

Supplement to:

Failure of Collateral Blood Flow is Associated With Infarct Growth in Ischemic Stroke

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Figure: An illustration of the distinction between normal anterograde (left middle cerebral artery) and retrograde collateral flow (right middle cerebral artery) using dynamic perfusion imaging. The collateral flow to the right hemisphere fills from the periphery indicating retrograde flow and arrives in the arterial phase (3-7.5sec in this case). There are no areas of absent opacification seen (ie grade 4). Delayed washout persists into the venous phase.

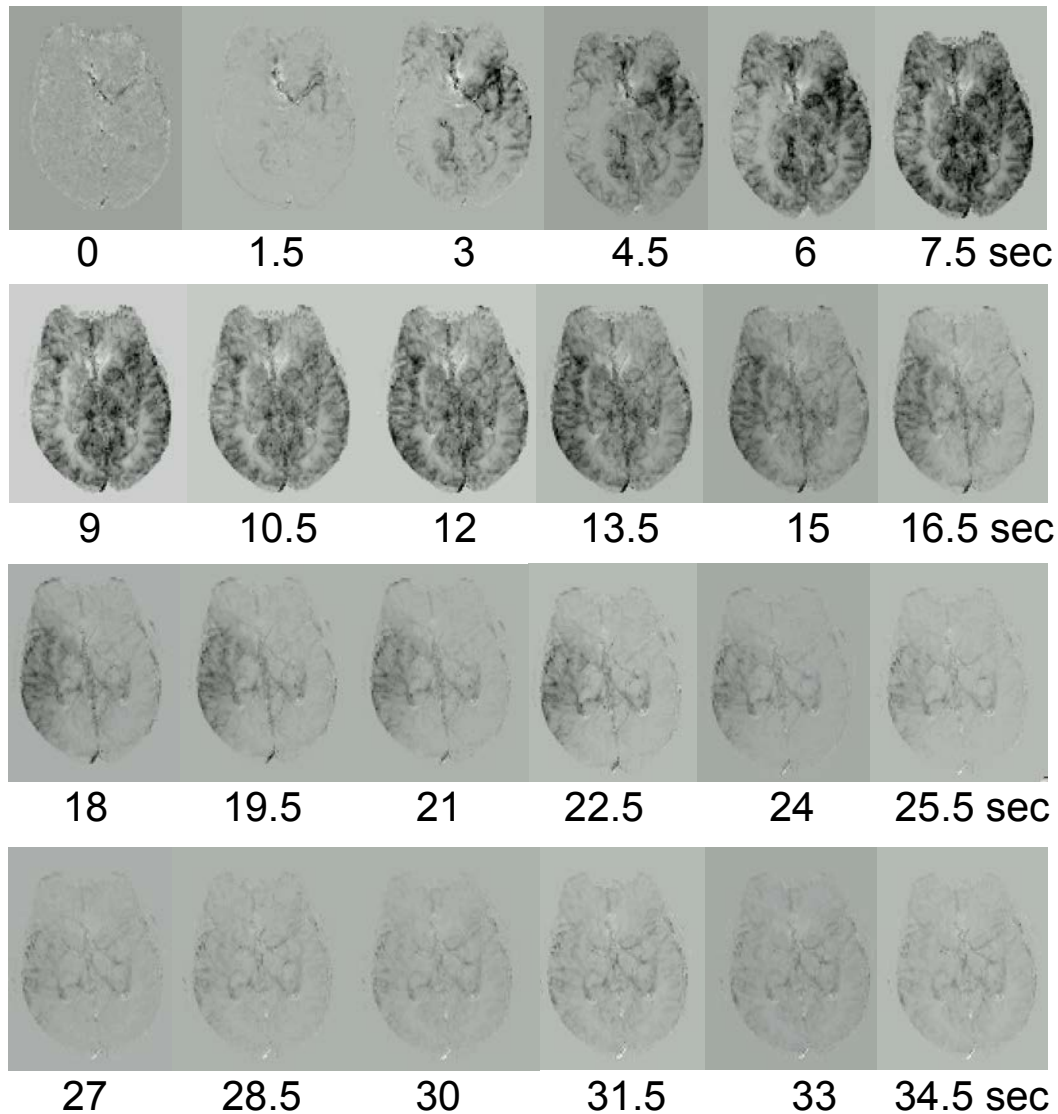


Table: Individual data for the 30 patients without reperfusion.

