**Table 1.** Baseline Characteristics of Patients with and without HT and sICH.

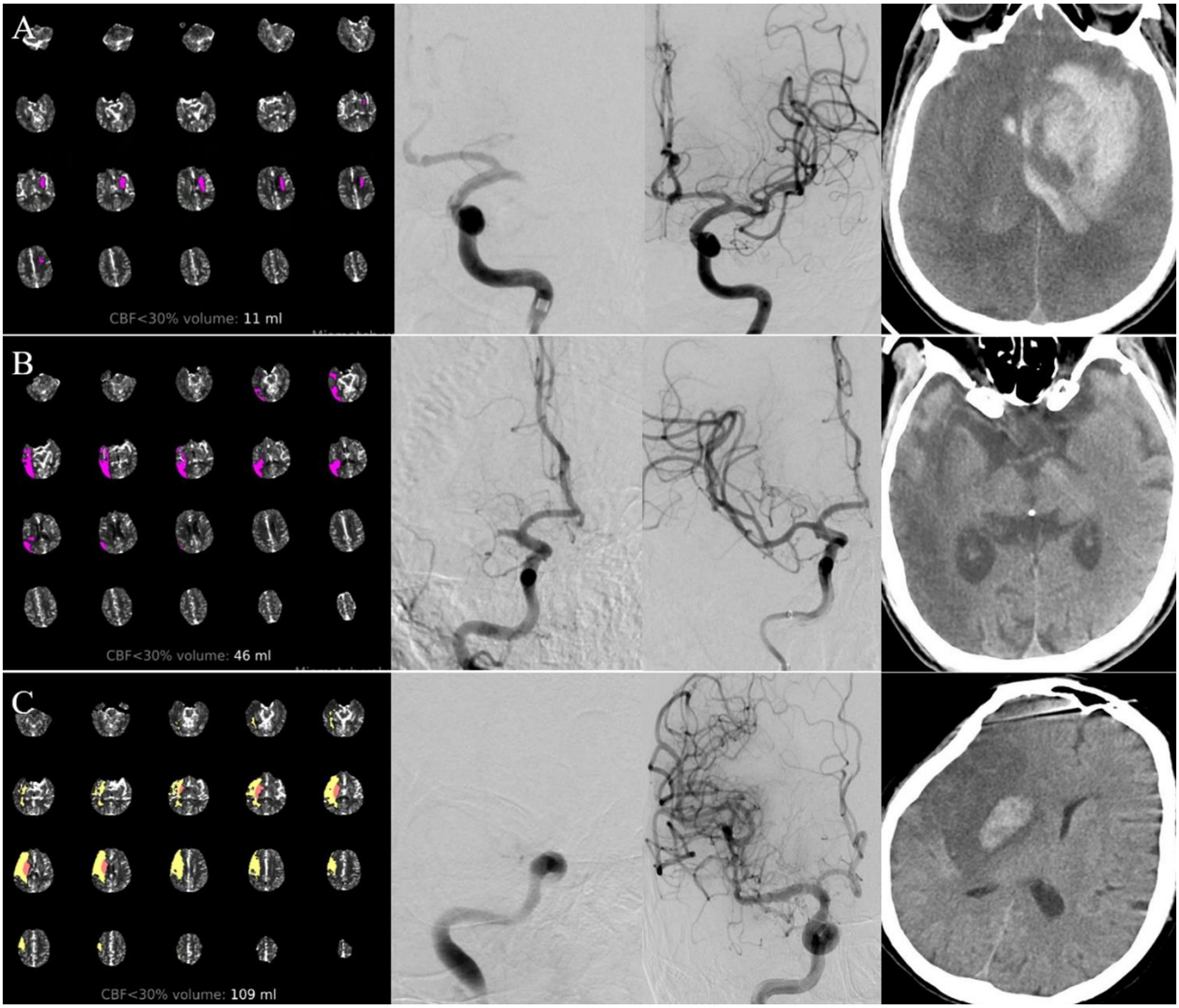
| Variable | HT (n=72) | No HT (n=74) | *P* value | sICH (n=23) | No sICH (n=123) | *P* value |
|---|---|---|---|---|---|---|
| Age (years), median (IQR) | 72 (66-80) | 70 (65-78) | 0.305 | 76 (69-80) | 71 (64-78) | 0.037 |
| Female sex, n (%) | 38 (52.3) | 33 (46.5) | 0.323 | 14 (60.9) | 57 (46.3) | 0.201 |
| Arterial hypertension, n (%) | 49 (68.1) | 50 (67.6) | 0.950 | 16 (69.6) | 83 (67.5) | 0.844 |
| Diabetes mellitus, n (%) | 21 (29.2) | 8 (10.8) | 0.005 | 9 (39.1) | 20 (16.3) | 0.012 |
| Myocardial infarction, n (%) | 9 (12.5) | 10 (13.5) | 0.856 | 3 (13.0) | 16 (13.0) | 1.000 |
| Hyperlipidemia, n (%) | 2 (2.8) | 1 (1.4) | 0.309 | 1 (4.3) | 2 (1.6) | 0.404 |
| Atrial fibrillation, n (%) | 41 (56.9) | 35 (47.3) | 0.243 | 16 (69.6) | 60 (48.8) | 0.067 |
| History of ischemic stroke, n (%) | 10 (13.9) | 10 (13.5) | 0.947 | 5 (21.7) | 15 (12.2) | 0.222 |
| Smoking, n (%) | 7 (9.7) | 10 (13.5) | 0.475 | 1 (4.3) | 16 (13.0) | 0.476 |
| PLT, median (IQR), $10^9$/L | 168 (133-206) | 178 (138-222) | 0.270 | 169 (124-195) | 171 (138-214) | 0.245 |
| SBP at admission (mm Hg), mean (SD) | 147 (21.6) | 145 (20.7) | 0.540 | 152 (24.3) | 145 (20.4) | 0.145 |
| DBP at admission (mm Hg), mean (SD) | 84 (14.4) | 81 (11.1) | 0.281 | 88 (17.5) | 83 (11.7) | 0.176 |
| Baseline NIHSS score, median (IQR) | 19 (13-23) | 16 (10-20) | 0.027 | 21 (16-26) | 16 (11-21) | 0.001 |
| Baseline ASPECTS, median (IQR) | 6 (4-7) | 7 (5-8) | 0.002 | 5 (2-6) | 7 (5-8) | < 0.001 |
