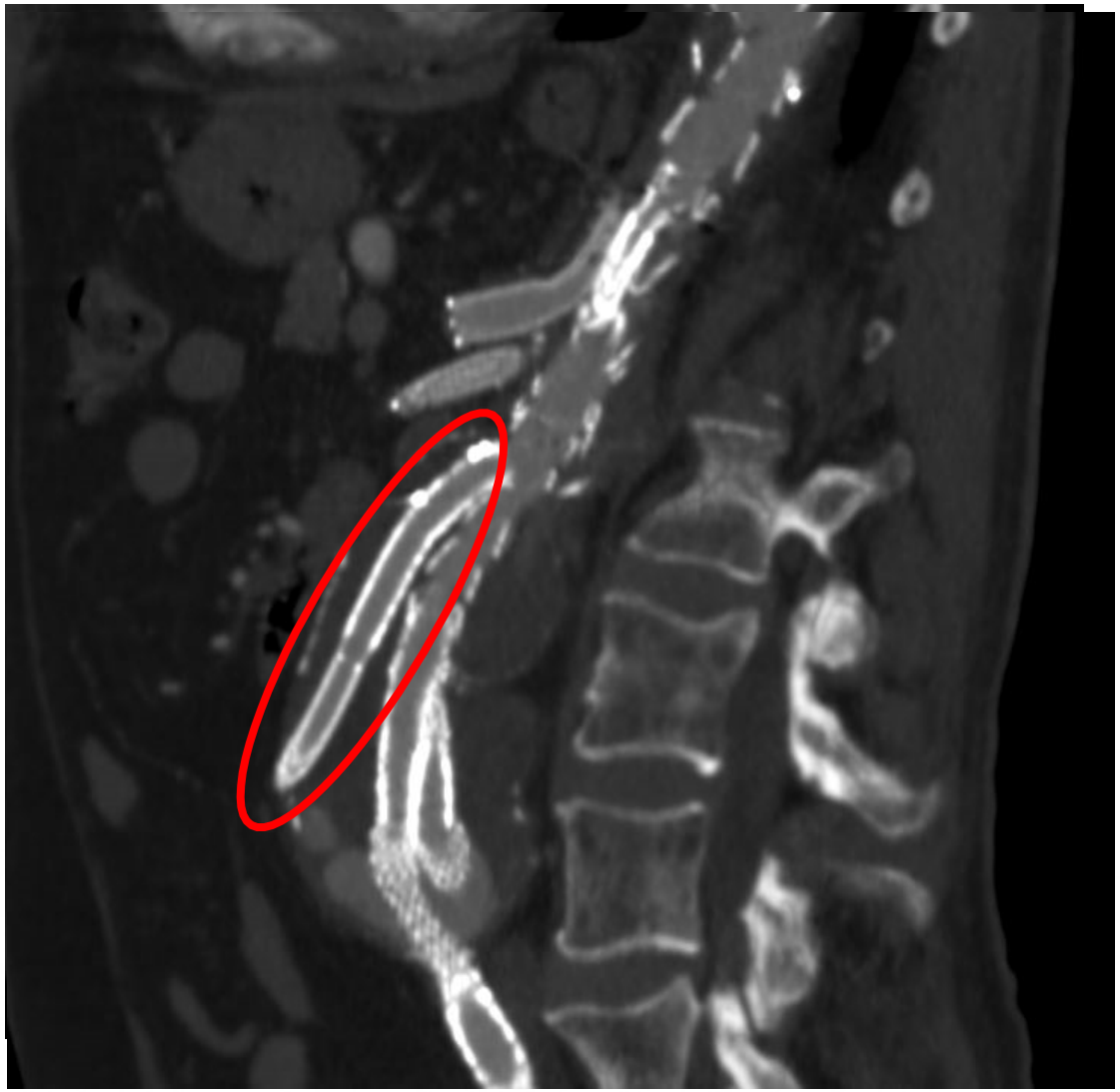
**CT:** 10x37 mm E-ventus stent
9x60 mm Covera stent

