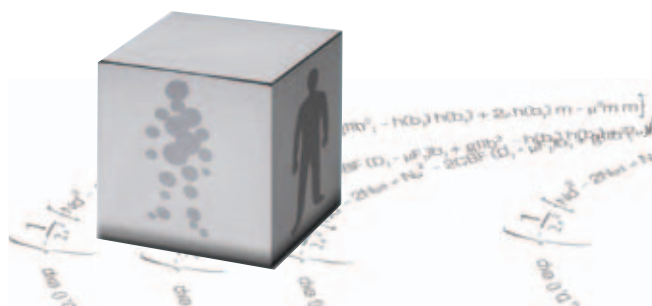


Case Report

Stroke: MCA occlusion

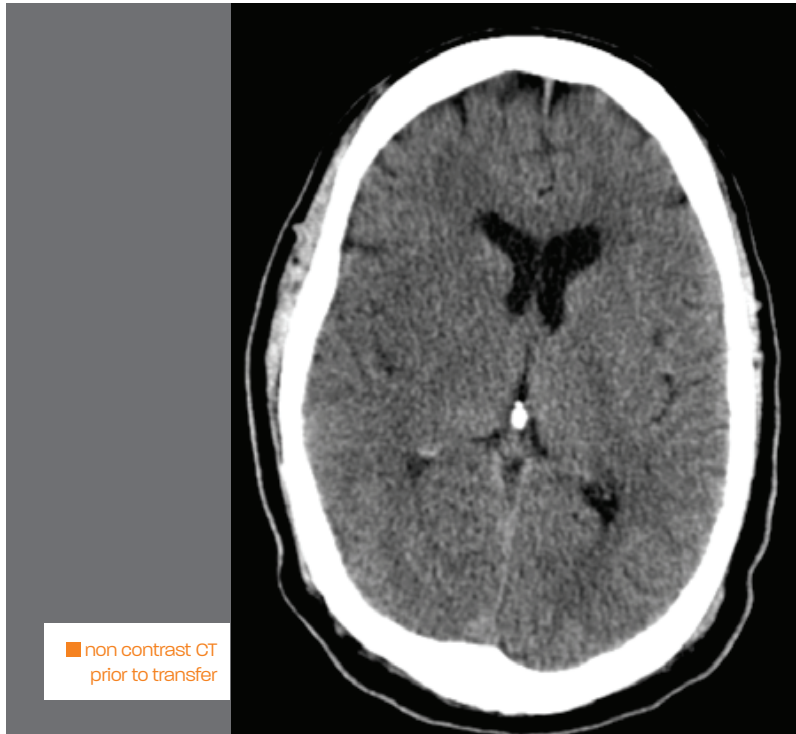


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Patient history

This patient is a 54 year old African American man with a past medical history significant for hypertension, diabetes (non compliant with medical care), renal failure (GFR 30), obesity, and hepatitis A and C who was found laying on his couch with dense left hemiparesis and dysarthria. The patient was taken to an outside hospital and received a noncontrast CT of the head prior to transfer to our hospital.

Upon presentation, the patient was noted to have a NIH stroke scale of 17 with partial gaze palsy, complete homonymous hemianopsia, left upper and lower neuron facial droop, dense left hemiparesis with no significant movement against gravity, dysarthria, and partial neglect.

