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When to Image in Idiopathic Intracranial Hypertension

Sir,

We read with great interest the article titled "Imaging and interventions in idiopathic intracranial hypertension: A pictorial essay" by Sivasankar *et al*.[1] This article describes in detail, the clinical features, imaging findings, and treatment strategies of idiopathic intracranial hypertension (IIH).

We would like to present an interesting observation we made with regards to IIH and to discuss its relevance.

A 23-year-old male with a history of severe episodic headache underwent magnetic resonance imaging (MRI) of the brain twice in our centre with an interval of 2 days. The first MRI of the brain was unremarkable, apart from hypoplastic transverse sinuses. The optic nerves and pituitary gland were normal in appearance with the pituitary gland maintaining a slight upward convexity [Figure 1].

The second MRI, performed when the patient was experiencing severe headache, showed the classical findings

Figure 1 (A and B): Magnetic resonance imaging done during asymptomatic period. (A) Axial T2-weighted image showing normal optic nerves (arrows). (B) Sagittal T1-weighted image showing normal pituitary gland with upward convexity (arrow)

of IIH including partial empty sella, markedly tortuous optic nerves, distended perioptic nerve cerebrospinal fluid space and flattening of optic disk [Figure 2].[2]

The above mentioned observation suggests that, in a suspected case of IIH, imaging may give false negative results during the symptom free interval. If the initial MRI is normal, relevant MRI sequences (thin high-resolution three-dimensional T2-weighted sequences such as FIESTA in GE and 3D CISS in Siemens) may be repeated when the patient is experiencing typical symptoms.

Any comments on the observations we made would be highly welcome.

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Conflicts of interest
There are no conflicts of interest.

Arockia Rajasekhar, Prasad T Veedu

Department of Radio-diagnosis, Shanthi Social Services, Coimbatore, Tamil Nadu, India
E-mail: drprasadtv@gmail.com

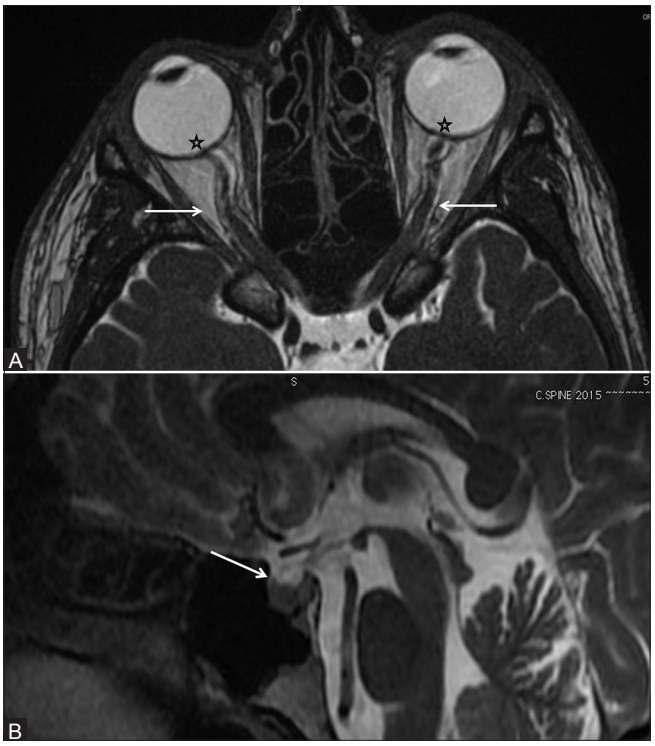

Figure 2 (A and B): Magnetic resonance imaging (MRI) done during an episode of severe headache, 2 days after the first MRI. (A) Axial thin T2-weighted image showing tortuous optic nerves (arrow) with distended perioptic cerebrospinal fluid spaces and flattened optic disks (asteriks). (B) Sagittal T2-weighted image showing upward concavity of pituitary gland (arrow)

References

1. Sivasankar R, Pant R, Indrajit IK, Negi RS, Sahu S, Hashim PI, *et al*. Imaging and interventions in idiopathic intracranial hypertension: A pictorial essay. Indian J Radiol Imaging 2015;25:439-44.
2. Degnan AJ, Levy LM. Pseudotumor cerebri: Brief review of clinical syndrome and imaging findings. AJNR Am J Neuroradiol 2011;32:1986-93.

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