

# 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.<sup>1</sup> Isolated bilateral ptosis without hemiplegia has also been reported in midbrain haemorrhage.<sup>2</sup> Cellular components of lesions show hyperintensity on T1W MT images, which further enhance on contrast.<sup>3</sup>

## Learning points

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

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

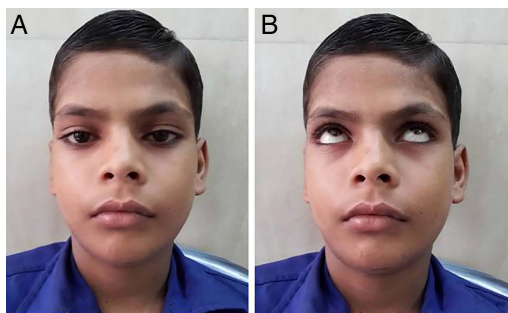
**Competing interests** None.

**Patient consent** Obtained.

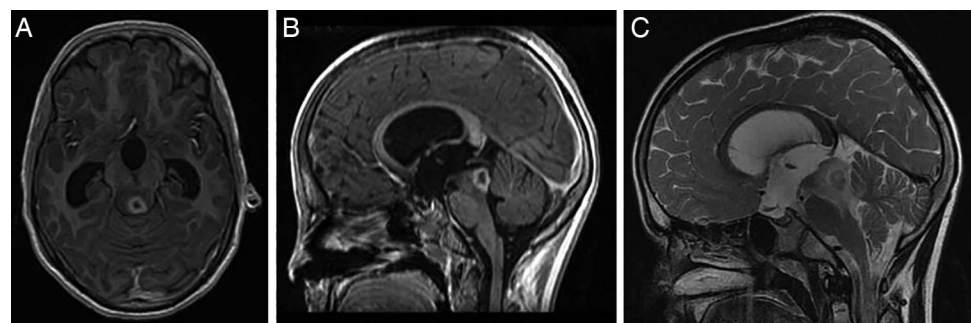
**Provenance and peer review** Not commissioned; externally peer reviewed.

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



**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

Copyright 2014 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <http://group.bmj.com/group/rights-licensing/permissions>.  
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ▶ Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ▶ Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact [consortiasales@bmjgroup.com](mailto:consortiasales@bmjgroup.com)

Visit [casereports.bmj.com](http://casereports.bmj.com) for more articles like this and to become a Fellow