



# CONTROVERSY: Horizontal Arch Pathology

# Parallel Graft in the Arch Are the Best Option

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## Disclosure

Speaker name: Armando C. Lobato MD, PhD

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- I have the following potential conflicts of interest to report:
  - Consulting
  - Employment in industry
  - Shareholder in a healthcare company
  - Owner of a healthcare company
  - Other(s)
- I do not have any potential conflict of interest

# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

- Total Surgical
- Hybrid
- Branched Arch Endograft
- Chimney/Sandwich Technique

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## 10 Reasons

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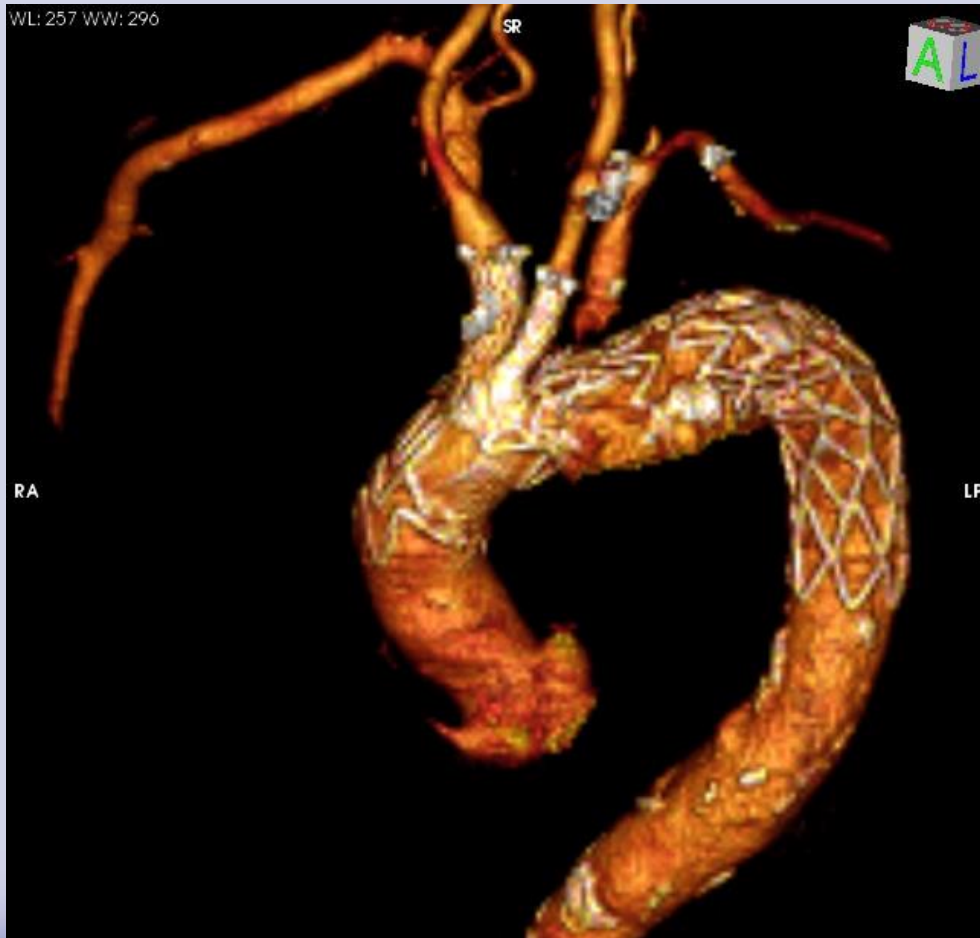


