

cion is deemed to be high (Sauerbrei, 2010). This would likely reduce morbidity and mortality in serious neonatal varicella infections which often are associated with poor outcomes. **BJHM**

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## IMAGES IN MEDICINE

## Two cases of tuberculous meningitis with stroke sequelae

**T**his article describes two patients who presented to the authors' local stroke unit with preceding tuberculous meningitis complicated with acute stroke.

The first patient was a 68-year-old Filipino woman, resident in the UK, who was unwell with disseminated tuberculosis (renal, miliary and tuberculous meningitis). She had been taking antituberculous treatment for 3 months before developing sudden right-sided weakness and dysphasia. Magnetic resonance imaging of the brain revealed bilateral basal ganglia infarcts, basal meningeal enhancement and tuberculosis-associated secondary hydrocephalus (*Figure 1*). Unfortunately, she had a complicated inpatient stay and died on the unit.

The second patient was a 69-year-old Somali man who had lived in the UK for 9 years. He had been treated for tuber-

culous meningitis with cauda equina syndrome for the last 4 months. He had a ventriculoperitoneal shunt in situ for his tuberculosis complicated by hydrocephalus. He developed sudden right-sided weakness and aphasia. Magnetic resonance imaging of the brain confirmed several small recent infarcts in the left frontoparietal lobes and in the right basal ganglia and right cerebellum with signs of basal meningitis. He was eventually discharged.

It was thought that both patients had a stroke as a result of tuberculous meningitis, given the relative paucity of vascular risk factors and the predisposition of the infarcts in the territory of the middle cerebral artery perforating vessels.

Stroke is the most serious complication of tuberculous meningitis, occurring in up to 30% of cases (Anuradha et al, 2010). Patients with tuberculous meningitis-associated hydrocephalus have increased risk of stroke and a worse prognosis (Chan et al,

2003). Other predictors of poor outcome are CSF leucocytosis and meningeal enhancement on brain imaging (Koh et al, 2007). Magnetic resonance imaging is the modality of choice in detecting brain in-farcts, typically revealing multiple or bilateral lesions in the territories of the middle cerebral artery perforating vessels (Lammie et al, 2009). Anti-tuberculous chemotherapy seems relatively ineffective in preventing vascular complications (Lammie et al, 2009). **BJHM**

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Figure 1. Diffusion weighted magnetic resonance images from the first patient, showing bilateral areas of restricted diffusion within the basal ganglia bilaterally which is consistent with acute infarcts.

