

FIRST IN HUMAN WITH 30 DAY FOLLOW UP NEXUS DUO™ CUSTOM-MADE AORTIC ARCH STENT GRAFT SYSTEM



PATIENT INFORMATION

The 75-year-old, high-risk patient presented with a complicated chronic none A-none B aortic dissection, respectively a proximal neck degeneration (Zone 3) after TEVAR.



REASON TO TREAT

Exclusion of arch pathology whilst maintaining a convenient retrograde axillary access for a pending distal descending/thoraco-abdominal endovascular repair.

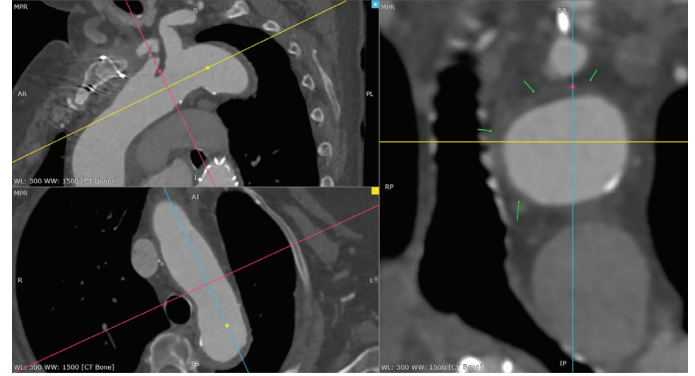


Figure 1. Preoperative morphology. Note the diseased Zone 2 (arrows)



STAGE 1

RCCA to LCCA surgical bypass was performed.



NEXUS DUO™ IMPLANTATION

1 week later, the NEXUS DUO™ Arch Stent Graft was implanted in an uncomplicated percutaneous intervention utilizing the LSA for the 2nd branch.



PROCEDURAL OUTCOME

NEXUS DUO™ implantation, with its pre-cannulated 2nd branch, was performed in December 2022. After a successful procedure the patient was discharged home 3rd post operative day.



30 DAY FOLLOW UP

30 day follow-up showed the patient doing very well, and CT study showed good position and function of the dual-branch system.

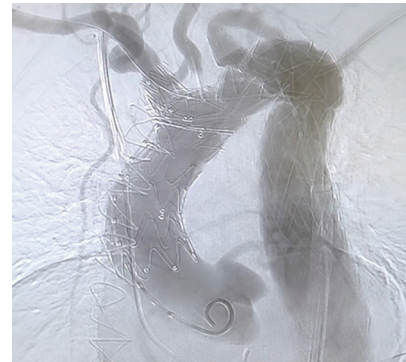


Figure 2. Intraoperative completion angiography

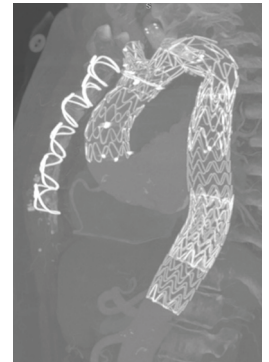


Figure 3. 30 day follow-up



PHYSICIAN COMMENTS

NEXUS DUO™ is an interesting evolution of the CE-marked NEXUS® single branch aortic arch endovascular system. It offers a second branch, which is a customizable inner branch, that is pre-cannulated, allowing preloading of 0.014" wires.

Pre-testing in elastomeric models as well as our first clinical experience confirm the system makes it quite easy to bridge to the second target artery (left carotid or left subclavian artery).

Overall, the pre-wired system results in minimal arch and target vessel manipulation to achieve stent graft completion.



Hirslanden Klinik
Zurich, Switzerland

M. Lachat, MD
Aortic and Vascular
Centre Hirslanden

D. Planer, MD
Hadassah University
Hospital, Jerusalem

N. Avisar
Endospan

M. Szente Varga, MD
Aortic and Vascular
Centre Hirslanden