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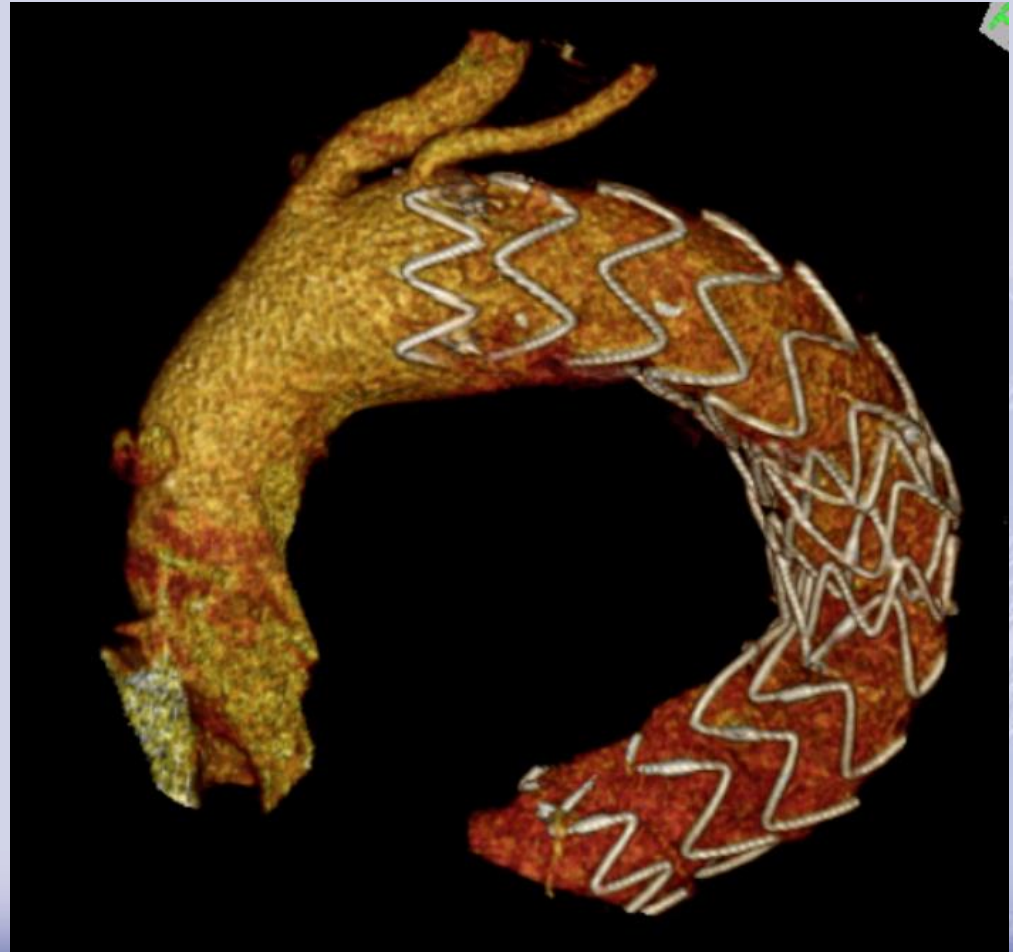




