

## Scallop Graft for Arch Repair

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## Disclosure of Interest

Speaker name: Jean-Marc Alsac

- I have the following potential conflicts of interest to report:
- Speaker and consultant for educational training
  - ABS BOLTON Medical
  - GORE Medical
  - ENDOLOGIX
  - BARD



# Which Treatment would you recommand?





## Parisian experience

Sept 2012 – June 2016

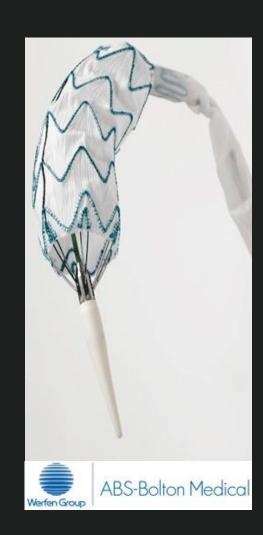
• 19 consecutive patients (16  $\circlearrowleft$ , 74 ± 8 y-o)

- for TAA involving the arch :
  - 10 Sacciform TAA
  - 8 Fusiform TAA / 3 previous TEVAR + type I A endoleak
  - 1 Chronic Dissection
- Follow-up by CTscans: 1 / 6 mo / 1 year



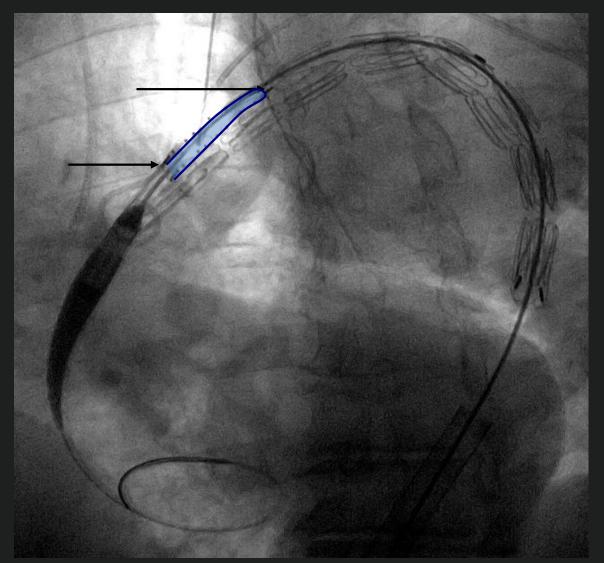
### **Materials**

- Custom made Stentgraft: RELAY Plus ©
  - Proximal Bare stent with capture
  - Median diameter = 38 mm (34 to 46)
  - Median length = 150 mm (120 to 250)
  - 10 Tapered / 22 to 26 Fr
  - 10 Additional distal stentgrafts
  - Available within 3 weeks





