temporal lobectomy for intractable epilepsy. *Neurology* 1998; 51:465–471.

14. Ho SS, Consalvo D, Gilliam F, et al. Amygdala atrophy and seizure outcome after temporal lobe epilepsy surgery. *Neurology* 1998;51:1502–1504.
15. Li LM, Cendes F, Antel SB, et al. Prognostic value of proton magnetic resonance spectroscopic imaging for surgical outcome in patients with intractable temporal lobe epilepsy and bilateral hippocampal atrophy. *Ann Neurol* 2000;47:195–200.
16. Ende GR, Laxer KD, Knowlton RC, et al. Temporal lobe epilepsy: bilateral hippocampal metabolite changes revealed at proton MR spectroscopic imaging. *Radiology* 1997;202:809–817.
17. Grigsby J, Kramer RE, Schneiders JL, Gates JR, Smith WB. Predicting outcome of anterior temporal lobectomy using simulated neural networks. *Epilepsia* 1998;39:61–66.
18. Arle JE, Perrine K, Devinsky O, Doyle WK. Neural network analysis of preoperative variables and outcome in epilepsy surgery. *J Neurosurg* 1999;90:998–1004.
19. Duda RO, Hart PE. Pattern classification and scene analysis. New York: Wiley, 1973.
20. Mitchell TM. Machine learning. Boston: WCB McGraw-Hill, 1997.
21. Engel JJ, Van Ness PC, Rasmussen TB, Ojemann LM. Outcome with respect to epileptic seizures. In: Engel JJ, ed. Surgical treatment of the epilepsies. 2nd ed. New York: Raven Press, 1993:609–621.

22. Watson C, Andermann F, Gloor P, et al. Anatomic basis of amygdaloid and hippocampal volume measurement by magnetic resonance imaging. *Neurology* 1992;42:1743–1750.
23. Roth K, Kimber BJ, Feeney J. Data shift accumulation and alternate delay accumulation techniques for overcoming the dynamic range problem. *J Magn Res* 1980;41:302–309.
24. Hand DJ. Discrimination and classification. Chichester: Wiley, 1981.
25. Webb A. Statistical pattern recognition. London: Oxford University Press, 1999.
26. Kuzniecky R, Ho SS, Martin R, et al. Temporal lobe developmental malformations and hippocampal sclerosis: epilepsy surgical outcome. *Neurology* 1999;52:479–484.
27. Kuzniecky R, Hugg J, Hetherington H, et al. Predictive value of ^1H MRSI for outcome in temporal lobectomy. *Neurology* 1999;53:694–698.
28. Jack CR Jr, Trenerry MR, Cascino GD, Sharbrough FW, So EL, O'Brien PC. Bilaterally symmetric hippocampi and surgical outcome. *Neurology* 1995;45:1353–1358.
29. Siegel AM, Wieser HG, Wichmann W, Yasargil GM. Relationships between MR-imaged total amount of tissue removed, resection scores of specific mediobasal limbic subcompartments and clinical outcome following selective amygdalohippocampectomy. *Epilepsy Res* 1990;6:56–65.
30. Wyler AR, Hermann BP, Somes G. Extent of medial temporal resection on outcome from anterior temporal lobectomy: a randomized prospective study. *Neurosurgery* 1995;37:982–991.

Figure. (A) Noncontrast axial CT performed 45 minutes after the onset of symptoms demonstrates a hyperdense right middle cerebral artery (MCA), with no evidence of intracranial hemorrhage. There was subtle asymmetry of the sylvian fissures, but no definite involvement of the right lentiform nucleus or insular ribbon (not shown). (B) Three-hour follow-up axial CT demonstrates resolution of the hyperdense right MCA.

Hyperdense MCA resolved after tPA

J.W. Tsao, MD, DPhil, A.D. Gean, MD, O.A. Glenn, MD, D.C. Bonovich, MD, San Francisco, CA

A 57-year-old male experienced sudden onset of left-sided hemianopsia, neglect, and weakness (face/arm [0/5 strength] > leg [2/5 strength]); NIH stroke scale (NIHSS) = 16. Prothrombin time/international normalized ratio was 15.2/1.8. CT scan revealed a hyperdense middle cerebral artery (HMCA) (figure, A). tPA (0.9 mg/kg) was infused at $t = 2.5$ hours. Within 30 minutes, arm/leg strength was 4/5 (NIHSS 10). Repeat CT scan demonstrated MCA

patency (see figure, B). The patient made a complete recovery.

The HMCA is a marker of intraluminal thrombus in the appropriate clinical setting.¹ When accompanied by an NIHSS > 10, outcomes are typically poor.² We believe these images represent recanalization of an occluded vessel.

1. Gacs G, Fox AJ, Barnett HJM, et al. CT visualization of intracranial arterial thromboembolism. *Stroke* 1983;14:756–762.
2. Tomsick T, Brott T, Barsan W, et al. Prognostic value of the hyperdense middle cerebral artery sign and stroke scale score before ultra-early thrombolytic therapy. *AJNR Am J Neuroradiol* 1996;17:79–85.

See also page 1470

Neurology[®]

Hyperdense MCA resolved after tPA
J. W. Tsao, A. D. Gean, O. A. Glenn, et al.
Neurology 2002;58;1512
DOI 10.1212/WNL.58.10.1512

This information is current as of May 28, 2002

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/58/10/1512.full
References	This article cites 2 articles, 1 of which you can access for free at: http://n.neurology.org/content/58/10/1512.full#ref-list-1
Citations	This article has been cited by 1 HighWire-hosted articles: http://n.neurology.org/content/58/10/1512.full##otherarticles
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Embolism http://n.neurology.org/cgi/collection/embolism Infarction http://n.neurology.org/cgi/collection/infarction MRI http://n.neurology.org/cgi/collection/mri
Permissions & Licensing	Information about reproducing this article in parts (figures,tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright . All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.