displacement of the tibial nerve and compression of popliteal vein due to PAA mass effect. The aneurysm sac was then closed over itself, fully decompressing the popliteal vein.

Conclusions: OBGL is the gold standard for PAA repair. However, late term complications can arise, and therefore surveillance with physical exam and Doppler should be continued in these patients.

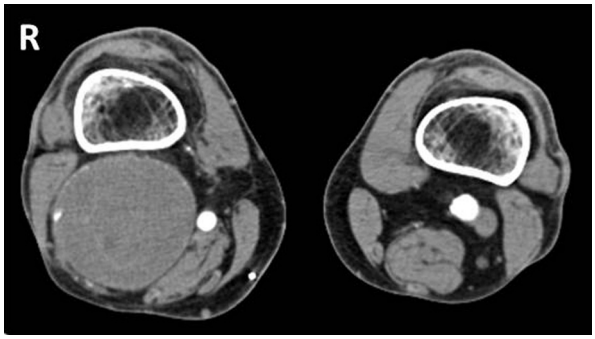

Fig 1.

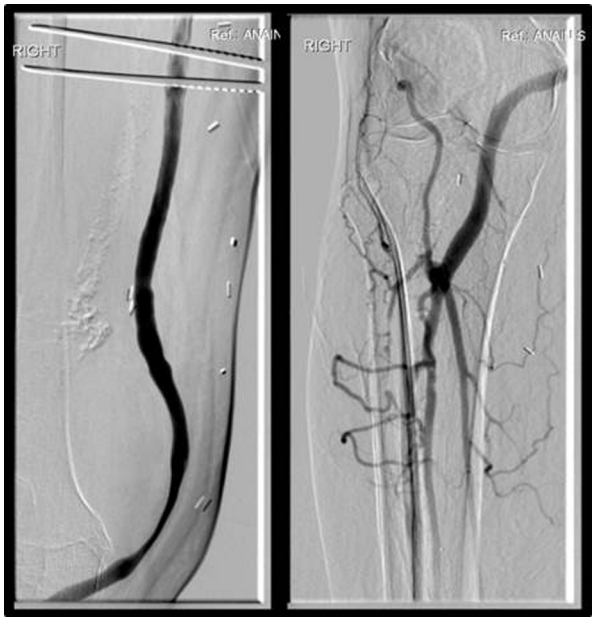

Fig 2.

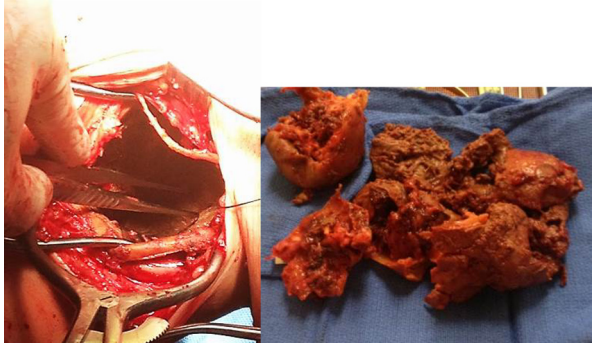

Fig 3.

The Incidence and Fate of Endoleaks Varies between Ruptured and Elective Endovascular Abdominal Aortic Aneurysm Repair

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Objectives: This study analyzes weather endoleaks behave differently following endovascular abdominal aortic aneurysm repair (EVAR) for rupture vs elective abdominal aortic aneurysm (AAA) repair.

Methods: From 2002 to 2012, 1728 patients underwent EVAR for treatment of rupture (n = 152, 8.8%) and elective (n = 1576, 91.2%) infrarenal AAA. Follow-up included computed tomographic angiogram at 1, 6, and q 12 months. All type I endoleaks were treated at the time of diagnosis, and persistent type II endoleaks at >6 months following EVAR without a decrease in AAA sac underwent translumbar and transfemoral embolization procedures. Data was prospectively collected in a vascular database.

Results: Over a mean follow-up of 38.5 months, patients following ruptured-EVAR (r-EVAR) had a significantly lower incidence of type II endoleaks when compared with elective (e-EVAR) (Table). Although the incidence of type I endoleaks is similar following r-EVAR and e-EVAR (Table), the r-EVAR patients with endoleaks required stent graft explant more frequently (7/26, 26.9% vs 32/475, 6.7%; $P < .01$), and e-EVAR patients undergo percutaneous embolization procedures more frequently (298/475, 62.7% vs 11/26, 42.3%, $P < .05$). The need for stent graft extensions in patients with endoleaks is comparable in both r-EVAR and e-EVAR (8/26, 30.8% vs 145/475, 30.5%) groups.

Conclusions: When compared with e-EVAR, r-EVAR patients experience a similar incidence of type I endoleaks, and a significantly lower incidence of type II endoleaks. However, r-EVAR patients with any endoleaks are at a significantly higher risk for stent graft explant, while endoleaks in e-EVAR patients can be more frequently managed by percutaneous endovascular means.

Table.

	rEVAR (n = 152)	*eEVAR (n = 1576)*	P *value*
All endoleaks	26 (17.1%)	475 (30.1%)	<.01
Type 1 endoleaks	12 (7.9%)	136 (8.6%)	NS
Type 2 endoleaks	14 (9.2%)	339 (21.5%)	<.01

Does Complete Eradication of Isolated Type II Endoleaks with Glue Embolization Affect EVAR Outcomes?

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Objectives: Indications for treatment, techniques, and reported outcomes following type II endoleak embolization remain inconsistent. We investigated endovascular abdominal aortic aneurysm repair (EVAR) outcomes with an exclusive focus on patients with isolated type II endoleaks (IT2) that were completely eradicated via N-butyl cyanoacrylate (N-BCA) embolization alone.

Methods: We retrospectively reviewed a series of 24 patients with completely eradicated IT2 for secondary interventions, aneurysm growth/regression, aneurysm rupture, and aneurysm-related and overall mortality. Indications for treatment were persistent (≥6 months) IT2 and growing (≥5 mm; n = 11) or stable (n = 13) aneurysm sacs. N-BCA was injected into the endoleak nidus transarterially (n = 17), via direct sac puncture (n = 6), or both (n = 1). Patients were followed by computed tomography angiography and/or duplex ultrasound.

Results: Complete eradication was achieved in all patients with no recurrent IT2 at last follow-up. Mean time between EVAR and embolization was 29 ± 22.8 months and follow-up was 41 ± 22.3 months. Overall mortality was 8 (33%) including one death following an explant for aneurysm rupture (due to a type Ia endoleak) and two deaths from unknown causes. Aneurysm outcomes following embolization are summarized in the Table.

Conclusions: There is a disconnect between overall sac behavior and presence or absence of IT2. Thus, we cannot demonstrate that complete eradication of persistent IT2 has any effect on EVAR outcomes.