## Materials







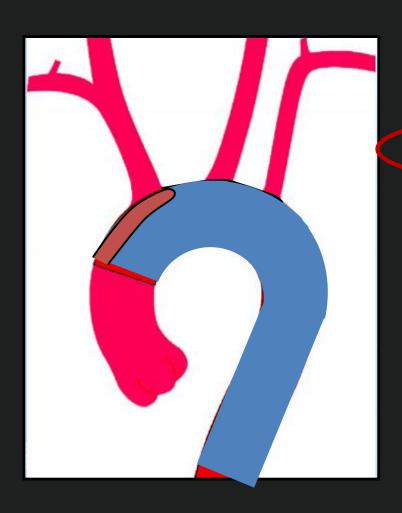








Targeted proximal sealing zones



Zone 2: 3 patients

Zone 1: 14 patients

Zone 0: 2 patients

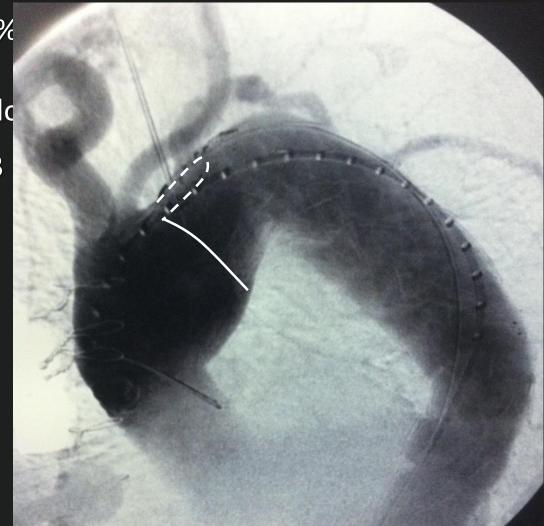


#### Immediate

• 100%

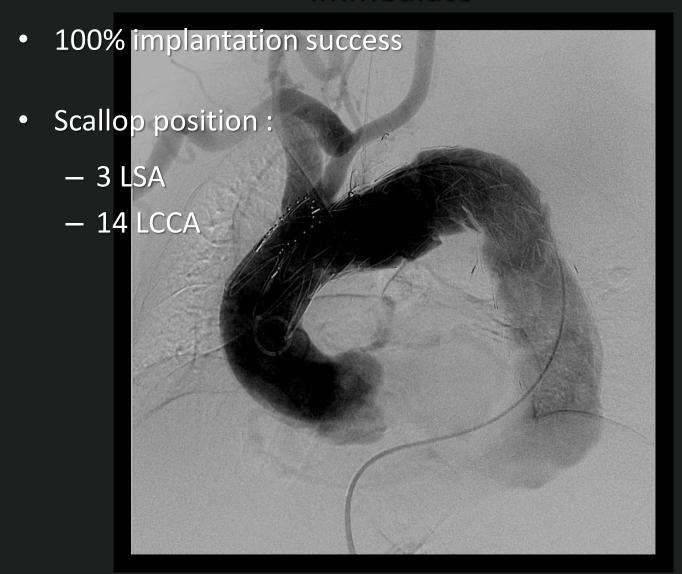
Scalle

**—** 3





#### **Immediate**





## Immediate

10 bolton relay plus



#### **Immediate**

- 100% implantation success
- Scallop position :
  - 3 LSA
  - 13 LCCA
  - 2 IA
- All targeted SAT patent
- No endoleak

completion angiogram



#### SAT additional revascularizations

• 2 LC

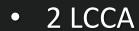
4 LSA



/ Transposition



#### SAT additional revascularizations



• 4 LSA :

3 LSA w



Transposition

verage



#### Post-operative course

- median hospital stay = 5 days (3 8)
- 1 ischemic posterior stroke : (5.3 %)
  - Zone 1 with left carotido-subclavian bypass + LSA embolization
- 1 death at day 4 by fatal myocardial infarction: (5.3 %)
  - Zone 1 with No retrograde dissection on post mortem study





## **Results**Mid-term Follow-up

- Median follow-up = 25 months (1 45)
- No proximal endoleak
- Patency of all targeted SAT / No stroke
- 1 distal IB endoleak treated with extension

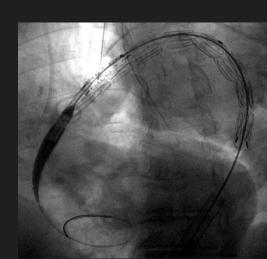






#### **Advantages of Proximal Scallop**

- Usefull to deal with short necks issues in TEVAR
- Precise and Reproducible deployment in the arch
- Avoid Debranching / Chimney / Branch procedures
- No canulation in the arch / No need to cross the valve
- Safe and efficient 2 years outcomes
- Custom-made available within 3 weeks





## Would you use it as an off the shelf device ?



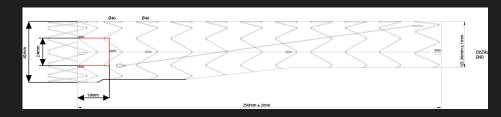
#### An off-the-shelf device?

- Off the shelf scalloped stentgraft for acute aortic syndroms:
  - Traumatic injuries of thoracic aorta
  - Acute Type B dissections
  - Ruptured TAA











#### An off-the-shelf device?

- Standardized proximal scallop (fits 90 %)
  - Width = 20 mm (related to diameter)
  - Length = 30 mm
  - = Anatomical study on SAT in AAS



- Larger experience is necessary = French multicentric study
  - 50 patients / with 1 year of prospective Follow-Up
  - 28 enrolled so far with safe results

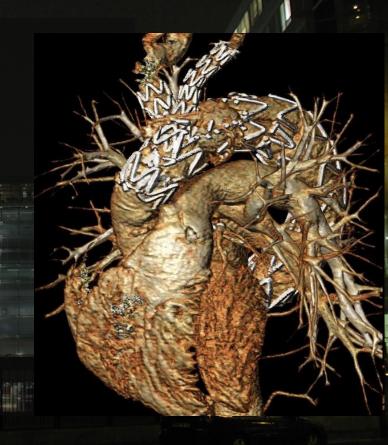
## Take Home Message...

If you think about DEBRANCHING,

Ask yourself for a PROXIMAL SCALLOP

If SAT ostia are involved in the disease

Then go for BRANCHES



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