| Subcortical involvement | 64 (88.9) | 28 (37.8) | < 0.001 | 20 (87.0) | 72 (58.5) | 0.010 |
| Total ICV (mL), median (IQR) | 24 (10-51) | 16 (9-39) | 0.222 | 25 (7-61) | 19 (10-38) | 0.713 |
| ICV ≥ 70 mL, n (%) | 10 (13.9) | 9 (12.2) | 0.757 | 3 (15.8) | 16 (13.0) | 0.996 |
| Cortical ICV (mL), median (IQR) | 11 (0-31) | 13 (3-31) | 0.217 | 7 (0-40) | 13 (0-30) | 0.473 |
| Subcortical ICV (mL), median (IQR) | 10 (6-20) | 0 (0-10) | < 0.001 | 11 (7-26) | 6 (0-12) | 0.002 |
| Treatment with IV alteplase, n (%) | 22 (30.6) | 23 (31.1) | 0.945 | 6 (26.1) | 39 (31.7) | 0.592 |
| Etiology, n (%) | | | 0.368 | | | 0.063 |
| Cardioembolism | 44 (61.1) | 39 (52.7) | 0.305 | 15 (65.2) | 68 (55.3) | 0.377 |
| Large artery atherosclerosis | 15 (20.8) | 23 (31.1) | 0.373 | 2 (8.7) | 36 (29.3) | 0.039 |
| Undetermined etiology or others | 13 (18.1) | 12 (16.2) | 0.768 | 6 (26.1) | 19 (15.4) | 0.214 |
| Occlusion site, n (%) | | | 0.491 | | | 0.726 |
| ICA | 25 (34.7) | 22 (29.7) | 0.519 | 9 (39.1) | 38 (30.9) | 0.438 |
| MCA | 43 (59.7) | 44 (59.5) | 0.974 | 13 (56.5) | 74 (60.1) | 0.744 |
| Tandem occlusion | 4 (5.6) | 8 (10.8) | 0.393 | 1 (4.3) | 11 (8.9) | 0.747 |
| Poor collaterals, n (%) | 55 (76.4) | 27 (36.5) | < 0.001 | 21 (91.3) | 61 (49.6) | < 0.001 |
| OTP time (min), median (IQR) | 381 (278-602) | 318 (213-513) | 0.384 | 433 (291-657) | 326 (245-510) | 0.227 |
| PTR time (min), median (IQR) | 68 (45-104) | 70 (47-99) | 0.515 | 83 (42-145) | 69 (47-100) | 0.562 |
| Passes of retriever ≥ 3, n (%) | 25 (34.7) | 13 (17.6) | 0.018 | 8 (34.8) | 30 (24.4) | 0.297 |
| Intra-arterial thrombolysis, n (%) | 2 (2.8) | 1 (1.4) | 0.617 | 1 (4.3) | 2 (1.6) | 0.404 |