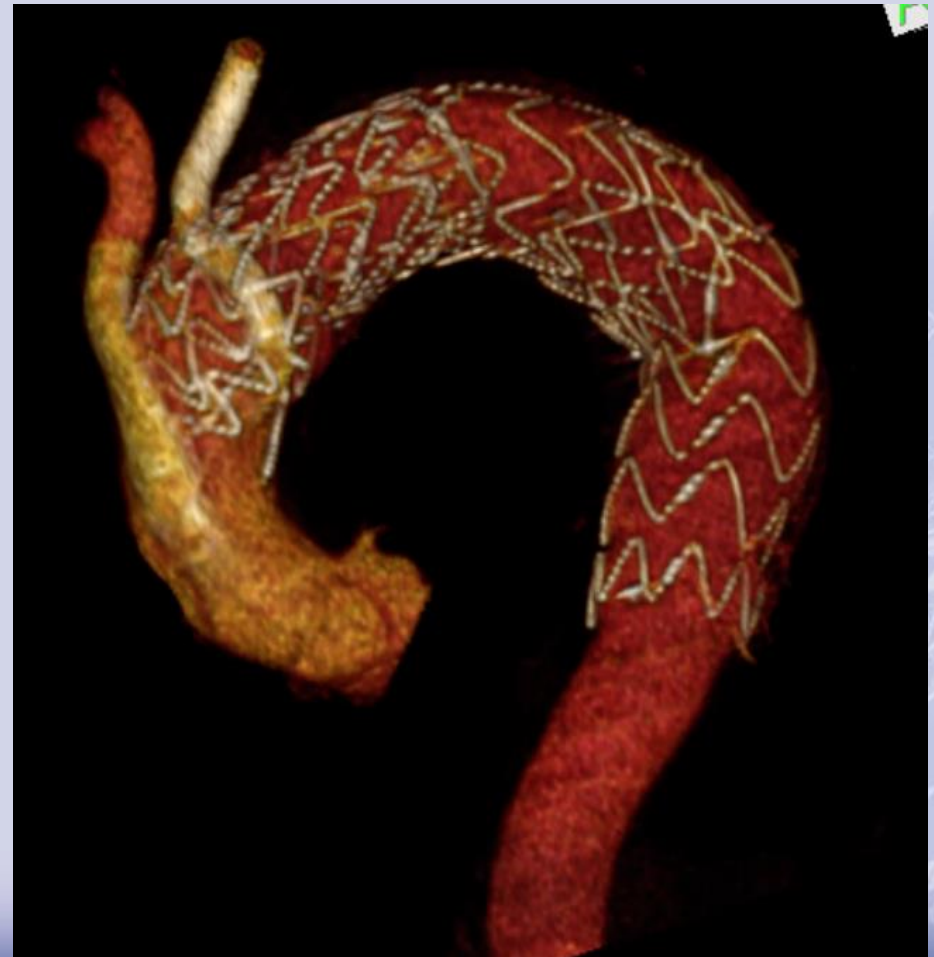
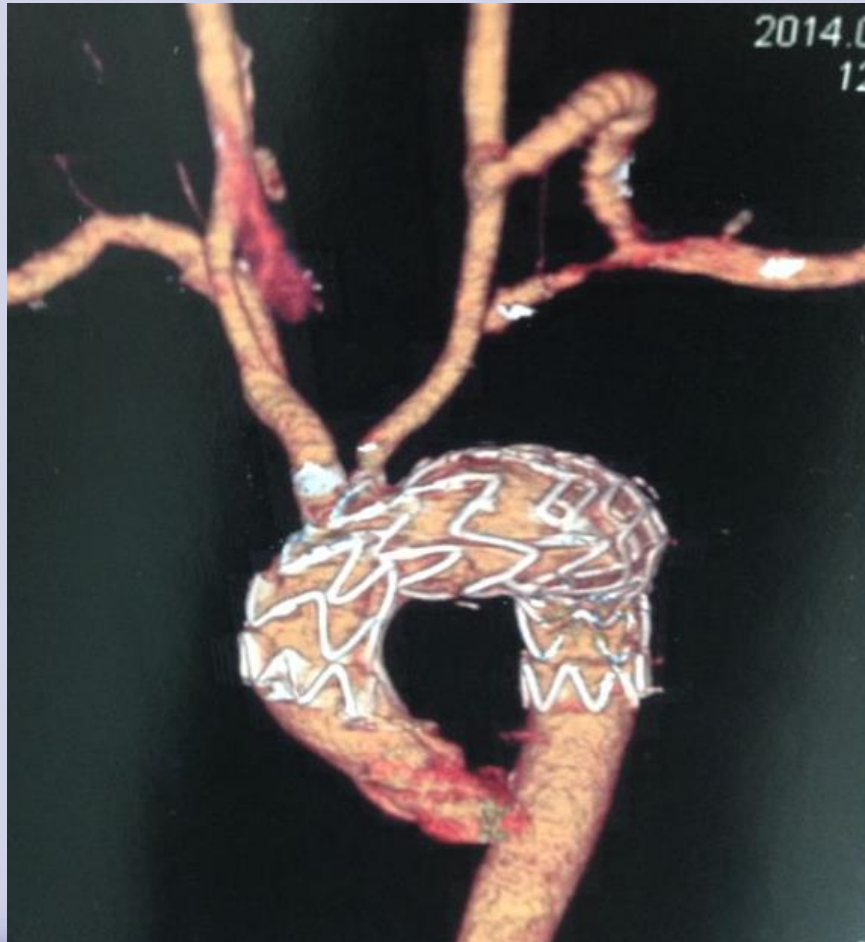
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