



Abstract E-025 Figure 1

Rosenwasser: None. P. Jabbour: 2; C; Medtronic, Microvention, Balt, Cerus Endovascular.

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E-026

LONG-TERM CLINICAL OUTCOMES OF ARTERIOVENOUS FISTULA TREATED WITH THE PENUMBRA SMART COIL SYSTEM: A SUBSET ANALYSIS OF THE PROSPECTIVE, MULTICENTER SMART REGISTRY

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Background Endovascular embolization techniques are generally the primary therapeutic modality for the treatment of arteriovenous fistula (AVF). This subset analysis aimed to assess the prospective long-term clinical outcomes of AVF treated with the SMART COIL System.

Methods Forty-one patients from the SMART registry (a prospective, multicenter, single-arm, postmarket registry) had AVF treated with endovascular coiling and were followed up to 12 ± 6 months after the procedure.

Results No patients (0/41) had a procedural device-related serious adverse event (SAE). Re-access with a guidewire due to catheter kickout was not required in 85.4% (35/41) of patients. Complete or adequate occlusion immediately after the procedure was achieved in 87.8% (36/41) of patients. The periprocedural SAE rate was 2.4% (1/41), and no periprocedural deaths occurred (0/41). Retreatment through follow-up occurred in 3.4% (1/29) of patients. At one year, the lesion occlusion was better or stable in 93.3% (28/30) of patients. The SAE rate after 24 hours through 365 days after the procedure was 26.8% (11/41). The one-year all-cause mortality rate was 2.4% (1/41), and 90.9% (20/22) of patients had a modified Rankin Scale score of 0 to 2 at one-year follow-up.

Conclusion Coiling of arteriovenous fistula with the SMART COIL System was safe and effective at one year.

Abstract E-026 Table 1 Clinical outcomes at (12 ± 6 months) follow-up of patients with arteriovenous fistula treated with the Penumbra SMART COIL System. Data are reported as percentage (n/N)

	Arteriovenous fistula(N = 41)
Primary safety	
Procedural device-related SAEs*	0.0% (0/41)
Primary effectiveness	
Retreatment through follow-up	3.4% (1/29)
Secondary effectiveness	
Re-access with a guidewire required due to catheter kickout	
0	85.4% (35/41)
1	7.3% (3/41)
2+	7.3% (3/41)
Complete or adequate occlusion immediately after the procedure	87.8% (36/41)
Unassisted coiling	96.0% (24/25)
Coiling plus liquid embolic	80.0% (8/10)
Stent-assisted coiling or balloon-assisted coiling	66.7% (4/6)
Additional periprocedural† outcomes	
SAEs	2.4% (1/41)‡
Mortality	0.0% (0/41)
Additional one-year outcomes	
Better or stable lesion occlusion	93.3% (28/30)
Unassisted coiling	95.0% (19/20)
Coiling plus liquid embolic	85.7% (6/7)
Stent-assisted coiling or balloon-assisted coiling	100% (3/3)
SAEs, after 24 hours through 1 year (±6 months) after procedure [§]	26.8% (11/41)
All-cause mortality	2.4% (1/41)
Modified Rankin Scale score of 0-2	90.9% (20/22)

Abbreviation: SAE, serious adverse event. *Occurring within 24 hours of arterial puncture. †Intraprocedural or within 24 hours of the procedure. ‡Retropertoneal hematoma.