On-line Table 1: Individual patient characteristics

Patient No	Age (yr)	Sex	Presenting Symptoms	Location[a]	Size (mm)	Treatment Method	Coil Density (%)	Time Interval[b]	Initial Angiography
POR1	50s	M	Incidental	Rt C6	19.63	PED	–	15 days	OG3
POR2	70s	F	Incidental	Lt C6	23.15	PED	–	1 day	OG3
POR3	20s	M	Headache, diplopia	Rt C4	27.52	PED	–	1 day	OG3
POR4	50s	F	Headache	Lt C4	25.69	PED + coil	4.92	1 day	OG3
POR5	40s	F	Headache	Rt C6	15.62	PED + coil	8.92	1 day	OG1
POR6	40s	M	Olfactory abnormality	Lt C7	26.15	PED + coil	2.41	1 day	OG3
POR7	50s	F	Incidental	Rt C6	21.97	PED + coil	3.12	3 days	OG3
POR8	60s	F	Decreased vision	Lt C6	17.20	PED + coil	5.91	120 days	OG2
POR9	40s	F	Incidental	Lt C6	19.68	PED + coil	2.11	1 day	OG3
POR10	50s	F	Incidental	Rt C6	18.02	PED + coil	3.35	1 day	OG2
POU1	50s	F	Decreased vision	Rt C6	17.95	PED	–	6 mo	OG3
POU2	10s	M	Incidental	Lt C4	19.01	PED	–	6 mo	OG3
POU3	50s	F	Decreased vision	Rt C6	23.12	PED	–	7 mo	OG3
POU4	50s	M	Dizziness and headache	Lt C6	11.33	PED	–	7 mo	OG3
POU5	60s	F	Incidental	Lt C6	19.72	PED	–	7 mo	OG3
POU6	40s	F	Dizziness and headache	Lt C4	13.16	PED	–	6 mo	OG3
POU7	40s	F	Dizziness and headache	Rt C5	13.12	PED + coil	5.91	6 mo	OG3
POU8	70s	M	Incidental	Lt C6	36.94	PED + coil	3.64	6 mo	OG3
POU9	60s	F	Incidental	Rt C4	17.53	PED + coil	2.08	4 mo	OG3
POU10	40s	F	Headache	Rt C7	15.72	PED + coil	3.67	4 mo	OG2
POU11	40s	F	Incidental	Lt C4	11.66	PED + coil	6.03	6 mo	OG2
POU12	60s	F	Dizziness	Rt C6	23.28	PED + coil	2.43	10 mo	OG3
POU13	70s	F	Blurred vision	Rt C6	18.46	PED + coil	10.15	6 mo	OG1
POU14	40s	M	Incidental	Lt C6	27.38	PED + coil	4.16	10 mo	OG3
POU15	40s	F	Blurred vision	Rt C6	24.16	PED + coil	5.70	4 mo	OG3
POU16	50s	F	Incidental	Lt C6	13.82	PED + coil	3.62	4 mo	OG2
POU17	70s	F	Headache	Lt C6	17.15	PED + coil	2.11	4 mo	OG3
POU18	50s	F	Incidental	Lt C5	19.42	PED + coil	2.93	6 mo	OG3
POU19	50s	F	Decreased vision	Lt C6	18.21	PED + coil	3.85	6 mo	OG3
POU20	60s	F	Blurred vision	Rt C6	17.39	PED + coil	4.36	10 mo	OG3

Note:—– indicates without coils; POR, post-operative ruptured case; POU, post-operative unruptured case; F, female; M, male; Lt, left; Rt, right.