HT, hemorrhagic transformation; sICH, symptomatic intracranial hemorrhage; PLT, platelet count; BP, blood pressure; NIHSS, National Institutes of Health Stroke Scale; ASPECTS, Alberta Stroke Program Early CT Score; ICV, ischemic core volume; ICA, internal carotid artery; MCA, middle cerebral artery; OTP, onset to puncture; PTR, puncture to reperfusion.

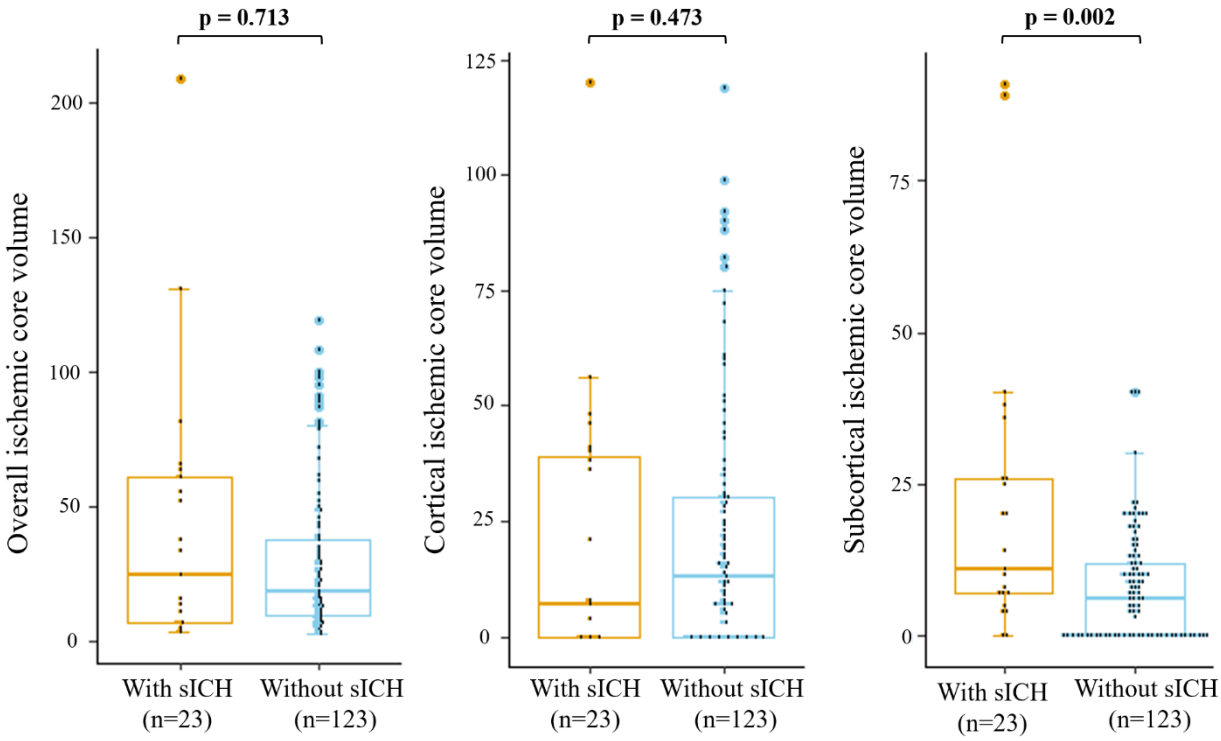
**Table 2.** Multivariate Analysis of Predictors of HT And sICH After Successful Thrombectomy.

