

**SYMPTOMATIC GOTHIC TYPE 3 AORTIC ARCH WITH CONTAINED RUPTURE (24 HOURS CT TO TREATMENT)**



**PATIENT INFORMATION**

A 76-year-old male patient was referred urgently to Dr. Buz at the German Heart Centre, Berlin, Germany, for treatment of his zone 1 aortic arch PAU with contained rupture (Figure 1).



**REASON TO TREAT**

The patient's condition was too frail to withstand a standard open surgical procedure as he had an urgent indication and could not wait for a custom-made endovascular solution. Therefore, the CE-marked NEXUS® Aortic Arch Stent Graft System was carefully selected as the most readily available and suitable device to treat this challenging anatomical situation.



**THURSDAY 8:00 A.M.**

The CT was received and evaluated, and a case plan was prepared and received back by Dr. Buz within one hour for him to decide on treatment.



**THURSDAY 8:00 P.M. | DEBRANCHING**

Dr. Buz performed a supraclavicular RCCA to LCCA to LSA bypass to ensure full cerebral perfusion following the implantation of the single branched NEXUS® system. The LCCA was ligated below the de-branching while the LSA remained patent.



**FRIDAY 8:00 A.M. | NEXUS® IMPLANTATION**

The NEXUS® Aortic Stent Graft System was successfully deployed during an uneventful procedure with an optimal outcome (Figure 2).



**PROCEDURAL OUTCOME**

The LSA perfusion was occluded by the NEXUS® Aortic Stent Graft, so spontaneously thrombosed and a plug to close the LSA was not necessary. Due to the minimally invasive nature of the procedure, and that there were no cerebral complications, the patient was discharged in less than a week.



**PHYSICIANS COMMENT**

The speed of availability and level of support needed to treat this patient quickly was paramount. The CE-marked "off the shelf" NEXUS® Arch Stent Graft System was the only real endovascular option for this treatment, and to avoid open surgery. Due to the combination of quick logistics, case planning, and procedural support, the urgent treatment of the patient was possible with a smooth and successful outcome.



**Dr. Semih Buz**  
Consultant Cardiothoracic Surgeon

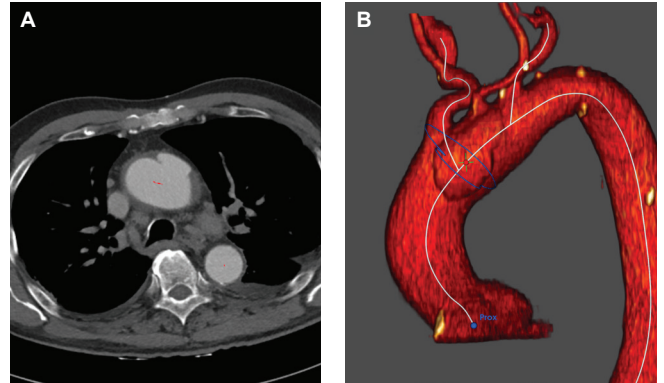


Figure 1.

(A) Computed tomography angiogram shows the location of the zone 1 aortic rupture.

(B) Three-dimensional reconstruction of the gothic aortic type 3 arch and the location of the supra-aortic vessel's position in relation to the pathology.

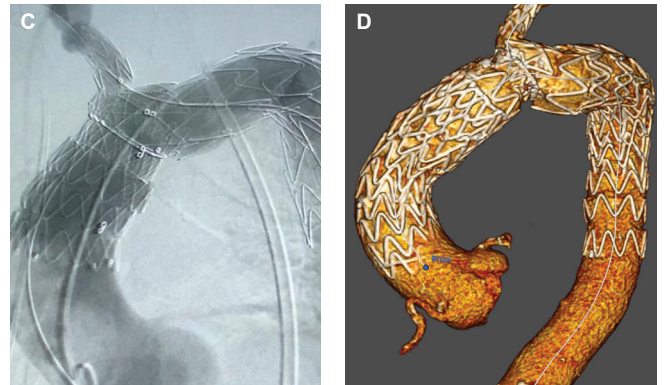


Figure 2.

(C) Intra-operative final angiogram shows total exclusion of the contained rupture.

(D) Three-dimensional reconstruction of the NEXUS® Aortic Arch Stent Graft System in place prior to patient discharge.

Deutsches Herzzentrum  
German Heart Centre  
Berlin, Germany