

IMAGES IN INTERVENTION

Type I Endoleak Post-Endovascular Aneurysm Repair, Successfully Treated With Excluder Cuff and Fixation Screws



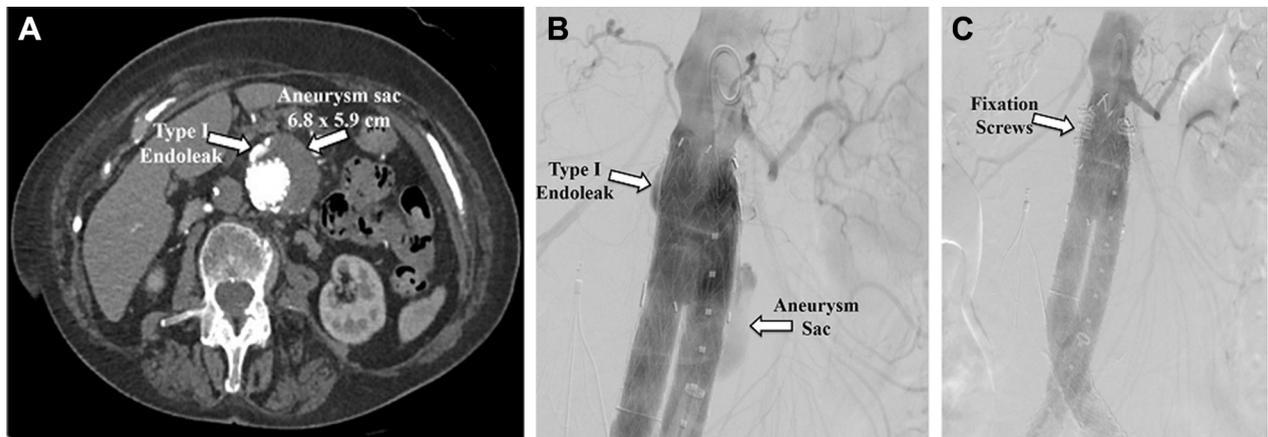
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An 86-year-old woman with a medical history significant for hypertension, hyperlipidemia, dilated cardiomyopathy, remote history of coronary artery disease with a drug-eluting stent to the left anterior descending artery, permanent atrial fibrillation on warfarin, mitral and tricuspid valve repairs with post-operative pulmonary embolism requiring inferior vena cava filter placement, and endovascular abdominal aortic aneurysm repair performed 3 years before, presented to our office after

a recent surveillance duplex ultrasound showed abdominal aneurysm sac expansion from 5 cm × 4.3 cm to 6.8 cm × 5.9 cm. A computed tomography scan of the abdomen showed a type I endoleak (Figure 1A). The etiology of the type I endoleak and aneurysm growth was found to be due to migration of the endograft with secondary malapposition at the aneurysm neck.

An initial attempt was made to repair the type I endoleak with a 26 mm × 33 mm excluder cuff at the

FIGURE 1 Endovascular Treatment of Type I Endoleak



(A) Abdominal computed tomography showing endoleak and aneurysm sac. (B) Angiogram showing endoleak (top arrow) and filling aneurysm sac (bottom arrow). (C) Angiogram showing successful exclusion of endoleak with the use of an excluder cuff and fixation screws.

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Manuscript received October 12, 2017; accepted October 17, 2017.

neck of the aneurysm, proximal to the prior graft and distal to the lowest renal artery. An 18-F sheath was placed through the right common femoral artery and a 6-F sheath was placed through the contralateral common femoral artery. A 6-F pigtail was placed above the renal arteries. Angiography detected type 1 endoleak (**Figure 1B**). The excluder cuff was deployed and apposed to the aortic wall with a balloon. There was an incomplete resolution of the endoleak, at which point the decision was made to deploy fixation screws for better anchoring and apposition of the graft to the aortic wall. Final angiography showed complete resolution of the endoleak (**Figure 1C**). Groin

hemostasis was achieved with pre-deployed perclose devices. The patient was discharged to home the following day. Serial ultrasounds performed at 1, 3, and 6 months showed reduction in aneurysm sac and no endoleak.

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KEY WORDS EVAR, type I endoleak