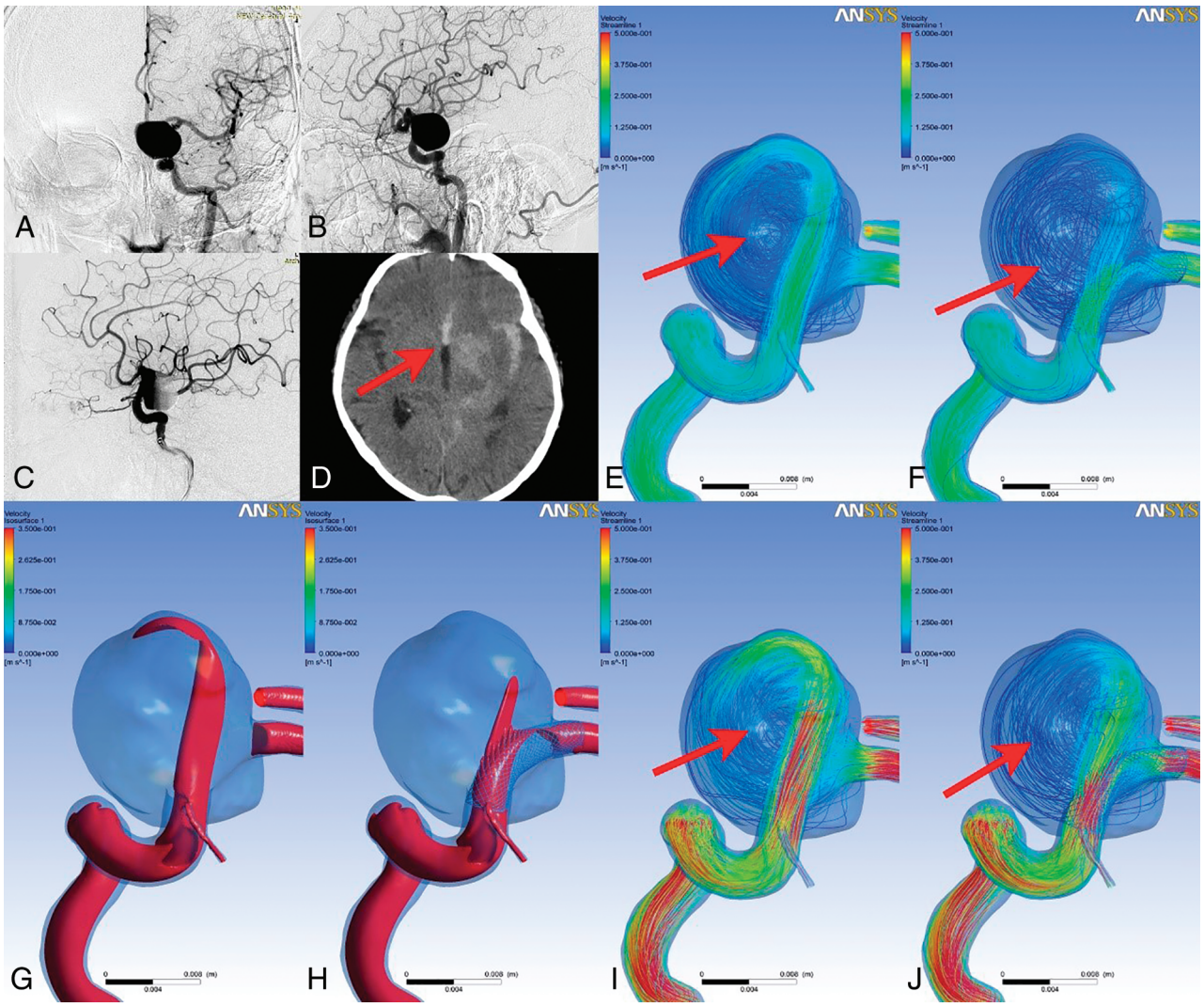
[a] The Bouthillier classification of internal carotid artery segments: C4 indicates cavernous; C5, clinoid; C6, ophthalmic; C7, communicating.

[b] The time interval for delayed-rupture cases indicates the time between angiography and eventual rupture. For unruptured cases, the time interval indicates the monitoring period from diagnosis.

