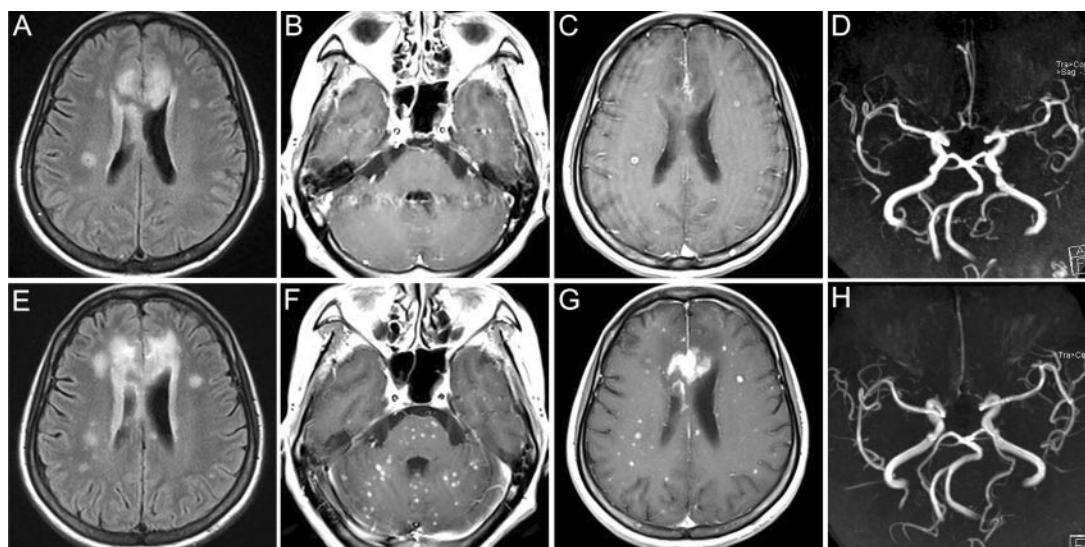


# Paradoxical progression of intracranial tuberculomas and anterior cerebral artery infarction

**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.<sup>1</sup> 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.<sup>2</sup>

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