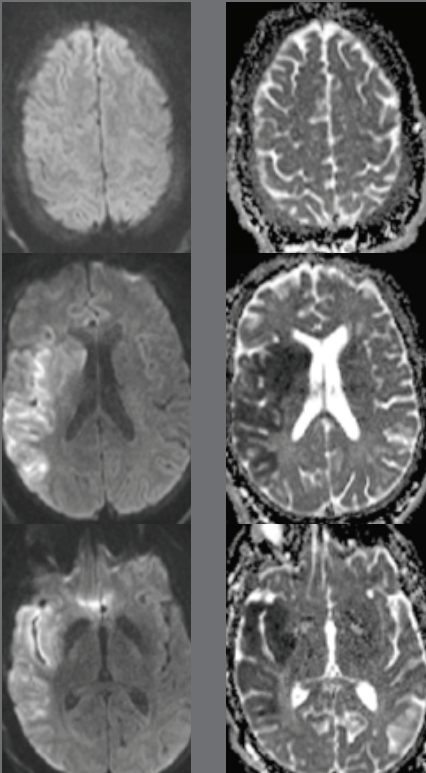


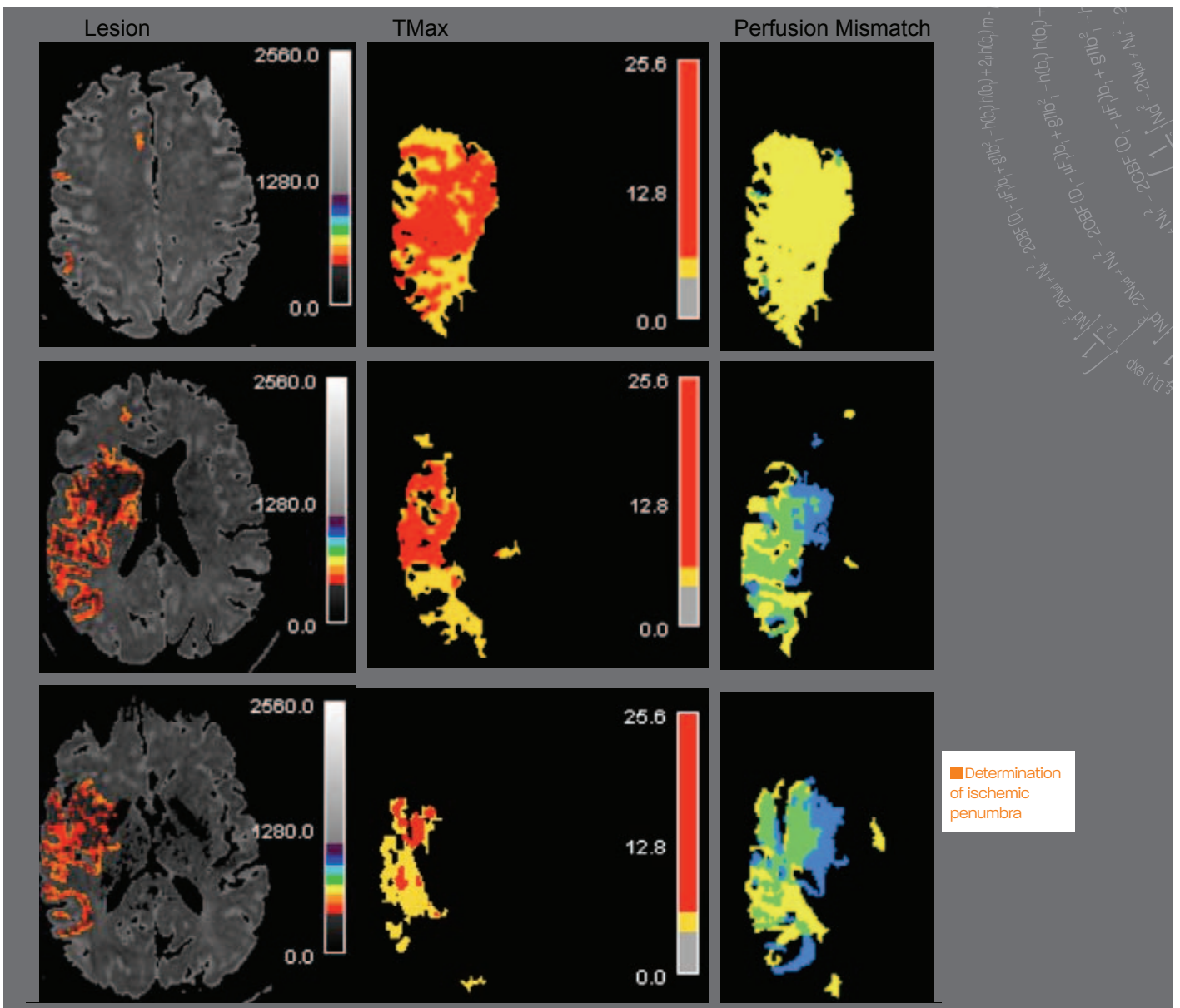
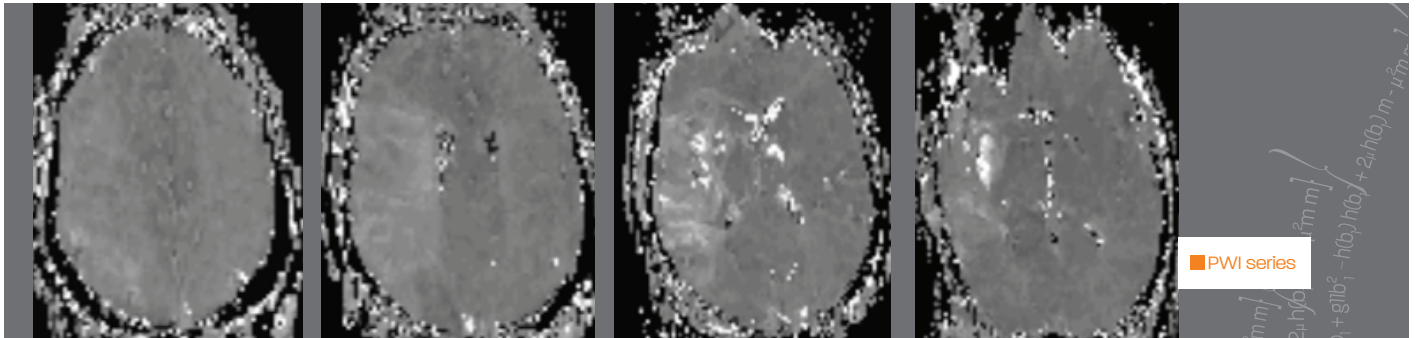
Imaging findings

