

Teaching NeuroImages: Face of the giant panda and her cub MRI correlates of Wilson disease

Shivakumar R. MD
Sanjeev V. Thomas, MD

Address correspondence and reprint requests to Dr. Shivakumar R, Resident, Department of Neurology, Sree Chitra Tirunal Institute of Medical Science and Technology, Trivandrum, India 695011
drshivakumar1995@yahoo.co.in

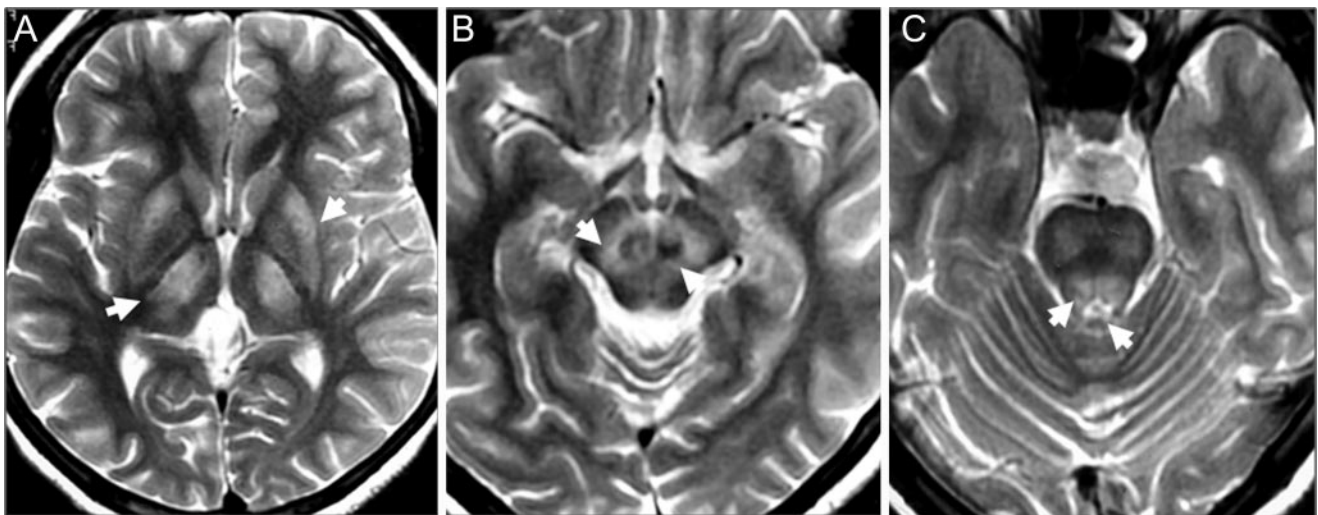
A 16-year-old girl presented with abnormal behavior and involuntary movements. Neurologic examination demonstrated Kayser-Fleischer rings, chorea, and dystonia. Serum ceruloplasmin and urine copper studies confirmed the diagnosis of Wilson disease. Brain MRI showed bilateral T2 hyperintensity involving putamen, thalami, and brainstem¹ (figure, A). The midbrain “panda sign” (figure, B) is due to high signal in the tegmentum, normal signals in the red nuclei and lateral portion of the pars reticulata of the substantia nigra, and

hypointensity of the superior colliculus. Dorsal pontine signal abnormalities resemble the face of a panda cub² (figure, C).

REFERENCES

1. Hitoshi S, Iwata M, Yoshikawa K. Mid-brain pathology of Wilson’s disease: MRI analysis of three cases. *J Neurol Neurosurg Psychiatry* 1991;54:624–626.
2. Jacobs DA, Markowitz CE, Liebeskind DS, Galetta SL. The double panda sign in Wilson’s disease. *Neurology* 2003;61:969.

Figure Brain MRI



T2-weighted axial MRI demonstrates (A) symmetric hyperintense signals in the putamen, posterior internal capsule, and thalami (arrows), (B) “face of the giant panda” in midbrain with high signal in tegmentum and normal red nuclei (arrows), and (C) “face of the panda cub” in pons with hypointensity of central tegmental tracts with hyperintensity of aqueductal opening to fourth ventricle (arrows).

From Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, Kerala, India.

Disclosure: The authors report no disclosures.

Neurology[®]

Teaching *NeuroImages*: Face of the giant panda and her cub: MRI correlates of Wilson disease

R. Shivakumar and Sanjeev V. Thomas
Neurology 2009;72;e50
DOI 10.1212/01.wnl.0000344409.73717.a1

This information is current as of March 16, 2009

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/72/11/e50.full
References	This article cites 2 articles, 2 of which you can access for free at: http://n.neurology.org/content/72/11/e50.full#ref-list-1
Citations	This article has been cited by 2 HighWire-hosted articles: http://n.neurology.org/content/72/11/e50.full##otherarticles
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Imaging http://n.neurology.org/cgi/collection/all_imaging Basal ganglia http://n.neurology.org/cgi/collection/basal_ganglia Chorea http://n.neurology.org/cgi/collection/chorea MRI http://n.neurology.org/cgi/collection/mri
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright . All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

