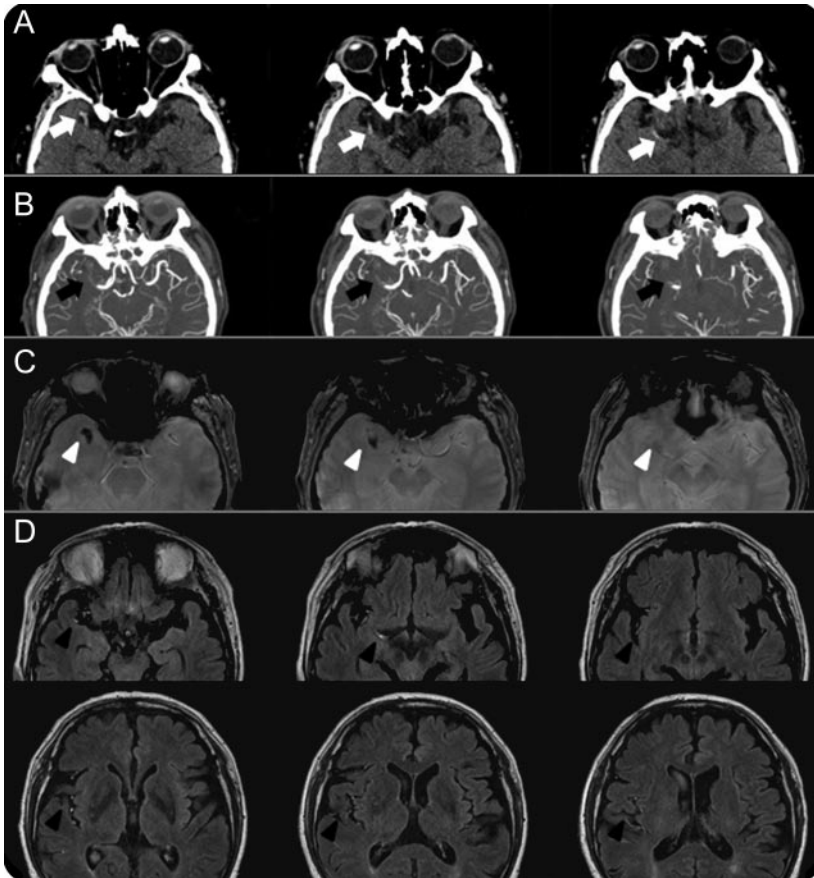


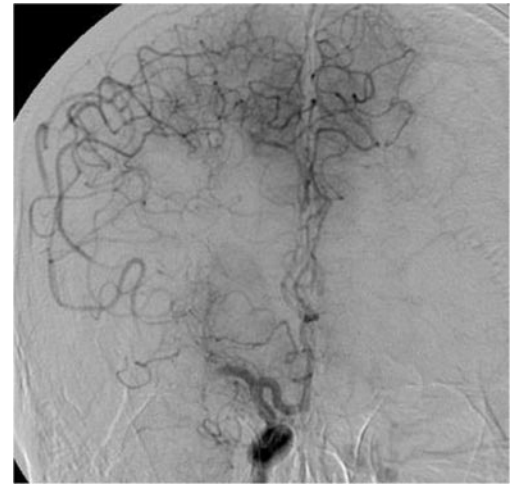
Different meaning of vessel signs in acute cerebral infarction

Figure 1 Brain CT and MR imaging



(A) Noncontrast CT shows hyperdense artery sign (arrow). (B) Contrast CT shows middle cerebral artery occlusion (arrow). (C) Gradient recalled echo MRI shows susceptibility vessel sign (arrow head). (D) Fluid-attenuated inversion recovery images show hyperintense vessels (arrow head).

Figure 2 Cerebral angiography



Angiography demonstrates occlusion of right middle cerebral artery and well-developed retrograde pial collateral flow.

A 64-year-old man presented with left-sided weakness with an initial NIH Stroke Scale score of 11. Brain CT imaging showed a hyperdense artery sign of right middle cerebral artery (MCA) occlusion (figure 1, A and B). Brain MRI showed the susceptibility vessel sign (SVS) on gradient recalled echo and hyperintense vessels (HV) on fluid-attenuated inversion recovery images (figure 1, C and D). Angiography demonstrated right MCA occlusion with well-developed pial collateral flow (figure 2). HV is not identical to hyperdense artery sign and SVS, which indicate intraluminal thrombus.¹ HV may indicate slow collateral flow, not thrombus itself.²

Jong Yun Lee, MD, Kyung-Yul Lee, MD, PhD, Sang Hyun Suh, MD, Seoul, South Korea

Disclosure: The authors report no disclosures.

Address correspondence and reprint requests to Dr. Kyung-Yul Lee, Department of Neurology, Severance Institute for Vascular and Metabolic Research, Gangnam Severance Hospital, Yonsei University College of Medicine, 712 Eonjuro, Gangnam-gu, Seoul, 135-720, Korea; kylee@yuhs.ac

REFERENCES

1. Flacke S, Urbach H, Keller E, et al. Middle cerebral artery (MCA) susceptibility sign at susceptibility-based perfusion MR imaging: clinical importance and comparison with hyperdense MCA sign at CT. *Radiology* 2000;215:476–482.
2. Lee KY, Latour LL, Luby M, Hsia AW, Merino JG, Warach S. Distal hyperintense vessels on FLAIR: an MRI marker for collateral circulation in acute stroke? *Neurology* 2009;72:1134–1139.

Neurology®

Different meaning of vessel signs in acute cerebral infarction

Jong Yun Lee, Kyung-Yul Lee and Sang Hyun Suh

Neurology 2010;75;668

DOI 10.1212/WNL.0b013e3181ed9ec0

This information is current as of August 16, 2010

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/75/7/668.full
References	This article cites 2 articles, 1 of which you can access for free at: http://n.neurology.org/content/75/7/668.full#ref-list-1
Citations	This article has been cited by 1 HighWire-hosted articles: http://n.neurology.org/content/75/7/668.full##otherarticles
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): CT http://n.neurology.org/cgi/collection/ct 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.