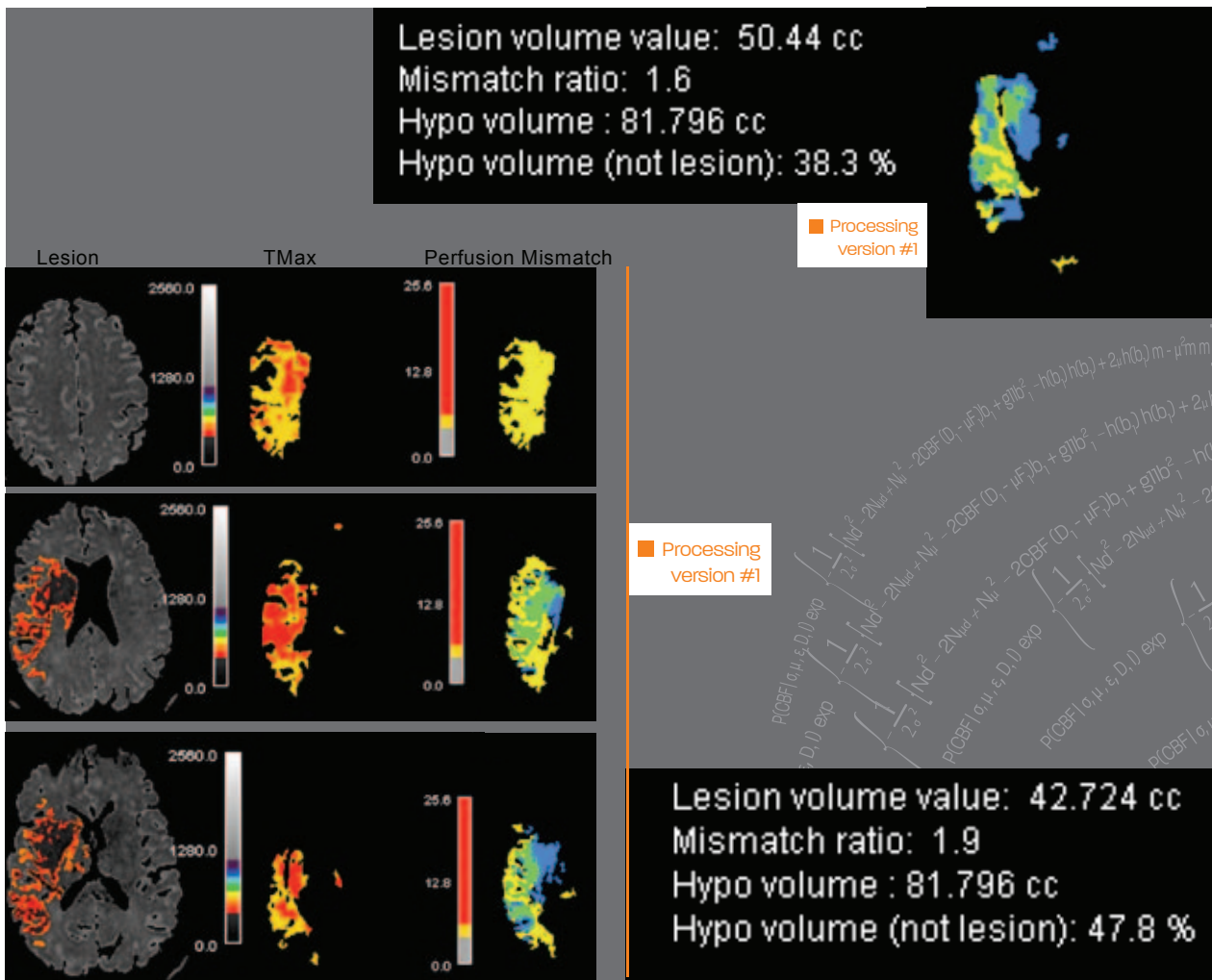
On initial inspection of the DWI sequence, there was concern about the size of the core infarct. The Olea software assisted in quickly quantifying the size of the core infarct, and the lesion definition, coupled with the delayed perfusion imaging helped to de-

