Midbrain tuberculoma presenting as partial ptosis

Sanjeev Kumar, Rakesh Shukla

Department of Neurology, King George's Medical University, Lucknow, Uttar Pradesh, India

Correspondence to
Professor Rakesh Shukla, rakeshshukla_rakesh@rediffmail.com

Accepted 28 October 2014

DESCRIPTION

A 14-year-old boy presented with mild headache of 20 days duration and three episodes of vomiting over the past 3 days. On clinical evaluation, he had grade I papilloedema along with bilateral partial ptosis (figure 1). Extraocular movements, pupils and the rest of the neurological examination were normal. MRI of the brain showed a thick-walled ring-enhancing lesion with perilesional gross oedema causing obstructive hydrocephalus due to the obstruction of the aqueduct sylvius (figure 2). A magnetisation transfer (MT) image showed brighter than T1-weighted (T1W) contrast image, which favoured the diagnosis of tuberculoma. The patient showed improvement on antituberculous and dexamethasone therapy.

Isolated oculomotor nuclear involvement is an uncommon phenomenon. Isolated bilateral ptosis is a rare presentation, because it is usually associated with superior rectus palsy. The subnucleus of the superior rectus and levator palpebrae superioris lie in proximity. Therefore, ptosis due to nuclear lesion is usually associated with upgaze palsy. Isolated bilateral ptosis with sparing of the extraocular muscles and pupils has been described due to mesencephalic lesions.[1] Isolated bilateral ptosis without hemiplaegia has also been reported in midbrain haemorrhage.[2] Cellular components of lesions show hyperintensity on T1W MT images, which further enhance on contrast.[3]

Learning points

- Isolated bilateral ptosis is due to a midbrain lesion.
- A magnetisation transfer image is helpful in diagnosing ring-enhancing lesions.

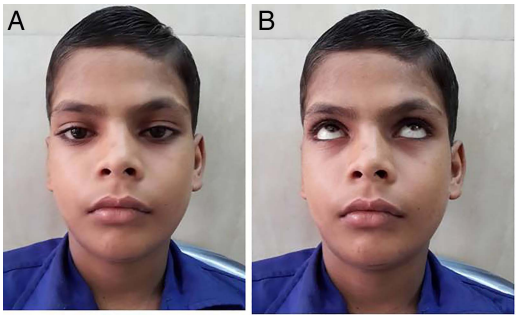

Figure 1 (A) Bilateral symmetrical partial ptosis and (B) normal upgaze.

Contributors RS provided the idea, gave guidance and edited the manuscript. SK prepared the manuscript and searched the literature regarding the case.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

1 Martin TJ, Corbett JJ, Babikian PV, *et al*. Bilateral ptosis due to mesencephalic lesions with relative preservation of ocular motility. *J Neuroophthalmol* 1996;16:258–63.
2 Chang DB, Lin YY, Guo WY, *et al*. Midbrain hemorrhage presenting as bilateral ptosis without hemiplegia: a case report. *Zhonghua Yi Xue Za Zhi (Taipei)* 1995;55:185–8.
3 Trivedi R, Saksena S, Gupta RK. Magnetic resonance imaging in central nervous system tuberculosis. *Indian J Radiol Imaging* 2009;19:256–65.

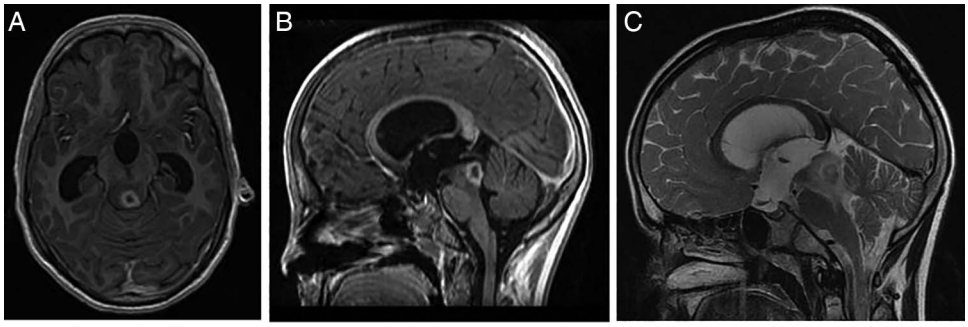

Figure 2 MRI of the brain. (A) T1-weighted (T1W) contrast image showing dorsal midbrain ring-enhancing tuberculoma. (B) T1W magnetisation transfer image with more enhancement compared with T1W contrast image. (C) T2W sagittal image showing perilesional gross oedema causing obstructive hydrocephalus due to the obstruction of the aqueduct sylvius.

To cite: Kumar S, Shukla R. *BMJ Case Rep* Published online: [*please include* Day Month Year] doi:10.1136/bcr-2014-207686