



Flowchart of patient inclusion.

	Study population N=367	Patients with endovascular vasospasm treatment n=138	Patients without endovascular vasospasm treatment n=229	P value
Baseline characteristics				
▪ Age (years), mean (\pm SD)	57.1 (13.4)	56.1 (11.7)	57.8 (14.2)	0.24
▪ Female sex, n (%)	241 (65.7%)	93 (67.4%)	148 (64.6%)	0.65
▪ Diabetes, n (%)	7 (1.9%)	1 (0.7%)	6 (2.6%)	0.26
▪ Hypertension, n (%)	161 (43.9%)	64 (46.4%)	97 (42.4%)	0.45
▪ Smoker, n (%)	123 (33.5%)	49 (35.8%)	74 (32.3%)	0.57
Ruptured Aneurysm location, n (%)				
- Anterior circulation				
▪ ICA	86 (23.4%)	33 (23.9%)	53 (23.1%)	0.9
▪ MCA	52 (14.2%)	20 (14.5%)	32 (14.0%)	0.88
▪ ACA	169 (46%)	62 (44.9%)	107 (46.7%)	0.75
- Posterior circulation	60 (16.4%)	23 (16.6%)	37 (16.2%)	0.89
Aneurysm size (median)	5 (4-8)	5 (4-8)	5 (4-8)	0.47
Imaging details				
▪ Modified Fisher grade, median (IQR)	3 (2-4)	4 (3-4)	3 (2-4)	0.005
▪ ICH baseline, n (%)	115 (31.3%)	58 (42.0%)	57 (24.9%)	<0.001
▪ Rebleeding	38 (10.4%)	15 (10.9%)	23 (10.1%)	0.86
▪ Infarction at discharge, n (%)	134 (36.5%), n=354	72 (52.2%), n=131	62 (27.8%), n=223	<0.001
Clinical deficit				
▪ Hunt and Hess grade, median (IQR)	3 (2-4)	3 (2-4)	2 (1-4)	0.026
Treatment details, n (%)				
▪ Surgical clipping	88 (24.0%)	37 (26.8%)	51 (22.3%)	0.38
▪ EVT	279 (76.0%)	101 (73.2%)	178 (77.7%)	0.38
▪ EVD	250 (68.3%)	103 (74.6%)	147 (64.2%)	0.036
▪ ASS	188 (51.2%)	66 (47.8%)	122 (53.3%)	0.33
Outcome				
• mRS>2 at follow up	152/354	69/136	83/218	0.021

• median length of hospitalization	24 (19-32)	26.5 (22-34)	22 (17-30)	<0.001
• In-hospital mortality	55/367	17/138	38/229	0.29

Demographic and clinical parameters of patients with aneurysmal subarachnoid hemorrhage. Boldface type indicates statistically significant values. ASS = acetylsalicylic acid, mRS = modified Rankin Scale, EVD = extraventricular drainage, EVT = endovascular treatment, ICH = intracerebral hemorrhage, ICA = internal carotid artery, MCA = middle cerebral artery, ACA = anterior cerebral artery, Posterior circulation included aneurysms of the basilar artery, the posterior inferior cerebellar artery and the posterior cerebral artery

			95% CI for Odds ratio	
	p-value	Odds ratio	lower	upper
Age	0.036	1.049	1.003	1.097
Sex	0.766	1.154	0.448	2.973
Aneurysm treatment	0.768	1.182	0.388	3.598
Hunt&Hess	<0.001	2.118	1.384	3.241
ICH at admission	0.169	1.005	0.381	2.651
Necessity of EVD	0.993	2.533	0.673	9.531
Re-Bleeding	0.050	4.971	1.002	24.647
Bihemispheric vasospasm	0.010	4.051	1.400	11.721
Posterior circulation vasospasm	0.439	1.632	0.472	5.645
Onset of vasospasm	0.175	0.920	0.815	1.038
Duration of vasospasm	0.094	0.830	0.668	1.032
Number of treatments	0.828	1.056	0.644	1.733
PTA	0.284	2.731	0.434	17.120