termine the ischemic penumbra. These were readily interpretable in real time with the CBF, CBV, and MTT maps to provide some certainty to the results.

The Olea software helped to determine that a significant amount of brain tissue was still potentially salvageable. Therefore, in light of the size of the mismatch and despite the length of time since onset, the patient was taken for angiography and mechanical intervention with the MERCI retrieval system and the Penumbra reperfusion system 10 hours after last seen normal. daily, Metformin 850 mg po TID, and Simvastatin 40mg po daily.







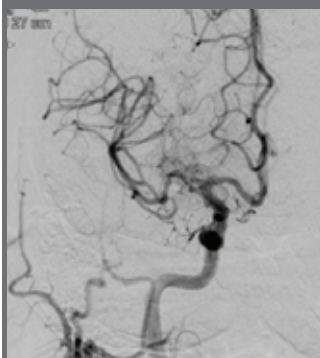
Discussion

Recanalization of the middle cerebral artery was achieved with a single focal M4 branch residual occlusion. The patient made a significant recovery during his hospitalization of 7 days and was eventually discharged to an acute rehabilitation facility with a NIH stroke scale of 5 (mild left upper extremity and lower extremity drift, mild facial droop). Discharge medications: Aspirin 81mg po daily, Celexa 10mg po daily, Glipizide 5mg po TID, Heparin 5000 units SQ q8h, Lisinopril 10mg po daily, Metformin 850 mg po TID, and Simvastatin 40mg po daily.

PRE



POST



Pre and Post MRA