Cerebral air embolism

Timea Hodics, MD, and Italo Linfante, MD, Boston, MA

A 35-year-old man developed tension pneumothorax 2 days after a right upper lobectomy with resection of an aspergiloma. During CT-guided chest tube placement, he suddenly developed decreased responsiveness, conjugate eye deviation to the right, left face, arm, and leg weakness with sensory deficit (NIH Stroke Scale [NIHSS] = 25). Head CT showed air in the right cortical middle cerebral artery (MCA) branches (figure, A). Diffusion-weighted imaging showed increased signal intensity in the cortical right MCA territory (see figure, B). Induced hypertension and hyperoxygen treatment led to gradual improvement until full recovery in 1 week (NIHSS = 0). There was no evidence of infarction on follow-up MRI examination.

Figure. (A) Head CT obtained half an hour after symptom onset demonstrates hypointensity in the cortical branches of the right middle cerebral artery (MCA) consistent with air. (B) Diffusion-weighted imaging obtained 1.5 hours after symptom onset shows increased signal intensity in the right MCA territory (arrow).
Cerebral air embolism
Timea Hodics and Italo Linfante
Neurology 2003;60;112-145
DOI 10.1212/WNL.60.1.112

This information is current as of January 14, 2003

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/60/1/112.full

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
All Cerebrovascular disease/Stroke
http://n.neurology.org/cgi/collection/all_cerebrovascular_disease_stroke
CT
http://n.neurology.org/cgi/collection/ct
Embolism
http://n.neurology.org/cgi/collection/embolism
Infarction
http://n.neurology.org/cgi/collection/infarction

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.