

中文題目：中樞神經結核- 一個罕見的肺外結核臨床表現

英文題目：TB Meningitis- An Unusual Presentation of Extra-pulmonary TB:  
A Case Report and Literature Review

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#### Introduction:

Meningitis, tuberculoma, and spinal arachnoiditis are three forms of CNS infection due to *Mycobacterium tuberculosis*. Here we report a case of TB meningitis with initial presentation of fever, consciousness change and status epilepticus.

#### Case Report:

The 85 y/o female has HTN and DM. She suffered from fever and consciousness disturbance and was admitted to our hospital through ER. Brain CT did not show ICH and acute ischemic stroke was impressed initially. We prescribed t-PA and no obvious complication noted. After t-PA however, she suffered from recurrent fever. We've completed septic work up and empiric antibiotics were administered. Fever persisted and status epilepticus happened. Therefore, we performed lumbar puncture. CSF data showed elevated total protein(295mg/dl), low glucose level (60mg/dl < half of that in blood, 163 mg/dl). Routine showed WBC: 117/ml and lymphocyte predominant(99%). Acid fast stain and TB PCR in CSF both showed negative. Finally, TB culture in CSF showed *Mycobacterium tuberculosis* complex. We started anti-TB treatment with steroid. Her fever subsided dramatically after treatment.

#### Discussion:

Common symptoms of TB meningitis include stiff neck, headache, fever, and vomiting. CSF study must be needed for the diagnosis, which shows elevated protein, low glucose concentration and lymphocytic predominance. The definite diagnosis is based on positive CSF smear for acid-fast bacilli, culture for *Mycobacterium tuberculosis*, or positive nucleic acid amplification test(PCR or Xpert). However, the sensitivity is doubtful and repeated CSF study is needed.

Hydrocephalus is one of the complications after TB meningitis. As our case, we performed lumbar drainage and then external ventricular drainage(EVD) due to the findings of hydrocephalus through brain CT later.

Treatment of tuberculous meningitis consists of prompt administration of antituberculous therapy, together with glucocorticoids. The antituberculous therapy in TB meningitis are similar as that in pulmonary TB, including intensive phase(4 combine) for 2 months and then continuation phase for 10 months.

Adjunctive glucocorticoid therapy should be prescribed to all patients with tuberculous meningitis and it shows mortality benefit. Dexamethasone 0.3 to 0.4 mg/kg/day IV could be considered in the first 2 weeks.

The outcome of TB meningitis is as high as 55-75%, especially in patients with advanced stage and HIV infection. As our patient, she has old age and is in coma status. We've informed poor prognosis to her family.