

Aortic anastomotic pseudoaneurysm repaired with iliac branched endoprosthesis



Rebecca Ur, MD,^a and Gale L. Tang, MD,^{a,b} Seattle, Wash

A 75-year-old man undergoing surveillance imaging for a known pseudoaneurysm of the aortic anastomosis of an aortobifemoral bypass graft placed 20 years prior for occlusive disease was found to have increase in pseudoaneurysm size to 6 cm (A/Cover). The patient has a history of chronic obstructive pulmonary disease and non-small cell lung cancer with right upper lobectomy. He is of very thin habitus, and a pulsatile mass was visible in his left mid abdomen. Previously, the patient had undergone multiple cutdowns to the right and left groin for graft thrombectomies, pseudoaneurysm repair, as well as distal bypass and revision of the distal bypass with the last intervention 5 years previously. Open revision was considered high risk given his age and significant chronic obstructive pulmonary disease. The heavily calcified infrarenal aorta had a 2-cm neck before the pseudoaneurysm, and the length from the left renal to the bifurcation of the femoral limbs was 6.3 cm on centerline reconstruction, which was too short for commercially available main body endografts (B).

A Gore iliac branch endoprosthesis (W. L. Gore & Associates Flagstaff, Ariz) was chosen owing to its shorter main body/contralateral limb length (5.5 cm) and successfully deployed in the infrarenal position via bilateral percutaneous common femoral artery access. The device was extended using Gore iliac limbs into the existing bifemoral graft. The patient did well and was discharged home the following morning. Follow-up imaging showed good graft position without a type I or III endoleak (C). The patient's consent was obtained to publish this case.

Endovascular repair of aortic anastomotic pseudoaneurysms has been reported with successful results. However in these cases an aortouni-iliac device is typically used with a femorofemoral bypass to maintain flow to the contralateral limb because of the historical preference for a short main body for previously placed open aortic grafts to avoid limb kinking.¹ Even in large pseudoaneurysms, the long main body length of most bifurcated devices results in jailing of the contralateral limb. In this case, an iliac branch endoprosthesis was used owing to its shorter main body length, allowing for total percutaneous endovascular repair.

REFERENCE

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From the Division of Vascular Surgery, University of Washington^a; and the Division of Vascular Surgery, VA Puget Sound.^b

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E-mail: gtang@uw.edu.

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