



ON-LINE FIG. Patient 3, a 73-year-old man, with poor outcome (mRS 3) after balloon angioplasty, despite an NIHSS score of 7. CTA (A) shows severe right MCA MI stenosis (arrows). Initial DWI (B, left column) demonstrates only subtle asymmetry in signal intensity in the right corona radiata and frontal subcortical white matter, but there is prolonged MTT involving much of the right MCA territory (B, right column). DWI 24 hours after symptom onset (C) shows multiple acute infarcts in the right MCA territory (total volume, 53.9 mL). CT after 4 months (D) shows infarct extension into the initial MTT lesion (final infarct volume, 173.5 mL). E–F, Patient 5, a 60-year-old man who underwent IV-tPA and angioplasty with poor outcome (mRS 3) despite an initial MTT volume of <50 mL. Initial DWI (E, top row) shows acute anterior cerebral artery and MCA infarcts involving the left superior frontal gyrus, motor cortex, and premotor cortex (volume, 42.1 mL). Elevated MTT is seen in the motor and premotor cortices and in part of the superior frontal gyrus (E, bottom row; volume, 29.8 mL). No infarct extension is seen on follow-up NCCT 5 days after MR imaging (F; volume, 40.6 mL).

On-line Table: Patients in whom imaging or clinical thresholds falsely predicted clinical outcome

Patient	Age (yr)/ Sex	Side	NIHSS	Occlusion	DWI	MTT/Tmax	mRS	Treatment	Final Infarct Volume (Modality)	Comorbidities or Complications
NIHSS <8 did not predict good outcome										
1	70/M	R	6 ^a	MCA M1	15.3	179.8/310.6	4	IV-tPA	34.3 mL (day 3 NCCT)	Critical right ICA stenosis, angioplasty performed 10 weeks after stroke, no postoperative follow-up
2	78/M	R	3 ^a	MCA M1	25.3	110.3/105.2	4	None ^b	29.2 mL (day 90 T2)	Prostate CA, status post radiation and chemotherapy
3	73/M	R	7	MCA M2	13.6	199.0/222.9	3	Balloon angioplasty ^c	173.5 mL (day 120 NCCT)	Critical ICA stenosis
MTT < 50 mL did not predict good outcome										
4	93/F	R	16	ICA	6.1	2.35/4.91 ^a	6	IV-tPA	22.5 mL (day 38 NCCT) ^d	CHF, critical aortic stenosis, recovery complicated by <i>Clostridium difficile</i> enterocolitis, aspiration pneumonia, urinary tract infection, and sepsis leading to death 9 weeks after stroke
5	60/M	L	22	ICA	42.1	298/17.3 ^a	3	IV-tPA and angioplasty	40.6 mL (day 5 NCCT)	Recovery complicated by aspiration pneumonia, requiring tracheostomy
6	55/M	R	10	None	1.0	3.9/1.6 ^a	3	None	No follow-up	Metastatic non-small cell lung cancer
DWI > 70 mL did not predict poor outcome										
7	45/M	R	14	ICA/MCA M1	103.1 ^a	111.1/211.4	0	IV-tPA and IA recanalization (Merci)	105.0 mL (day 1 NCCT)	None
8	32/M	L	20	MCA M1	74.8 ^a	284.3/240.1	1	IV-tPA + IA recanalization (Penumbra)	73.7 mL (day 11 T2)	None
9	26/F	R	14	ICA/MCA M1	98.5 ^a	193.1/157.8	1	IV-tPA	81.7 mL (day 70 NCCT)	None

Note:—R indicates right; L, left; MERCI, Merci retriever (Concentric Medical, Mountain View, California); CA, carcinoma; CHF, congestive heart failure.

^a Criteria that produced incorrect outcome predictions.

^b Symptoms worsened after MRI was completed, but by that time, the patient was outside the treatment window for IV and/or IA therapy.

^c Balloon angioplasty was performed after significant infarct extension on follow-up MRI and was complicated by postangioplasty clot treated with eptifibatid.

^d Infarct extension into previously inconspicuous areas was found on follow-up NCCT.