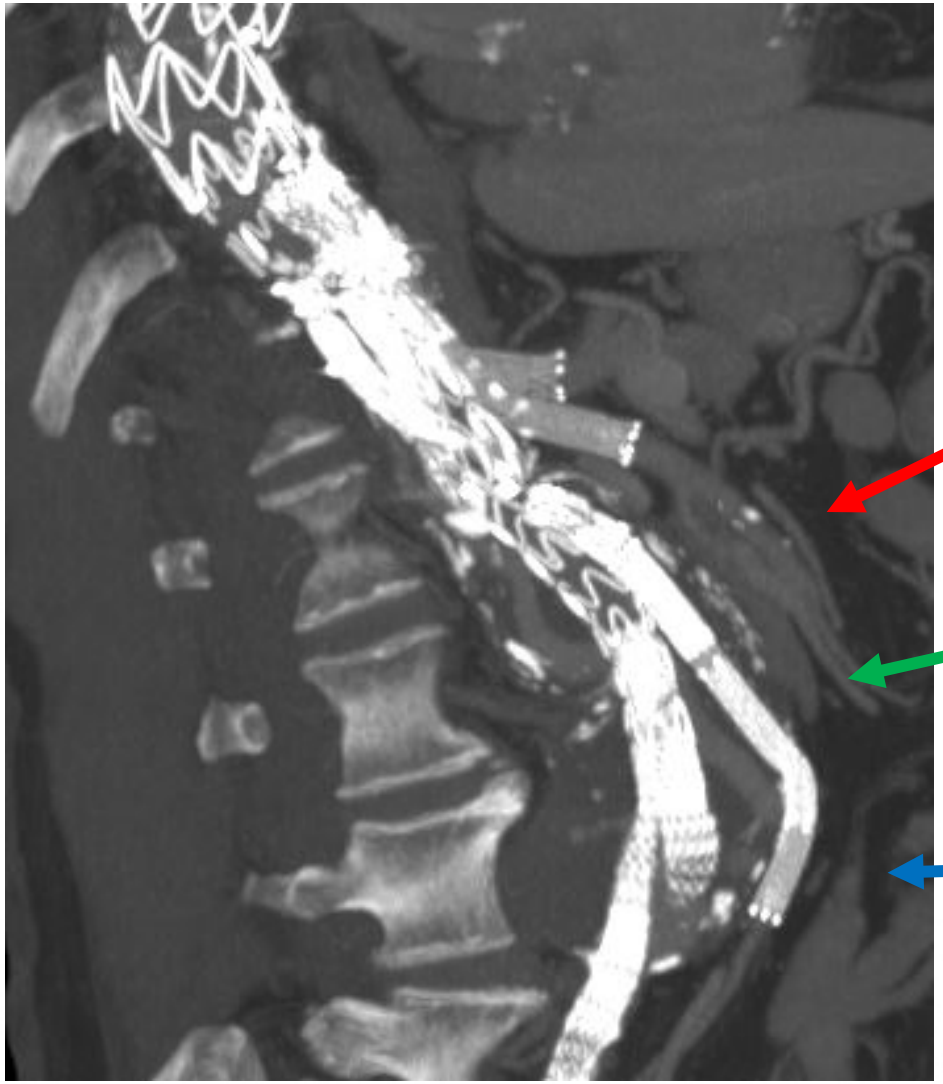
**SMA:** 9x57 mm E-ventus stent
8x80 mm Covera stent

**IMA:** 8x57 mm E-ventus stent
6x10 mm Covera stent
+
6x40 mm bare stent Eucatech (distal relining)

**RRA:** 7x57 mm E-ventus stent
6x80 mm Covera stent

**LRA:** 6x28 mm E-ventus stent
6x80 mm Covera stent

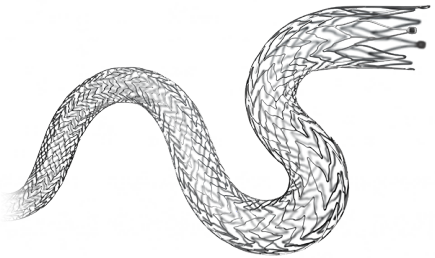




How to...**FIX**

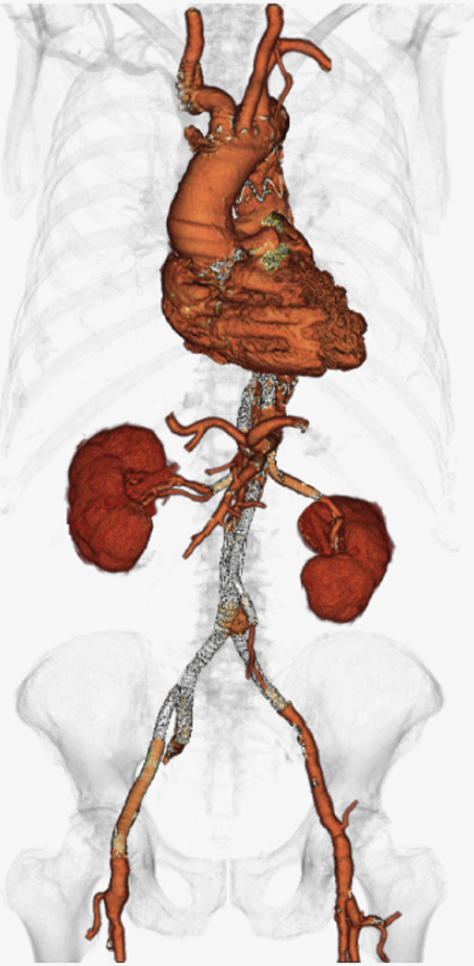
How to...**BRIDGE**

How to...**RELINE**



## 1 year follow-up CT-scan

- Type II endoleak (lumbars)
- Patency of SGs & TVVs
- Shrinkage of 4 mm



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# THANK YOU!