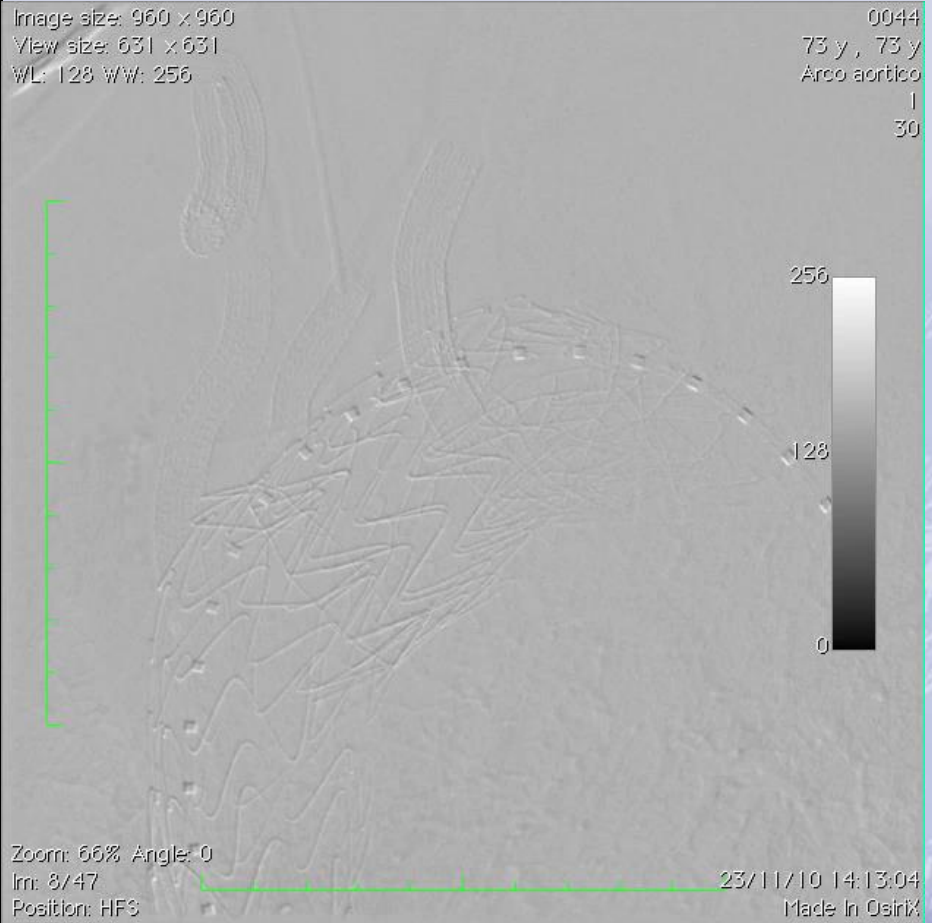
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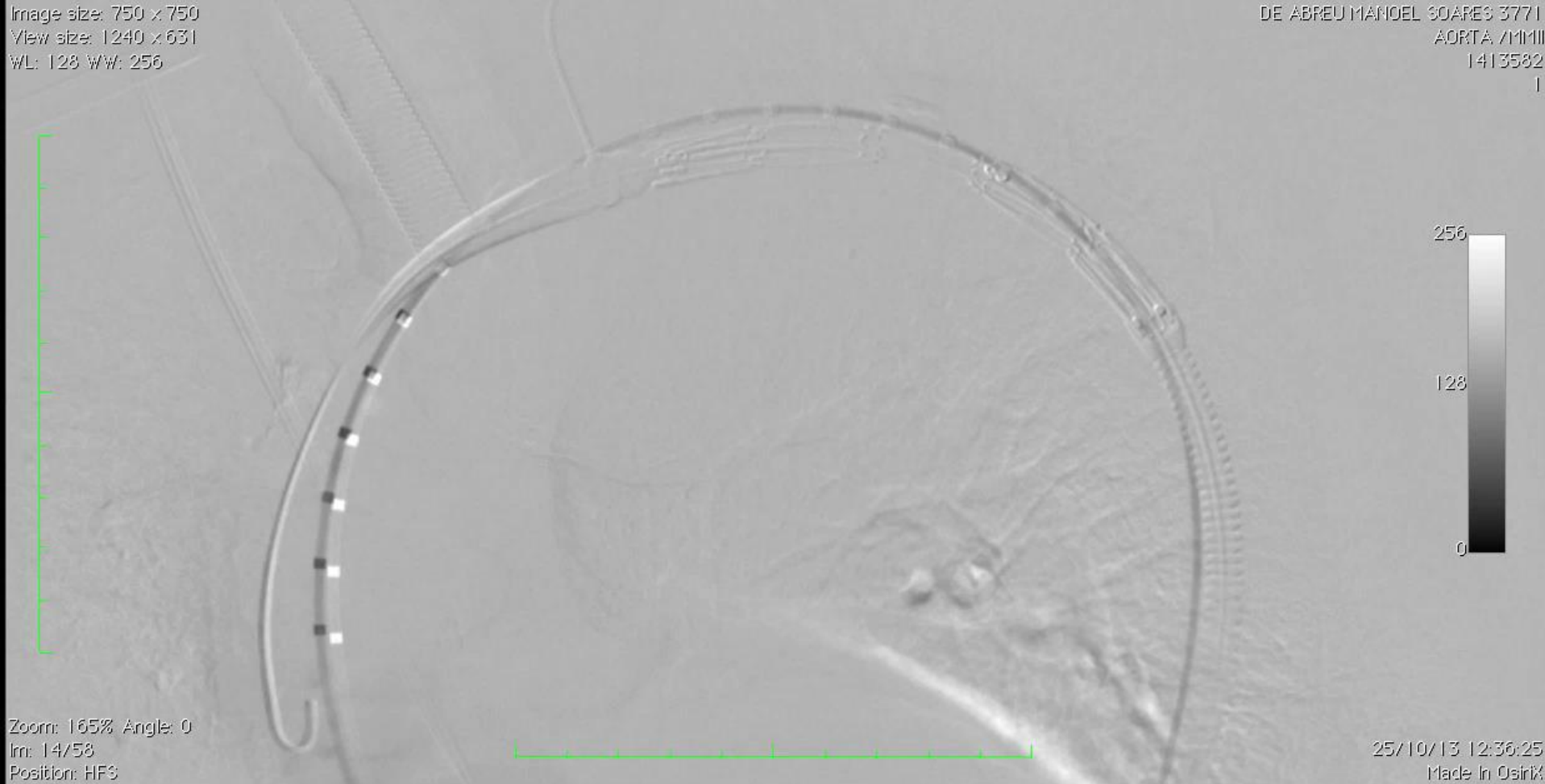
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# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