| Variable | HT | | | | sICH | | | |
|---|---|---|---|---|---|---|---|---|
| | Unadjusted OR (95% CI) | *P* value | Adjusted OR (95% CI) | *P* value | Unadjusted OR (95% CI) | *P* value | Adjusted OR (95% CI) | *P* value |
| Age | 1.02 (0.99-1.05) | 0.272 | – | – | 1.05 (1.00-1.10) | 0.039 | 1.06 (0.99-1.12) | 0.055 |
| Female sex | 0.72 (0.38-1.34) | 0.323 | – | – | 0.56 (0.22-1.38) | 0.205 | – | – |
| Arterial hypertension | 1.02 (0.51-2.05) | 0.950 | – | – | 1.10 (0.42-2.89) | 0.844 | – | – |
| Diabetes mellitus | 3.40 (1.39-8.29) | 0.007 | 4.54 (1.26-16.28) | 0.020 | 3.31 (1.26-8.69) | 0.015 | 1.97 (0.59-6.61) | 0.272 |
| Myocardial infarction | 0.86 (0.35-2.40) | 0.914 | – | – | 1.00 (0.27-3.76) | 0.996 | – | – |
| Hyperlipidemia | 2.1 (0.19-23.52) | 0.552 | – | – | 2.75 (0.24-31.65) | 0.417 | – | – |
| Atrial fibrillation | 1.47 (0.77-2.83) | 0.244 | – | – | 2.40 (0.92-6.24) | 0.073 | 1.80 (0.49-6.64) | 0.377 |
| History of ischemic stroke | 1.03 (0.40-2.45) | 0.947 | – | – | 2.00 (0.65-6.18) | 0.229 | – | – |
| Smoking | 0.69 (0.25-1.92) | 0.477 | – | – | 0.30 (0.34-2.41) | 0.260 | – | – |
| PLT | 1.00 (0.99-1.00) | 0.151 | – | – | 1.00 (0.99-1.00) | 0.236 | – | – |
| Systolic BP at admission | 1.01 (0.99-1.02) | 0.538 | – | – | 1.02 (0.99-1.04) | 0.146 | – | – |
| Diastolic BP at admission | 1.02 (0.99-1.05) | 0.183 | – | – | 1.04 (0.99-1.08) | 0.172 | – | – |
| Baseline NIHSS score | 1.05 (1.00-1.09) | 0.043 | 1.02 (0.92-1.04) | 0.526 | 1.08 (1.02-1.14) | 0.008 | 1.03 (0.96-1.11) | 0.427 |
| Baseline ASPECTS | 0.80 (0.69-0.92) | 0.003 | 0.87 (0.71-1.07) | 0.186 | 0.69 (0.57-0.85) | < 0.001 | 0.73 (0.57-0.93) | 0.010 |
| Total ICV | 1.01 (0.99-1.02) | 0.201 | | | 1.01 (0.99-1.02) | 0.109 | | |
| Subcortical involvement | 13.14 (5.49-31.4) | < 0.001 | 8.06 (2.31-28.10) | 0.001 | 4.72 (1.33-16.74) | 0.016 | 2.53 (0.52-12.32) | 0.251 |
| Cortical ICV | 1.09 (0.98-1.01) | 0.700 | – | – | 1.00 (0.98-1.02) | 0.822 | – | – |
| Subcortical ICV | 1.13 (1.07-1.19) | < 0.001 | 1.05 (0.99-1.12) | 0.131 | 1.07 (1.03-1.11) | 0.001 | 1.05 (1.01-1.09) | 0.039 |
| Treatment with IV alteplase | 0.98 (0.48-1.97) | 0.945 | – | – | 0.76 (0.28-2.08) | 0.593 | – | – |
| Etiology (LAA vs. others) | 0.96 (0.72-1.29) | 0.794 | – | – | 0.23 (0.05-1.03) | 0.055 | 0.56 (0.09-3.46) | 0.535 |
| Poor collaterals | 5.63 (2.74-11.58) | < 0.001 | 5.49 (2.15-14.01) | < 0.001 | 10.67 (2.40-47.49) | 0.002 | 6.92 (1.47-32.73) | 0.015 |
| OTP time | 1.00 (0.99-1.00) | 0.382 | – | – | 1.00 (1.00-1.00) | 0.152 | – | – |
| PTR time | 1.00 (0.99-1.00) | 0.227 | – | – | 1.01 (0.99-1.02) | 0.183 | – | – |
| Passes of retriever >3 | 2.50 (1.16-5.39) | 0.020 | 3.46 (1.24-9.64) | 0.018 | 1.65 (0.64-4.28) | 0.300 | – | – |
| Intra-arterial thrombolysis | 2.09 (0.19-23.52) | 0.552 | – | – | 2.75 (0.24-31.65) | 0.417 | – | – |

HT, hemorrhagic transformation; sICH, symptomatic intracranial hemorrhage; PLT, platelet count; BP, blood pressure; NIHSS, National Institutes of Health Stroke Scale; ASPECTS, Alberta Stroke Program Early CT Score; ICV, ischemic core volume; LAA, Large artery atherosclerosis; OTP, onset to puncture; PTR, puncture to reperfusion.




**Online Supplemental Fig 1.** Images of Three Representative Cases. A. The ischemic core volume (CBF < 30%) determined by CTP imaging was 11 mL and the infarct was limited to the subcortical area. The patient underwent successful recanalization after endovascular thrombectomy for left middle cerebral artery occlusion. Hemorrhagic transformation with a big hematoma was found in the subcortical territories on follow-up CT imaging. B. The ischemic core volume was 46 mL, and the infarct was limited to the cortical area. The patient underwent successful recanalization after endovascular thrombectomy for right middle cerebral artery occlusion, and no hemorrhagic transformation was found on follow-up CT. The final infarction was consistent with the ischemic core on pretreatment CTP. C. The ischemic core volume was 109 mL, including the subcortical infarct volume of 15 ml (red) and cortical infarct volume (yellow) of 94 ml. The patient underwent a successful thrombectomy for internal carotid artery occlusion, and hemorrhagic transformation was observed in the subcortical area.




**Online Supplemental Fig 2.** Comparison of the CTP-Based Ischemic Core Volumes in Patients with and without Symptomatic Intracranial Hemorrhage (sICH).