

Supplemental table 1 Symptom improvement by cranial nerve

	Improved	Not improved	P value
Cranial neuropathies overall	72	17	
Cranial nerve II	12 (17)	10 (59)	0.001
Cranial nerve III	23 (32)	4 (24)	0.571
Cranial nerve IV	0 (0)	1 (6)	0.191
Cranial nerve V	10 (14)	0 (0)	0.198
Cranial nerve VI	27 (38)	2 (12)	0.048

Supplemental table 2 Previous studies reporting cranial neuropathy after flow diversion treatment

References	No. of patients	Mean follow-up*	Improvement	Improvement of each cranial neuropathy		
				II	III + IV + VI	V
Tachi et al., 2020 ²⁶	18	12	10/18 (56%)	3/5 (60%)	7/14 (50%)	
Wang et al., 2019 ¹⁴	22	25.5 (24-30)	12/22 (54%)	9/19 (47%)	5/7 (71%)	
Oishi et al., 2018 ¹⁶	40	13.5 (1-45)	18/40 (45%)	3/10 (30%)	15/28 (54%)	0/2 (0%)
Miyachi et al., 2017 ⁸	6	6	5/6 (83%)	NA	NA	
Silva et al., 2017 ⁹	64	NA	45/64 (71%)	45/64 (71%)		
Brown et al., 2016 ¹¹	45	8.4 (0.1-21.5)	30/45 (67%)	6/10 (60%)	30/35 (86%)	
Sahlein et al., 2015 ¹³	39	6	25/39 (64%)	9/17 (53%)	17/27 (63%)	1/3 (33%)
Moon et al., 2014 ¹²	20	7 (4-28)	15/20 (75%)	2/3 (67%)	13/16 (81%)	3/4 (75%)
Tanweer et al., 2014 ²⁷	19	NA	16/19 (84%)	NA	NA	
Zanaty et al., 2014 ¹⁰	51	14.5 (2.2-26.8)	47/51 (92%)	NA	NA	
Szikora et al., 2013 ²⁵	16	NA (12-18)	15/16 (94%)	NA	NA	
O'Kelly et al., 2013 ²⁴	27	NA	18/27 (67%)	5/9 (56%)	13/18 (72%)	
Current study	77	40 (12-72)	62/77 (81%)	12/22 (55%)	50/57 (88%)	10/10 (100%)
Total	444		318/444 (72%)	94/159 (59%)	150/202 (74%)	14/19 (74%)

*Expressed in months with range in parentheses. If range is not specified, all cases were evaluated at the time noted.

Supplemental Table 3 Univariate analysis for predictors of aneurysmal regression

Variables	+ regression	- regression	P value
No. of patients	33	33	
Age >65 yrs	20 (61)	18 (55)	0.804
Women	28 (85)	29 (88)	1.000
Hypertension	17 (52)	20 (61)	0.620
Dyslipidemia	14 (42)	11 (33)	0.612
Diabetes mellitus	1 (3)	3 (9)	0.613
History of smoking	14 (42)	7 (21)	0.112
Aneurysm size ≥ 20 mm	14 (42)	14 (42)	1.000
Aneurysm neck ≥ 8 mm	17 (52)	17 (52)	1.000
Steroid use	22 (67)	25 (76)	0.587
Adjunctive coiling	1 (3)	17 (52)	< 0.0001
Aneurysm occlusion*			
6 months	29 (88)	20 (61)	0.023
12 months	32 (97)	24 (73)	0.013

Values shown are medians with interquartile range or numbers with percentage.

*Aneurysm occlusion is defined as O'Kelly-Marotta grade C or D.

Supplemental table 4 Relationship between volume embolization rate and resolution or improvement of cranial neuropathy in patients who underwent adjunctive coiling

Variable	Improved	Unimproved	P value
No of Patients	9	9	
VER	11.6 (9.8-14.9)	17.3 (13.9-23.2)	0.0243
VER<13	6 (67)	1 (11)	0.0498

Values shown are medians with interquartile range or numbers with percentage.