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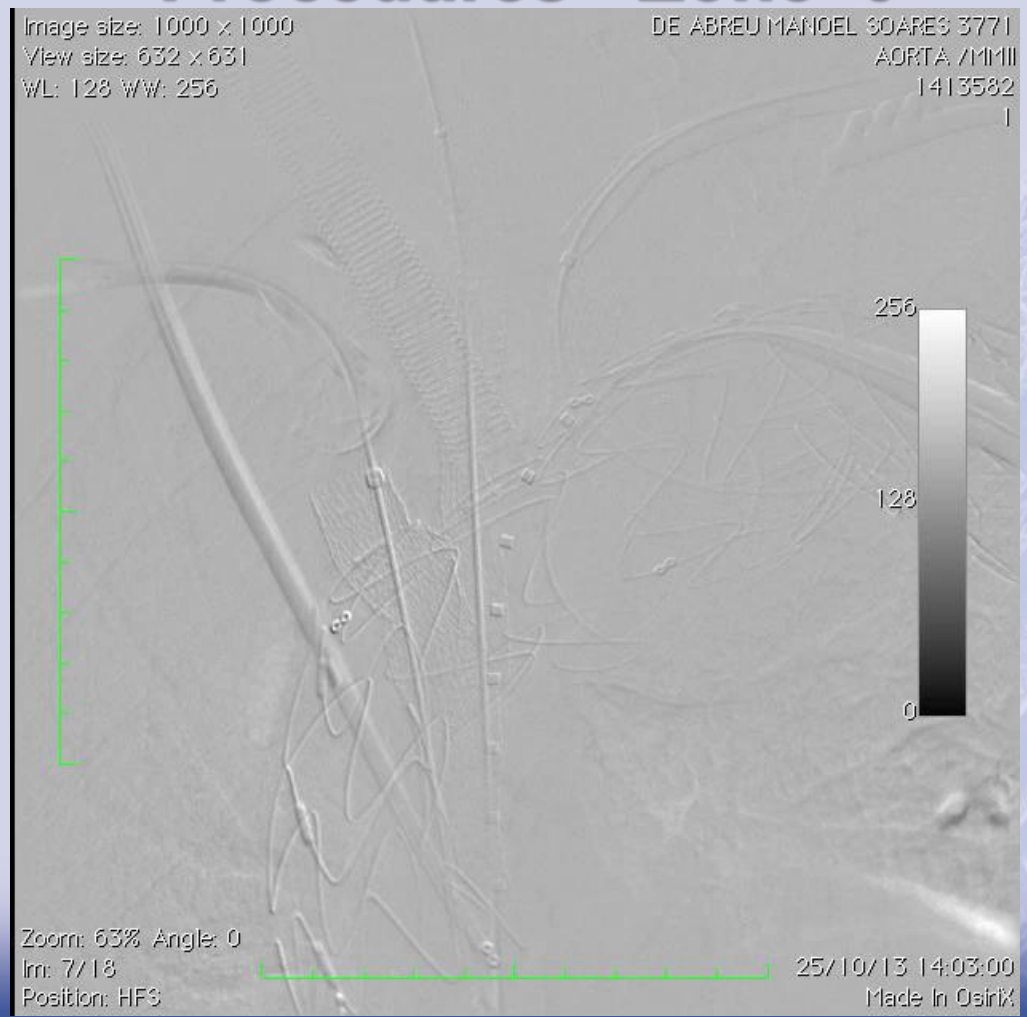
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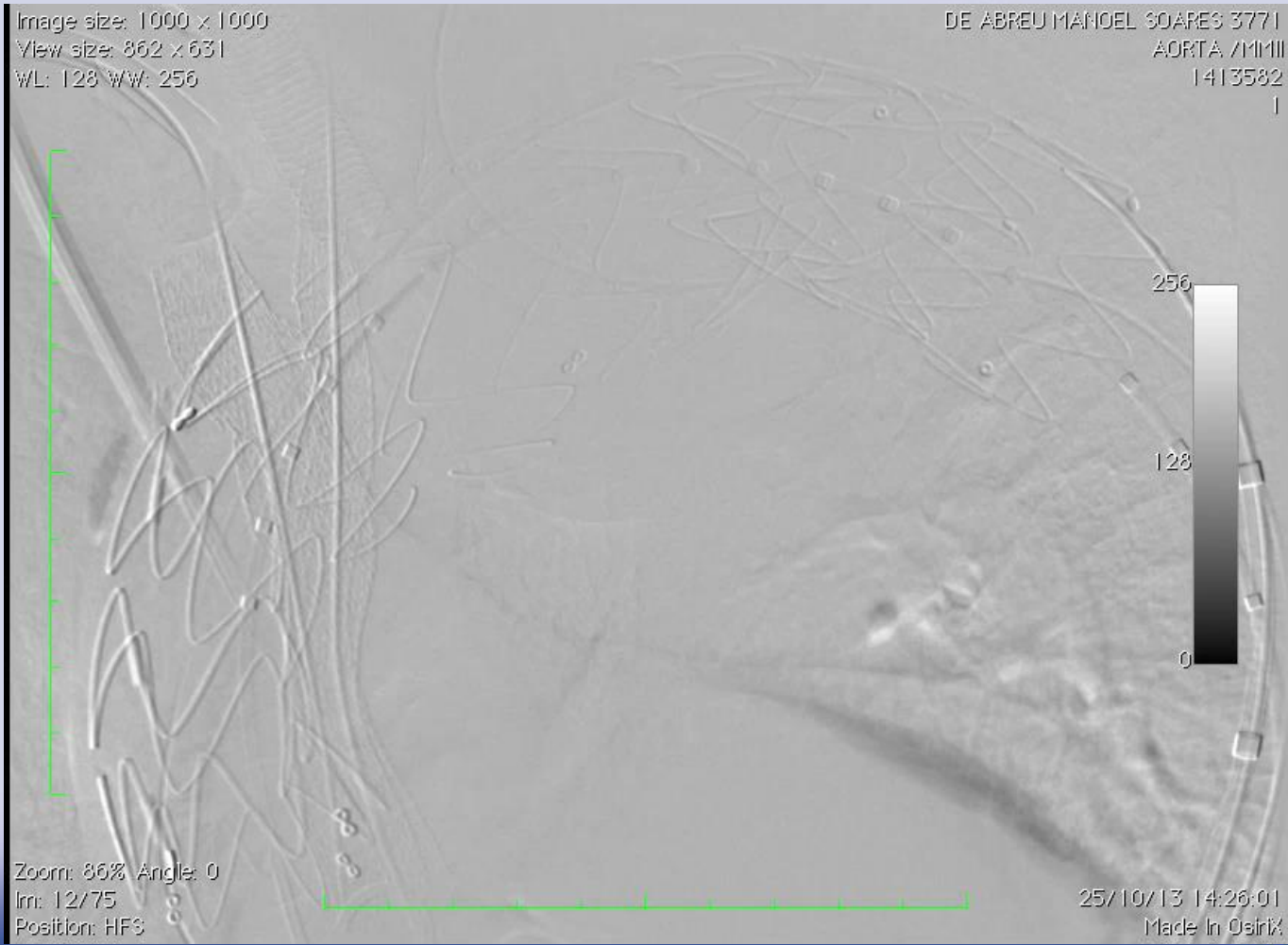


# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'





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# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

1. Real World
2. 2 Thoracic ELG, 3 SECS, 1 LB, 3 Introducers,  
3 Guide wire & 1 pig tail
3. Use the ELG which the surgeon is  
familiarized
4. Can be used in an urgent setting
5. Easier than branched ELG

# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

6. Previous TEVAR or Open Repair
7. More patients can be treated
8. More Endovascular Specialist can perform it
9. Intervention time is shorter
10. Significant low cost (at least in Brazil)

# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

□ In our institution, a prospective study was conducted of all consecutive patients undergoing endovascular repair of complex aortic arch aneurysms (zone 0) from October 2010 to May 2014, 11 patients (10 men and 1 woman; mean age,  $60.4 \pm 10.1$  years) with aortic arch aneurysm underwent TEAAR with the ST.

# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

## Primary endpoints included:

- ▣ 30-day and 1-year related mortality
- ▣ Endoleak
- ▣ Supra-aortic trunk (SAT) patency
- ▣ Aneurysm sac (AS) evolution
- ▣ Neurologic complication rate

# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

- **The Mean Follow-up Period:  $9.4 \pm 8.3$  months**
- **Primary SAT Patency Rate: 91% (3/33)**
- **30-Day Endoleak Rate (18%):**
  - **One type I: It was successfully managed during the procedure with the deployment of a thoracic endograft.**
  - **One type II: It sealed spontaneously after a 30-day CT scan.**

# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

## □ Late Endoleak Rate (9%):

- One type III. It was effectively treated with a second thoracic stent graft deployed after three months.

Reappear in 4 months

# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

- The 30-day survival rate was 91%. One patient died from complications related to an acute myocardial infarction.
- There were two late deaths (> 30 days) in our series (18%)
  - One procedure-related (9%) : Previous aorto-esophageal fistula died from pulmonary complications 4 months postprocedure.
  - One non-procedure-related (9%): Concomitant thoraco-abdominal aortic aneurysms; Died during elective thoracoabdominal aneurysm repair after 6 months.



# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

- After 6-month FU: Complete AS exclusion 91%
- No Conversion Rate
- No Spinal Cord Ischemia Rate
- Stroke/TIA Rate
  - Minor Stroke (9%): Complete recovered in 2 days)

# Parallel Graft in the Arch Are the Best Option Procedures - Zone '0'

## Conclusions

- ✓ TAAER with the ST is an effective technique with satisfactory early and midterm results.
- ✓ This technique could be an attractive alternative to conventional total arch replacement.
- More experience with the method is warranted.



# CICE 2015

April 15-18, 2015  
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