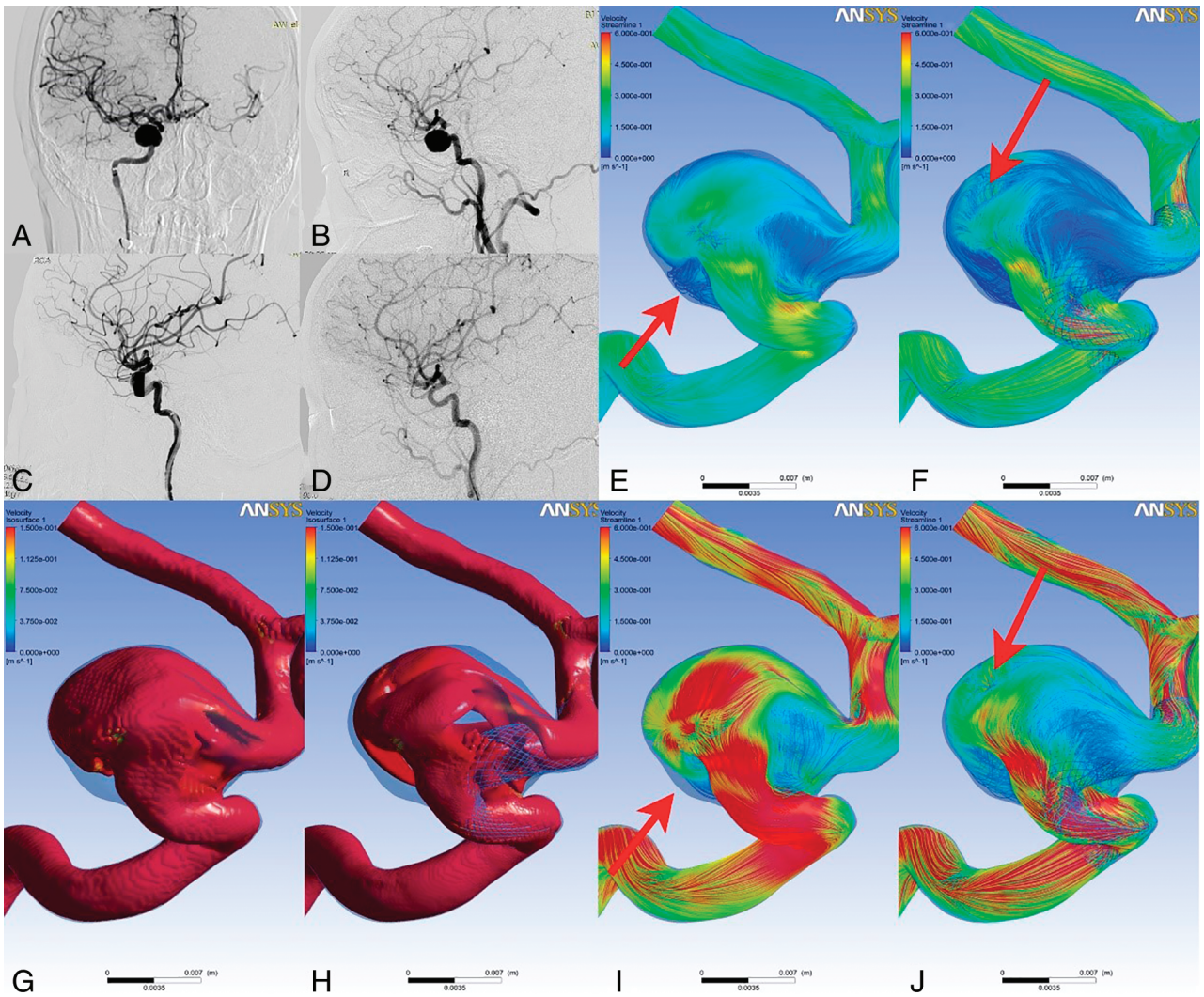
On-line Table 2: Comparison of baseline characteristics between POR and POU groups[a]

	POR Group ($n = 10$)	POU Group ($n = 20$)	*P* Value
Age (yr)	50.50 ± 13.91	54.70 ± 13.37	.441
Female sex (No.) (%)	7 (70.0)	16 (80.0)	.542
Hypertension (No.) (%)	3 (30.0)	7 (35.0)	.784
Cigarette smoking (No.) (%)	2 (20.0)	4 (20.0)	1.000
Symptomatic aneurysm (No.) (%)	5 (50.0)	12 (60.0)	.602
Aneurysm size (mm)	21.46 ± 4.09	18.89 ± 6.01	.113
Aneurysm height (mm)	17.38 ± 4.01	17.47 ± 6.73	.982
Aneurysm neck (mm)	10.73 ± 3.85	11.48 ± 5.23	.895
Aspect ratio	1.80 ± 0.70	1.72 ± 0.89	.567
Size ratio	5.51 ± 1.50	5.51 ± 2.06	.843
PED alone	3 (30.0)	6 (30.0)	1.000
Coil density (%)	4.39 ± 2.41	4.33 ± 2.12	.856
Initial angiographic result			.804
OG1	1 (10.0)	1 (5.0)	
OG2	2 (20.0)	3 (15.0)	
OG3	7 (70.0)	16 (80.0)	

[a] Continuous variables are expressed as mean ± SD. Categoric variables are expressed as (No.) (%).



ON-LINE FIG 1. A female patient with a left internal carotid aneurysm was treated by a PED alone. Compared with the anteroposterior and lateral position of preoperative angiography (*A* and *B*), contrast agent retention is found (*C*). Unfortunately, the aneurysm ruptured 1 day postoperatively (*D*, *arrow*). After CFD analysis, we found that an unstable flow pattern appeared after treatment. Compared with the streamlines at end diastole, the vortex structure in the preoperative streamlines (*E*, *arrow*) is not changed at peak systole (*I*, *arrow*). However, after treatment, the vortex structure is moved at peak systole (*F* and *J*, *arrows*). Isovelocity surfaces show that the velocity in the aneurysm lumen decreased between the preoperative (*G*) and postoperative (*H*) periods.



ON-LINE FIG 2. A female patient with a right internal carotid aneurysm was treated with a PED alone. Compared with anteroposterior and lateral position of preoperative angiography (*A* and *B*), contrast agent retention is found (*C*). At follow-up, the aneurysm is successfully embolized (*D*). After CFD analysis, we found that the unstable flow pattern disappeared after treatment. Compared with the streamlines at end diastole, the vortex structures in the preoperative streamlines (*E*, *arrow*) are found and disappear at peak systole (*I*, *arrow*). However, after treatment, the amount of vortex structure is not changed at peak systole (*F* and *J*, *arrows*). Isovelocity surfaces show that the velocity in the aneurysm lumen decreased between preoperative (*G*) and postoperative (*H*) periods.