Third nerve palsy due to compression by interpeduncular cistern tuberculoma

Diing Sheng Wong^{1,2}, Annuar Zaki Azmi³, Ainal Adlin Naffi², Sheena Mary Alexander¹, Mohamad Israk Mohamad Isa³

¹Department Of Ophthalmology, Queen Elizabeth Hospital, Kota Kinabalu, Sabah, Malaysia, ²Department of Ophthalmology, Faculty of Medicine, Universiti Kebangsaan Malaysia, Wilayah Persekutuan Kuala Lumpur, Malaysia, ³Department Of Ophthalmology, Hospital Wanita dan Kanak-Kanak Sabah, Kota Kinabalu, Sabah, Malaysia

ABSTRACT

Central nervous system (CNS) disease resulting from Mycobacterium tuberculosis is a rare but profoundly destructive manifestation of tuberculosis. CNS tuberculosis constitutes 5-10% of all tuberculosis cases and is associated with high mortality and significant neurological morbidity. In children, CNS tuberculosis commonly presents as tubercular meningitis, post-tubercular meningitis hydrocephalus, and, more rarely, as space-occupying lesions called tuberculomas. A 10-year-old boy with underlying tuberculosis meningitis on day 54 intensive phase of anti-tuberculosis treatment with adjunctive dexamethasone. He presented with a left side headache for 2 days associated with left eyelid drooping and mild blurring of vision. Otherwise, no dizziness, nausea and vomiting. Visual acuity of the right eye (RE) was 6/9 and the left eye (LE) was 6/12 with reverse relative afferent pupillary defect negative. LE ptosis with aperture opening of 2mm covering pupillary axis and frontalis overaction was observed. The patient had all gaze diplopia and left eye limited extraocular movement in all gazes except left lateral movement. Normal optic nerve function with anisocoria of RE 3mm and LE 5mm were noted. Anterior and posterior segment findings were unremarkable. Otherwise, there was no nystagmus and the patient had normal gait. Magnetic resonance imaging revealed interpeduncular cistern tuberculoma ($0.9 \times 1.2 \times 1.2 \text{ cm}$) with mass effect and compression on the left oculomotor nerve. Intracranial paediatric tuberculoma is a rare presentation of CNS tuberculosis. Thorough systemic and ocular examination is needed to evaluate the patient's condition and immediate imaging to look for life threatening space occupying lesion.