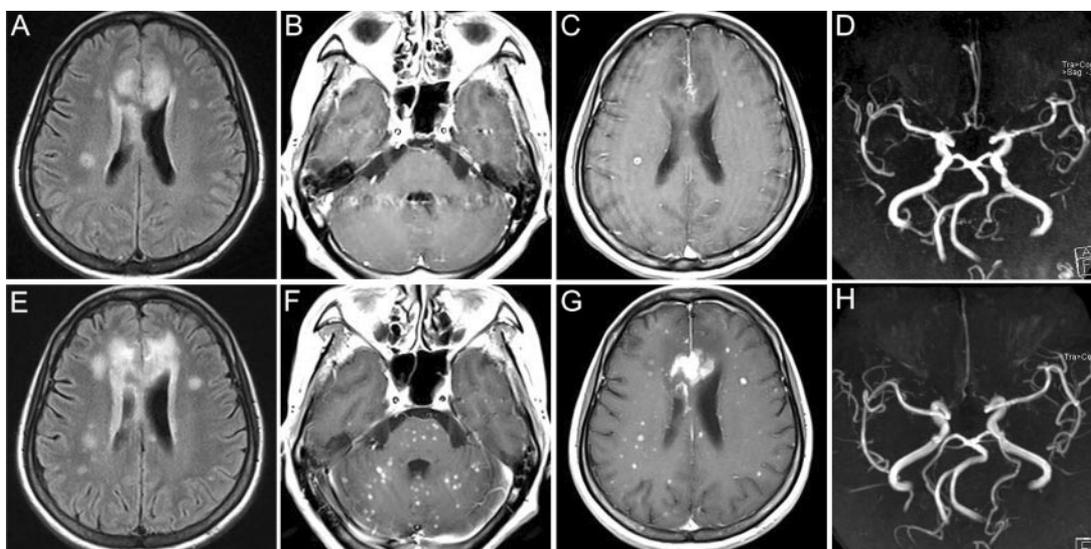


Paradoxical progression of intracranial tuberculomas and anterior cerebral artery infarction

Figure Initial and follow-up MRI examinations



Initial MRI shows acute infarction in the cingulate cortex and corpus callosum on FLAIR sequence (A) and several gadolinium-enhancing nodular lesions in the cerebellum and cerebrum (B and C). MR angiography shows mild narrowing of the proximal anterior cerebral arteries (D). Follow-up MRI performed 40 days later shows slightly increased size of infarction (E) and markedly increased number of enhancing lesions throughout the whole brain (F and G). MR angiography demonstrates severe diffuse narrowing of the anterior cerebral arteries (H).

An immunocompetent 52-year-old woman presented with subacute onset of headache, vomiting, and mental deterioration after 3 weeks' history of fever, cough, and dyspnea. Diagnostic workups confirmed pulmonary miliary tuberculosis, multiple intracranial tuberculomas, and tuberculous meningovascularitis causing cerebral infarction (figure, A–D). Treatments with antituberculous medications (oral isoniazid 300 mg/day, rifampin 450 mg/day, pyrazinamide 1,000 mg/day, IM streptomycin 750 mg/day) and IV dexamethasone (16 mg/day) were commenced. Two weeks later, she regained alertness but showed akinetic mutism and urinary incontinence. Follow-up MRI showed slightly increased size of infarction, markedly increased number of tuberculomas, and worsening of cerebral arteritis (figure, E–H).

CNS arteritis leading to cerebral infarction is the most serious complication of tuberculous meningitis. Paradoxical development or progression of intracranial tuberculomas during the course of treatment has been recognized previously.¹ Our main concern is that the serial MRI examinations of our patient showed a paradoxical progression of tuberculomas along with an aggravation of anterior cerebral artery vasculitis, despite the appropriate treatments with antituberculous medications and dexamethasone.²

Sung Ik Lee, MD, Jeong Hyun Park, MD, Ji Hyun Kim, MD, Seoul, Korea

Supported by a grant from Wonkwang University in 2008.

Disclosure: The authors report no disclosures.

Address correspondence and reprint requests to Dr. Kim, Department of Neurology, Korea University Medical Center, Korea University College of Medicine, 80 Guro-Dong, Guro-Ku, Seoul, 152-703, Republic of Korea; jbkim.merrf@gmail.com

1. Nicolls DJ, King M, Holland D, Bala J, del Rio C. Intracranial tuberculomas developing while on therapy for pulmonary tuberculosis. *Lancet Infect Dis* 2005;5:795–801.
2. Thwaites GE, Nguyen DB, Nguyen HD, et al. Dexamethasone for the treatment of tuberculous meningitis in adolescents and adults. *N Engl J Med* 2004;351:1741–1751.

Neurology[®]

Paradoxical progression of intracranial tuberculomas and anterior cerebral artery infarction

Sung Ik Lee, Jeong Hyun Park and Ji Hyun Kim

Neurology 2008;71;68

DOI 10.1212/01.wnl.0000316309.86367.3e

This information is current as of June 30, 2008

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/71/1/68.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/71/1/68.full#ref-list-1
Citations	This article has been cited by 1 HighWire-hosted articles: http://n.neurology.org/content/71/1/68.full##otherarticles
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Bacterial infections http://n.neurology.org/cgi/collection/bacterial_infections Meningitis http://n.neurology.org/cgi/collection/meningitis MRI http://n.neurology.org/cgi/collection/mri Other cerebrovascular disease/ Stroke http://n.neurology.org/cgi/collection/other_cerebrovascular_disease__stroke
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.

