以多發性腦栓塞表現的恙蟲病:病例報告 Scrub typhus presenting as multiple brain emboli: a case report 黃宏福¹ 蔡鎮吉² 陳宜鈞³ 大林慈濟醫院 內科部¹ 感染科² 腎臟內科³

Introduction:

Scrub typhus is an acute febrile disease, caused by *Orientia tsutsugamushi*. It is characterized by focal or disseminated vasculitis, which may involve the lung, heart, liver, spleen and central nerve system. Brain emboli have not been reported as a complication of scrub typhus before. Herein, we report a case of scrub typhus presenting as multiple brain emboli

Case Report:

The 49-year-old man is a worker for digging wells in the mountain. He was admitted to our hospital for complaints of fever, headache, delirium and disorientation. Physical examination revealed a temperature of 39.3° C, pulse rate 168/min, respiratory rate 22/min, and blood pressure 105/75 mmHg. He was not noted to have any skin lesions including eschar or rash on his trunk and extremities. Laboratory investigations showed hemoglobin of 18.8 g/L and peripheral white cell count 5470/uL with 53% band neutrophils. Vancomycin and ceftriaxone were used first but his condition worsened with seizure and acute renal failure in hospitalziation. Lumbar puncture revealed no pleocytosis but increased protein concentration. Brain magnetic resonance image (T2WI and DWI) revealed multiple focal round bright spots in the periventricular and subcortical regions, compatible with multiple brain emboli. Serum IgG antibody titer against *O. tsutsugamushi*, were 1:320. The antibiotics were changed to ceftriaxone and minocycline. Fever, delirium and acute renal failure subsided gradually. He was discharged on the 45th hospital day. He had mild urine retention when examined on his follow-up visit 6 months later.

Discussion:

The clinical manifestations of scrub typhus ranged from focal to disseminated multiorgan involvement. If not treated appropriately, the case fatality rate varies from 7-15% and survival after a severe course may be accompanied by long-term neurologic and cognitive deficits In addition to aseptic meningitis and encephalitis, the present case showed that brain embolism is a possible complication of central nerve system for scrub typhus. The physicians should considered scrub typhus as a differential diagnosis when a patient presented with fever and brain embolism.