

中文題目：糖尿病患者伴隨結核性腦膜炎和腦積水：一病例報告

英文題目：Tuberculous meningitis complicated by Acute Hydrocephalus in Diabetes Mellitus

Patient: A case report.

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### **Background:**

Tuberculous meningitis is the most severe form of extra-pulmonary tuberculosis. The definite diagnosis of this disease is difficult and can result in delayed treatment. We report tuberculous meningitis complicated by Acute Hydrocephalus in Diabetes Mellitus Patient in a patient.

### **Case Report:**

A 52-year-old woman had past history of thalassemia. She suffered from vertigo and headache for one month. Disturbance consciousness was found in recent three days. She was brought to emergency department on September 14, 2018. WBC, 13,400 / $\mu$ L; platelet count, 421,000/ $\mu$ L; c-reactive protein, 137 mg/L; and creatinine, 0.56 mg/dL. CXR showed no active lung lesion. Brain CT, CTA, and MRI revealed basal cisternal/cerebral/interhemisphere fissural SAH or infective debris associated with mild internal hydrocephalus; progressed soft tissue lesion around left orbital medial rectus muscle and left orbital apex and left cavernous sinus; hypodense change involving the left thalamus. She was admitted to ICU. The lumbar puncture was arranged and showed high protein with low glucose level, and WBC was 80 with lymph dominate and negative gram stain. VDRL showed reactive 1:1. But anti-HIV, PRP, TPPA, cryptococcus, aspergillus, HSV-PCR, and RIF MTB Quantitative PCR showed negative. Antituberculous agents with dexamethasone were treated for suspected tuberculous meningitis. Acute confused and hydrocephalus was noted. Neurosurgeon was consulted and surgical intervention with external ventricular drainage was performed on September 14. Diabetes mellitus was new diagnosis. Sino-orbital necrotizing infection and right maxillary sinusitis were noted. Probable mucormycosis and Otolaryngologist was consulted. Sinus endoscopic surgery was arranged. Biopsy showed negative funding. Brain MRI was repeated. Neurological status was improved after therapy. She was transferred to RCC for weaning trial.

### **Conclusion:**

Hydrocephalus occurs in 85% of patients with tuberculous meningitis. External ventricular drainage is first-line treatment for relieving increased intracranial pressure. The diagnosis of tuberculous meningitis should combine clinical manifestations, CSF examination and the effect of anti-TB therapy. Differential diagnosis and trial anti-TB therapy may be of help for diagnosis. Positive CSF smear, CSF culture and biopsy of the brain, or biopsy of meninges are golden standards for the diagnosis of tuberculous meningitis. Early diagnosis and treatment are very important for improving the outcome.