PHOTO ESSAY

The Eye Opener: Finding and Targeting the Midbrain Lesion

Aditya Choudhary, Rajveer Singh, Manoj Goyal, and Manish Modi

Department of Neurology, Post Graduate Institute of Medical Education and Research, Chandigarh, India

ABSTRACT

Lesions of the central nucleus of the third cranial nerve in midbrain leads to bilateral ptosis. We present a case of a 14 year old boy, who was found to have B/L non-correctable ptosis and medial rectus palsy. There was a ring enhancing lesion in the midbrain in contrast MRI which resolved with treatment. The case exemplifies that bilateral ptosis results from the central nucleus involvement of third nerve which has bilateral innervation.

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A 14-year-old boy, hailing from a village in Northern India, presented to the neurology outpatient with 10 day history of bilateral ptosis. On interrogation, there was no diurnal variation in the symptoms and he also complained of diplopia on lateral gaze bilaterally. Examination of the eye movements revealed bilateral non-correctable ptosis and bilateral medial rectus palsy (right > left). (Figure 1). Rest of the neurological examination was unrevealing. He was investigated with a contrast enhanced MRI which showed a ring enhancing lesion in the midbrain. When serum ELISA for neurocysticercal antigen was done, it turned out to be positive. He was given a 14 day course

of oral steroids with albendazole to which he responded. His ptosis resolved and the ring enhancing lesion cleared from his MR imaging at 1 month of follow up.(Figure 2). Bilateral ptosis results from the central nucleus involvement of the oculomotor nerve which has bilateral innervation. Isolated brainstem involvement in NCC is very infrequent.^{1,2} Neurocysticercal brainstem involvement usually occurs in disseminated neurocysticercosis.

Declaration of interest

The authors declare that there are no conflicts of interest. The authors alone are responsible for the writing and content of the article.

Figure 1. Clinical examination revealing B/L ptosis and medial rectus palsy. Contrast MRI Brain shows a ring enhancing lesion.

CONTACT Manish Modi modim72@yahoo.com Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh 160012, India.

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Figure 2. Clinical examination shows resolved ptosis and medial rectus palsy. Ring enhancing lesion on the contrast MRI has also resolved.

Notes on contributors

Aditya Choudhary: Drafting the article, analysis of the data; manuscript preparation.

Rajveer Singh: Drafting the article, analysis of the data; manuscript preparation.

Manoj Goyal: Drafting the article and revising its intellectual content, manuscript preparation.

Manish Modi: Revising the intellectual content, analysis or interpretation of the data.

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