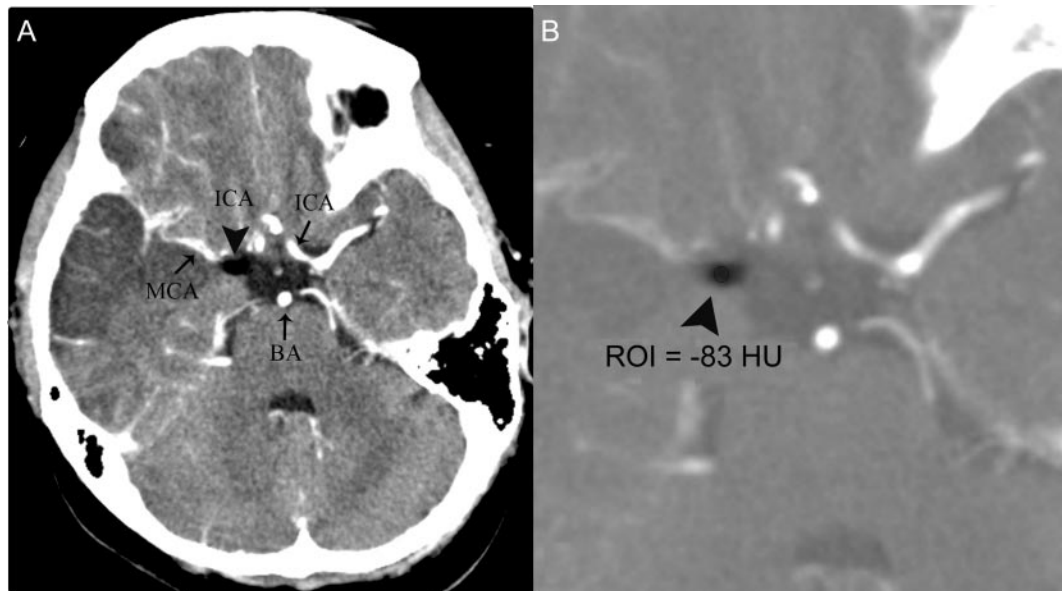


Teaching NeuroImages: Hypodense artery sign in acute cerebral infarction by contrast-enhanced CT

Yen C. Wang, MD
Jui H. Fu, MD
Ping H. Lai, MD

Address correspondence and
reprint requests to Dr. Ping H.
Lai, Faculty of National Yang-
Ming University School of
Medicine, Department of
Radiology, Veterans General
Hospital-Kaohsiung, 386 Ta-
Chung First Rd., Kaohsiung, 813,
Taiwan, ROC
phlai@isca.vghks.gov.tw

Figure CT of hypodense artery sign



(A) Postcontrast brain CT shows right middle cerebral artery territory infarction and a hypodense lesion in right internal carotid artery (ICA) (arrowhead). MCA = middle cerebral artery; BA = basilar artery. (B) A hypodense lesion (arrowhead) in right distal internal carotid artery has a Hounsfield unit of -83 , indicating a fat macroembolus instead of an air density.

An obese 52-year-old woman underwent mitral valve replacement. On the first day after the operation, she had left-sided weakness. Brain CT showed right side middle cerebral artery infarction, and a hypodense filling defect was noted in the right distal internal carotid artery (figure, A). Region of interest measurement of CT density of the hypodense lesion was -83 Hounsfield units (figure, B), indicating a macroscopic fat embolus. The patient died 2 days later. Cerebral fat macroembolism is a rare cause in thromboembolic stroke. Perioperative cerebral fat embolism of cardiac surgery can be caused by aortic cannulation during cardiopulmonary bypass, aortic clamping, median sternotomy, and dislodgement of pericardial or epicardial fat.^{1,2}

lism of cardiac surgery can be caused by aortic cannulation during cardiopulmonary bypass, aortic clamping, median sternotomy, and dislodgement of pericardial or epicardial fat.^{1,2}

REFERENCES

1. Hedberg M, Boivie P, Edstrom C, Engstrom KG. Cerebrovascular accidents after cardiac surgery: an analysis of CT scans in relation to clinical symptoms. *Scand Cardiovasc J* 2005;39:299–305.
2. Lee TC, Bartlett ES, Fox AJ, Symons SP. The hypodense artery sign. *AJNR Am J Neuroradiol* 2005;26:2027–2029.

From the Department of Radiology, Kaohsiung Veterans General Hospital, Kaohsiung; and School of Medicine, National Yang-Ming University, Taipei, Taiwan, ROC.

Supported by grants from the National Science Council (NSC-97-2314-B-075B-010-MY3) and the Veterans General Hospital-Kaohsiung (VGHKS97-56).

Disclosure: The authors report no disclosures.

Neurology[®]

Teaching *NeuroImages*: Hypodense artery sign in acute cerebral infarction by contrast-enhanced CT

Yen C. Wang, Jui H. Fu and Ping H. Lai

Neurology 2009;73:e16

DOI 10.1212/WNL.0b013e3181af78df

This information is current as of July 27, 2009

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/73/4/e16.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/73/4/e16.full#ref-list-1
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.