| case | acute collateral grade | subacute collateral grade | absolute growth | relative growth | major growth | change in median Tmax | | hypoperfusion intensity ratio | |
|------|------------------------|---------------------------|-----------------|-----------------|--------------|-----------------------|------------------|-------------------------------|-----------|
| | | | | | | within Tmax2 ROI | within Tmax6 ROI | Tmax 8:2 | Tmax 14:6 |
| 1 | 3 | 1 | 98.3 | 166 | 1 | 0.5 | 3.0 | -0.2 | 0.08 |
| 2 | 1 | 1 | 24.9 | 68 | 0 | 0 | -2.5 | 0 | -0.02 |
| 3 | 1 | 1 | 99.7 | 64 | 0 | -2.5 | -2.5 | 0.07 | -0.05 |
| 4 | 4 | 1 | 288.5 | 3104 | 1 | 12.5 | 30 | 0.55 | 0.47 |
| 5 | 3 | 3 | 65.9 | 327 | 1 | 0 | 2.5 | 0.15 | -0.03 |
| 6 | 1 | 1 | 87.7 | 45 | 0 | -5 | -2.5 | -0.19 | -0.25 |
| 7 | 3 | 1 | 96.5 | 293 | 1 | 5 | 2.5 | 0.23 | 0.25 |
| 8 | 3 | 3 | 175.6 | 801 | 1 | -1.3 | -1.0 | -0.13 | -0.04 |
| 9 | 3 | 3 | 11.6 | 209 | 0 | 0 | 11 | 0 | 0.5 |
| 10 | 3 | 2 | 61.6 | 299 | 1 | 0 | 4 | -0.03 | 0.24 |
| 11 | 3 | 2 | 65.9 | 753 | 1 | 6 | 6 | 0.21 | 0.63 |
| 12 | 2 | 1 | 138.9 | 221 | 1 | 0 | -2 | -0.09 | -0.16 |
| 13 | 3 | 3 | 11.8 | 28 | 0 | -4 | 2 | -0.19 | 0.05 |
| 14 | 3 | 3 | 101.9 | 492 | 1 | -2 | 0 | -0.19 | -0.05 |
| 15 | 3 | 3 | 11.3 | 372 | 0 | -4 | -2 | -0.3 | -0.24 |
| 16 | 1 | 1 | 89.4 | 63 | 0 | 0 | 2 | -0.04 | 0 |
| 17 | 1 | 1 | 100.4 | 218 | 0 | 2 | 0 | 0.22 | 0.13 |
| 18 | 3 | 1 | 297.4 | 3763 | 1 | 10 | 12 | 0.15 | 0.55 |
| 19 | 3 | 3 | 59.8 | 315 | 1 | -2.4 | 0.2 | -0.18 | 0.16 |
| 20 | 1 | 1 | 189.7 | 215 | 1 | 0 | 1.4 | -0.02 | 0.11 |
| 21 | 2 | 1 | 88.0 | 73 | 0 | 0 | 1 | 0.05 | 0.1 |
| 22 | 3 | 0 | 538.7 | 14815 | 1 | 8 | 8 | 0.08 | 0.44 |
| 23 | 1 | 1 | 69.9 | 40 | 0 | 1.4 | -1.4 | -0.01 | -0.05 |
| 24 | 2 | 3 | 52.7 | 187 | 0 | -4.3 | -4.3 | -0.37 | -0.44 |
| 25 | 1 | 1 | 62.8 | 42 | 0 | 2 | 4 | 0.28 | 0.21 |
| 26 | 3 | 3 | 50.3 | 161 | 0 | -4 | 0 | -0.45 | -0.13 |
| 27 | 4 | 3 | 12.6 | 358 | 0 | 0 | 0 | 0.02 | -0.01 |
| 28 | 2 | 3 | 108.7 | 285 | 1 | 0 | -3 | -0.19 | -0.19 |
| 29 | 3 | 3 | 100.4 | 959 | 1 | -3 | 0 | -0.15 | 0 |
| 30 | 1 | 2 | 108.6 | 60 | 0 | -3 | -9 | -0.3 | -0.36 |