

Section: SURGICAL CASE REPORT

Abstract: SCR-03

Recurrent type II endoleak after EVAR: Case report treated with repeated embolizations

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INTRODUCTION: Type II endoleak (EL2) is the most frequent complication after endovascular abdominal aortic aneurysm repair (EVAR), resulting from retrograde flow through collateral branches. Although often self-limited, persistent EL2 may lead to aneurysm sac expansion and require reintervention. Recurrent cases remain a therapeutic challenge, with no clear consensus on optimal management. **CASE REPORT:** A 70-year-old male with hypertension and dyslipidemia, previously submitted to EVAR in 2016, presented in 2022 with a late EL2 associated with aneurysm sac enlargement (8.5 × 6.8 cm). The patient underwent three transarterial embolizations between 2022 and 2025 due to persistent recurrence. The first procedure used metallic coils, achieving initial exclusion. However, follow-up imaging demonstrated recanalization. A second embolization with coils and microspheres was performed, again with temporary resolution. In 2025, significant sac growth (9.9 × 8.7 cm) and recurrent symptoms were observed. A third embolization using Onyx 18 was performed via femoral access, achieving complete angiographic exclusion. Postoperative Doppler confirmed sac thrombosis without residual flow. **DISCUSSION:** EL2 accounts for up to 50% of endoleaks, with approximately half resolving spontaneously upon being detected during the procedure. However, persistent or recurrent EL2 is associated with sac enlargement and increased risk of rupture, requiring intervention. Endovascular embolization is widely used as a therapeutic option, although recurrence rates remain high, especially in large aneurysms or in the presence of multiple collateral vessels. Different embolic agents may be used, with Onyx showing potential advantages in complex cases due to better penetration of collateral networks. This case highlights the challenges of managing recurrent EL2 and reinforces the importance of long-term surveillance and individualized treatment strategies.

KEYWORDS: Abdominal aortic aneurysm; Type II endoleak; EVAR; Embolization.