

Supplementary Table 2. Details of patients who developed post-SRS hemorrhage

Age (yr)	Sex	Onset	Location	Sinus/ non-sinus	CVR	Prior embolization	Volume (mL)	Prescription dose (Gy)	Timing of hemorrhage (mo)	Deficit	Deterioration in mRS
68	M	Hemorrhage	TS	Sinus	No	No	0.022	20	10.6	Temporary dysphagia	No
54	F	Hemorrhage	SSS	Sinus	Yes	No	1.8	21	4.0	No additional deficit*	No
62	M	HA/bruit	Tentorial	Sinus	No	Yes	0.79	20	8.0	No additional deficit	No
67	M	NHND, HA/ bruit	TS	Sinus	Yes	Yes	2.5	20	78.6	Ataxia	-3

SRS, stereotactic radiosurgery; CVR, cortical venous reflux; mRS, modified Rankin Scale; TS, transverse-sigmoid; SSS, superior sagittal sinus; HA, headache; NHND, non-hemorrhagic neurological deficit.

*The patient already had hemiparesis and aphasia due to a pre-SRS hemorrhage.

Supplementary Table 3. Comparison of baseline characteristics between the SRS alone and Emb-SRS groups following propensity score matching

Variable	SRS alone (n=83)	Emb-SRS (n=117)	P
Follow-up period			
Clinical (mo)	48.0 (32.1–81.0)	48.0 (25.5–69.2)	0.48
Radiographic (mo)	45.0 (25.5–75.5)	37.0 (23.5–59.5)	0.18
Male sex	38 (52.1)	39 (53.4)	1.00
Age at SRS (yr)	63.0 (51.5–71.0)	64.0 (56.5–73.0)	0.28
Onset*			
Hemorrhage	10 (13.7)	17 (23.3)	0.20
NHND	3 (4.1)	3 (4.1)	1.00
Bruit/headache	21 (28.7)	19 (26.0)	0.85
Ophthalmic symptoms	20 (27.4)	20 (27.4)	1.00
Other miscellaneous	5 (6.8)	6 (8.2)	1.00
Incidental	22 (30.1)	12 (16.4)	0.08
Location			0.86
Transverse-sigmoid	24 (32.9)	29 (39.7)	
Cavernous sinus	22 (30.1)	22 (30.1)	
Tentorial	13 (17.8)	14 (19.2)	
Superior sagittal sinus	4 (5.5)	2 (2.7)	
Anterior skull base	5 (6.8)	2 (2.7)	
Middle skull base	2 (2.7)	2 (2.7)	
Others	3 (4.1)	2 (2.7)	
Drainage pattern			
CVR	30 (41.1)	31 (42.5)	1.00
Non-sinus type	11 (15.1)	16 (21.9)	0.39
Dosimetric values			
Prescription dose (Gy)	20.0 (18.0–21.0)	20.0 (18.0–20.0)	0.23
Central dose (Gy)	36.0 (31.6–40.0)	36.8 (32.0–40.0)	0.75
Target volume (mL)	1.4 (0.6–3.1)	1.5 (0.8–2.9)	0.35

Values are presented as median (interquartile range) or number (%).

SRS, stereotactic radiosurgery; Emb-SRS, embolization with SRS; NHND, non-hemorrhagic neurological deficit; CVR, cortical venous reflux.

*Some overlaps exist.