Type IB and type III endoleak 8 years after endovascular aneurysm repair

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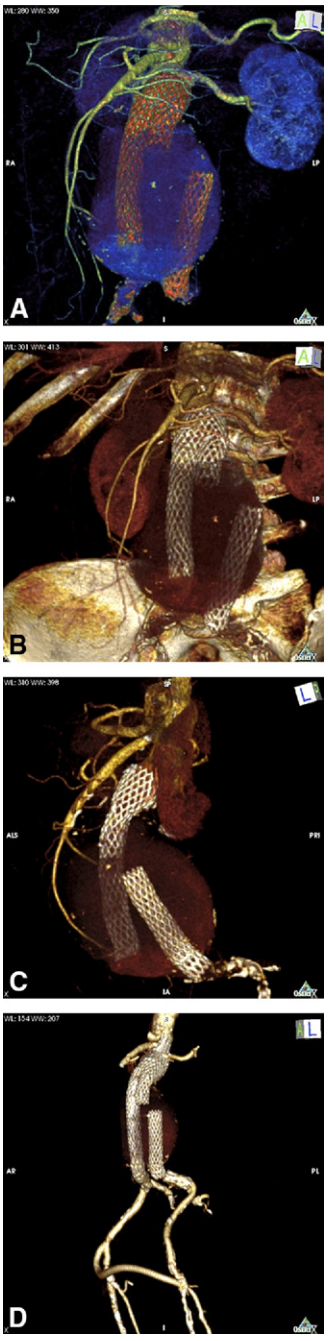
An 86-year-old man was admitted to our hospital for abdominal pain and underwent an AneurRx bifurcated endograft (Medtronic AVE, Sunnyvale, Calif) implantation 8 years earlier for a 7-cm-diameter abdominal aortic aneurysm (AAA). His comorbidities were chronic atrial fibrillation, diabetes, dyslipidemia, chronic renal failure, hypertension, severe chronic obstructive pulmonary disease, and coronary artery disease. This patient also underwent an appendicectomy, inguinal hernioplasty, and cholecystectomy.

An expandible abdominal mass was found during a clinical examination. Doppler ultrasound imaging and a computed tomography scan showed a severe increase of AAA diameter to 11 cm, associated with a type IB endoleak from the right leg displaced into the aneurysmal sac itself and to a type III endoleak due to detachment of the contralateral leg (*A-C*). Similar patients reported in the literature underwent open or endovascular treatment.[1,2] Our patient was assessed by the anesthesiologist and cardiologist as being in American Society of Anesthesiologist class IV and therefore unfit for surgical repair, so an endovascular approach was planned.

Through a left transaxillary access, a hydrophilic guidewire was introduced first into the endograft main body and its right leg and, thereafter, was captured by means of an Amplatz GooseNeck (EV3, Plymouth, Minn) introduced through the right common femoral artery. This was exchanged with a stiff guidewire, and a right aorto-uni-iliac Zenith Cook endograft (Cook Inc, Bloomington, Ind) was deployed. After surgical exposure of the left common femoral artery, an endovascular plug (Iliac Plug Cook Zip-20) was inserted in the ipsilateral common iliac artery. A femoro-femoral crossover bypass was completed with a 7-mm external-supported polytetrafluoroethylene graft (Vascutek Ltd, Inchinnan, Scotland).

The procedure was performed with spinal anesthesia, the operating time was 135 minutes, and the contrast medium amount was 250 mL. The patient's postoperative period was uneventful and he was discharged after 8 days, with no worsening of renal condition. A computed tomography scan at 6 months showed a good result of the procedure, with no endoleak and reduction of the AAA diameter (*D*).



REFERENCES

1. Teruya TH, Ayerdi J, Solis MM, Abou-Zamzam AM, Ballard JL, McLafferty RB, et al. Treatment of type III endoleak with an aortouniiliac stent graft. Ann Vasc Surg 2003;17:123-8.
2. Krajcer Z, Howell M, Dougherty K. Unusual case of AneuRx stent-graft failure two years after AAA exclusion. J Endovasc Ther 2001;8:465-71.

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