

Revision of an AAA Endograft Supported by Artis zeego and *syngo* DynaCT

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Patient history

An elderly man was found to have a large infrarenal aortic aneurysm. He was treated and an endograft was placed. Annual CT scans were performed, and for five years the device maintained its position and exclusion of the aneurysm. The CT scan at year six noted that the device had collapsed into the aneurysm sac, and the aneurysm was again pressurized.

Diagnosis

Further examination of the CT scan revealed that with collapse of the device, there was a large amount of metal just above the aortic bifurcation that might hinder any endovascular attempt at repair. As such, a plan was made to treat the patient in a hybrid Artis zeego room. The advanced imaging would allow more options endovascularly, as well as allow conversion to an open repair, if necessary.

Treatment

Access to the arterial system was obtained from both femoral arteries. *syngo* DynaCT images were obtained which clarified the position and structural position of the old stent (Fig. 1). A 3D angio was also performed which shows the position of the migrated device and the endoleak (Fig. 2). Another endograft system, with supra-renal fixation, was advanced from the right, positioned, and then deployed in position. The contralateral gate to this device was obstructed by the prior device's stent structure, which had created a mass of wire at the aortic bifurcation (Fig. 3). Ultimately, a large balloon was used to deform the old stent, and then appropriate access to the new stent from the left was performed. The new stent system was completed and completion studies show an excellent result with exclusion of the aortic aneurysm. Another *syngo* DynaCT acquisition shows the relationship of the two devices, as well as the integrity of the repair, with no evidence of an endoleak (Fig. 4).

Comments

The patient is now six months post procedure and follow-up CT scans show the new device in appropriate position and the aneurysm excluded.

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- 1** syngo DynaCT showing position of old stent.
- 2** 3D Angio clearly showing the endoleak.
- 3** Visualization of mass wire at the aortic bifurcation.
- 4** syngo DynaCT image of the repaired stent without endoleak.