

FIRST-IN-GREECE CUSTOM-MADE NEXUS DUO™ AORTIC ARCH STENT GRAFT SYSTEM

**PATIENT INFORMATION**

The 67-year-old high-risk patient presented with a complicated chronic Type A aortic dissection, post Type A surgical repair.

**REASON TO TREAT**

Exclusion of arch pathology for this patient was unsuitable for a surgical solution.

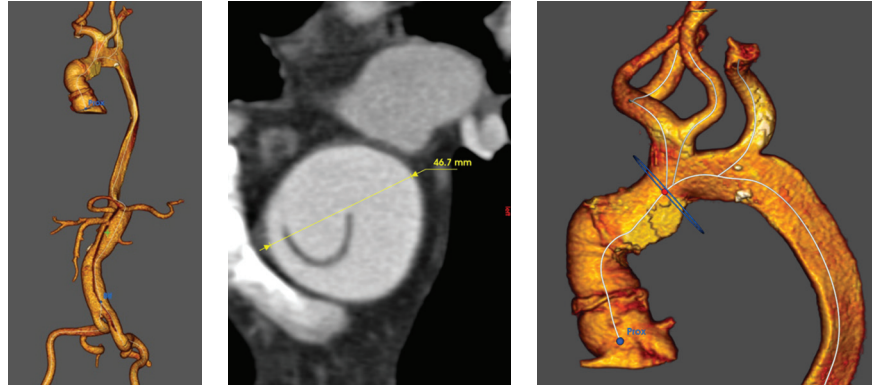


Figure 1. Preoperative morphology and 3D reconstruction highlighting angulations and narrow true lumen of aortic approach.

**STAGE 1**

LSA to LCCA surgical bypass was performed with a PTFE graft (8mm with rings); temporary closure of the wound. Post implantation of NEXUS, ligation of the LCCA proximally.

**STAGE 2**

The same day, the NEXUS DUO™ Aortic Arch Stent Graft System was implanted utilizing the LSA for the second branch. A Nitrex 300cm x 0.014 wire was used for the LSA branch. A combination of a balloon-expandable stent graft (VBX 10x57mm) with Viabahn was used as a second branch.



Figure 2. Intraoperative final angiogram

**PROCEDURAL OUTCOME**

The NEXUS DUO™ Aortic Arch Stent Graft System with its pre-cannulated second branch was performed in January 2023 with one week post-op CT.

**PHYSICIAN COMMENTS**

The device performed well. The performance of the LCCA-LSA bypass at the same procedure is better than in two stages because you have always the option to connect the branch to the LCCA, if this goes wrong with the LSA.

Main reasons for combination of VBX and Viabahn are the ability to flare the BX stentgraft at the entry of the branch (similarly to fenestrated devices), and secondly, the precise implantation alongside the branch.



Dr. Theodosios Bisdas



Figure 3. 3D Reconstruction of post-op CT

Athens Medical Centre  
Athens, Greece