

**Supplementary Table 1.** Demographics, cardiovascular risk factors, and MCA-M1 luminal stenosis in patients with non-ulcerative versus ulcerative MCA-M1 plaques

Characteristics	Overall (n=154)	Non-ulcerative plaques (n=134)	Ulcerative plaques (n=20)	P
Age (yr)	59 (53–67)	60 (53–67)	59 (55–66)	0.955
Male sex	101 (65.6)	87 (64.9)	17 (73.9)	0.656
Ever-smoker	77 (50.0)	66 (49.3)	12 (52.2)	0.632
History of dyslipidemia	105 (68.2)	94 (70.1)	14 (60.9)	0.175
History of hypertension	89 (57.8)	79 (59.0)	12 (52.2)	0.449
History of diabetes	42 (27.3)	38 (28.4)	6 (26.1)	0.434
Prior ischemic stroke or TIA	35 (22.7)	31 (23.1)	4 (20.0)	0.755
Systolic blood pressure (mm Hg)	149 (135–165)	150 (135–164)	144 (134–174)	0.824
Diastolic blood pressure (mm Hg)	82 (74–90)	81 (74–90)	84 (64–100)	0.665
Laboratory test results				
Glycosylated hemoglobin (%)*	6.0 (5.6–6.8)	6.0 (5.6–6.7)	6.1 (5.8–6.8)	0.417
Fasting blood glucose (mmol/L)*	5.5 (5.1–6.7)	5.5 (5.0–6.6)	5.9 (5.2–6.8)	0.547
Low-density lipoprotein cholesterol (mmol/L)*	3.3 (2.6–3.9)	3.3 (2.5–4.0)	3.4 (2.9–3.9)	0.525
High-density lipoprotein cholesterol (mmol/L)	1.1 (0.9–1.4)	1.1 (0.9–1.4)	1.1 (1.0–1.3)	0.868
Triglycerides (mmol/L)	1.4 (1.1–1.9)	1.4 (1.1–1.9)	1.3 (1.0–1.8)	0.599
Percent luminal stenosis in MCA-M1 (%)	75 (71–84)	75 (71–85)	76 (71–83)	0.806

Values are medians (interquartile range) or numbers (%); Wilcoxon rank sum tests were used for comparison of continuous variables and chi-square or Fisher's exact tests for categorical variables.

MCA, middle cerebral artery; TIA, transient ischemic attack.

\*Data were missing in 5, 1, and 1 cases for glycosylated hemoglobin, fasting blood glucose, and low-density lipoprotein cholesterol, respectively.

**Supplementary Table 2.** Geometric characteristics at terminal ICA bifurcation in patients with non-ulcerative versus ulcerative MCA-M1 plaques

Geometric features	Non-ulcerative plaques (n=134)	Ulcerative plaques (n=20)	P
Diameter of MCA origin (mm)	2.6 (2.3–2.9)	2.5 (2.0–2.6)	0.075
Diameter of ACA origin (mm)	2.0 (1.7–2.3)	2.1 (1.8–2.3)	0.246
Diameter of terminal ICA (mm)	3.3 (2.9–3.7)	3.3 (3.0–3.6)	0.823
MCA/ACA area ratio	1.71 (1.29–2.51)	1.36 (0.97–1.68)	0.007
MCA/ICA area ratio	0.65 (0.51–0.75)	0.51 (0.42–0.68)	0.029
(MCA+ACA)/ICA area ratio	1.03 (0.87–1.16)	0.94 (0.82–1.09)	0.226
MCA-ACA angle (°)	113.2 (103.6–125.0)	103.1 (95.1–120.3)	0.046
Distance between the starting point of MCA-M1 plaque and the MCA origin (mm)	4.7 (0–8.7)	4.4 (0.2–6.3)	0.871

Values are medians (interquartile range); Wilcoxon rank sum tests were used for all comparisons in the table.

ICA, internal carotid artery; MCA, middle cerebral artery; ACA, anterior cerebral artery.