Results of the logistic regression analysis of clinical and procedural variables with follow-up mRS

			95% CI for Odds ratio	
	p-value	Odds ratio	lower	upper
Age	0.002	1.075	1.026	1.126
Sex	0.307	0.614	0.241	1.564
Aneurysm treatment	0.141	2.218	0.768	6.407
Hunt&Hess	0.880	1.028	0.714	1.480
ICH at admission	0.371	0.662	0.268	1.635
Necessity of EVD	0.467	0.641	0.193	2.125
Re-Bleeding	0.379	0.528	0.128	2.188
Bihemispheric vasospasm	0.053	2.596	0.988	6.819
Posterior circulation vasospasm	0.554	0.702	0.217	2.268
Onset of vasospasm	0.183	0.919	0.812	1.040
Duration of vasospasm	0.387	1.089	0.898	1.321
Number of treatments	0.399	1.215	0.773	1.911
PTA	0.142	3.392	0.665	17.290

Results of the logistic regression analysis of clinical and procedural variables with new infarctions at discharge

STROBE Statement—Checklist of items that should be included in reports of **cohort studies**

	Item No.	STROBE items	Location in manuscript where items are reported
	1	(a) Indicate the study's design with a commonly used term in the title or the abstract (b) Provide in the abstract an informative and balanced summary of what was done and what was found	Abstract - Methods
Background rationale	2	Explain the scientific background and rationale for the investigation being reported	Introduction
Objectives	3	State specific objectives, including any prespecified hypotheses	Introduction
Study Design	4	Present key elements of study design early in the paper	Methods
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Methods
Participants	6	<p>(a) <i>Cohort study</i> - Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up</p> <p><i>Case-control study</i> - Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls</p> <p><i>Cross-sectional study</i> - Give the eligibility criteria, and the sources and methods of selection of participants</p> <p>(b) <i>Cohort study</i> - For matched studies, give matching criteria and number of exposed and unexposed</p> <p><i>Case-control study</i> - For matched studies, give matching criteria and the number of controls per case</p>	<p>Methods</p> <p>NA</p>
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	Methods – Assessed variables & study end points
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	Methods - Patient management, Diagnosis & management of cerebral vasospasms, Assessed variables & study end points
Bias	9	Describe any efforts to address potential sources of bias	Discussion
Study size	10	Explain how the study size was arrived at	Methods

Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why	Methods - Statistics
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) <i>Cohort study</i> - If applicable, explain how loss to follow-up was addressed <i>Case-control study</i> - If applicable, explain how matching of cases and controls was addressed <i>Cross-sectional study</i> - If applicable, describe analytical methods taking account of sampling strategy (e) Describe any sensitivity analyses	Methods - Statistics
Data access and cleaning methods		..	
Linkage		..	
Participants	13	(a) Report the numbers of individuals at each stage of the study (e.g., numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed) (b) Give reasons for non-participation at each stage. (c) Consider use of a flow diagram	Methods, Supplementary material
Descriptive data	14	(a) Give characteristics of study participants (e.g., demographic, clinical, social) and information on exposures and potential confounders (b) Indicate the number of participants with missing data for each variable of interest (c) <i>Cohort study</i> - summarise follow-up time (e.g., average and total amount)	Results – Patient demographics, see Table 1
Outcome data	15	<i>Cohort study</i> - Report numbers of outcome events or summary measures over time <i>Case-control study</i> - Report numbers in each exposure category, or summary measures of exposure <i>Cross-sectional study</i> - Report numbers of outcome events or summary measures	Results – Patient demographics, see Table 1
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized	Results – Patient demographics, Logistic regression analysis, see Figure 2

		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	
Other analyses	17	Report other analyses done—e.g., analyses of subgroups and interactions, and sensitivity analyses	NA
Key results	18	Summarise key results with reference to study objectives	Discussion
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	Discussion
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Discussion, Conclusion
Generalisability	21	Discuss the generalisability (external validity) of the study results	Discussion
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Funding
Accessibility of protocol, raw data, and programming code		..	

STROBE Checklist