Register study for Zone 0 aortic arch aneurysm with Chimney/Sandwich technique: 8-year follow-up

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Aortic arch replacement remains among the most technically challenging cardiovascular operations, incurring considerable risk for perioperative death and stroke.
Aortic Arch Sandwich & Chimney Graft
Total Endovascular Aortic Arch Replacement (Zone)

Saccular Aneurysm
No Proximal Neck
PAU

Zoom: 182% Angle: 0
Im: 1/20
Uncompressed
Position: FFS

19/09/17
Made

CICE 2019
April, 3-5, 2019
Unique Hotel
Aortic Arch Sandwich & Chimney Graft
Total Endovascular Aortic Arch Replacement (Zone)
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Total Endovascular Aortic Arch Replacement (Zone)
Aortic Arch Sandwich & Chimney Graft
Total Endovascular Aortic Arch Replacement (Zone)
Left subclavian revasc w/ viabahn
Aortic Arch Sandwich & Chimney Graft
Total Endovascular Aortic Arch Replacement (Zone)
Aortic Arch Sandwich & Chimney Graft
Total Endovascular Aortic Arch Replacement (Zone)

Viabahn 8X10

Viabahn 13X10
Aortic Arch Sandwich & Chimney Graft

Total Endovascular Aortic Arch Replacement (Zone)

BT  LCA

LSA
Aortic Arch Sandwich & Chimney Graft
Total Endovascular Aortic Arch Replacement (Zone)
Aortic Arch Sandwich & Chimney Graft
Total Endovascular Aortic Arch Replacement (Zone)

Advantages

1. Real World
2. 2 Thoracic ELG, 3 SECS, 1 LB, 4 Introducers, 4 Guide wire, 1 rapid pacing & 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
Advantages

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. One Step
11. Significant low cost (at least in Brazil)
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 December 2017. 20 patients (18 men and 2 women; mean age, 60.4 ± 10.1 years) with aortic arch aneurysm underwent Total Endovascular Aortic Arch Repair with the Sandwich Technique/Chimney.

Primary endpoints included 30-day and 1-year related mortality, endoleak and supra-aortic trunk (SAT) patency, as well as aneurysm sac (AS) evolution and neurologic complication rate.
The Mean Follow-up Period: 19.4 ± 8.3 months

Primary SAT Patency Rate: 100% (57/57)

30-Day Endoleak Rate (20%):

- Two type I: It was successfully managed during the procedure with the deployment of a thoracic endograft.
- Two type II: It sealed spontaneously after a 30-day CT scan.
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Late Endoleak Rate (5%):

- One type III. It were effectively treated with a second thoracic stent graft deployed after three months.
The 30-day survival rate was 90%.

- Two procedure-related (10%): Two patients died from complications related to an ischemic myocardial infarction.

There were four late deaths (> 30 days) in our series (20%)

- One procedure-related (5%): Previous aortoesophageal fistula died from pulmonary complications 4 months postprocedure and .
- Three non-procedure-related (15%):
  - One died during attempted elective TAAA open repair after 6 months.
  - One died from complications related to an ischemic myocardial infarction after one year
  - One died related a lung cancer
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- After 18-month FU: Complete AS exclusion 90%
- No Conversion Rate
- No Spinal Cord Ischemia Rate
- Stroke/TIA Rate
  - Minor Stroke (5%): Complete recovered in 2 days

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NEW
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