Teaching *NeuroImages*: Cerebral white matter involvement in a patient with Vogt-Koyanagi-Harada syndrome

Sadullah Keles, MD
Hayri Ogul, MD
Lokman Can Pinar, MD
Mecit Kantarci, MD,
PhD

Correspondence to
Dr. Ogul:
drhogul@gmail.com

Figure 1 Ophthalmologic image

Fundus photography (A, B) reveals exudative retinal detachment of the macula in both eyes on presentation. Fundus fluorescein angiography (C, D) shows subretinal fluorescein pooling. Optical coherence tomography displays exudative macular detachment in both eyes (E, F). It also shows reduction of subretinal fluid after corticosteroid therapy in both eyes (G, H).

A 27-year-old man presented with decreased vision bilaterally. Ophthalmologic examination revealed panuveitis with bilateral serous retinal detachments (figure 1) characteristic of Vogt-Koyanagi-Harada (VKH) syndrome. Analysis of CSF revealed mild pleocytosis. No oligoclonal bands were detected. On MRI, there was bilateral abnormal thickening of the choroid with retinal detachment (figure 2, A and B), with hyperintense lesion on fluid-attenuated inversion recovery (FLAIR) image in the periventricular

deep white matter (figure 2C). VKH syndrome is one of the causes of uveo-meningeal syndromes. Differential diagnosis of VKH syndrome includes Wegener granulomatosis, sarcoidosis, and Behçet disease.¹ The main disorders showing association with hyperintense plaques on deep white matter FLAIR images are inflammatory, metabolic, vascular, degenerative, autoimmune, and demyelinating diseases. MRI is a helpful tool in diagnosing VKH syndrome; in addition to the typical bilateral ocular findings, scattered

Download teaching slides:
www.neurology.org

From the Department of Ophthalmology (S.K., L.C.P.), Faculty of Medicine, Ataturk University, Erzurum; and Department of Radiology (H.O., M.C.), Medical Faculty, Ataturk University, Erzurum, Turkey.

Go to Neurology.org for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

Figure 2 Orbital and brain MRI

Axial T1-weighted MRI (A, B) demonstrates symmetric choroidal thickening with retinal detachment (arrows). Axial fluid-attenuated inversion recovery MRI shows hyperintense lesion in the periventricular left parietal deep white matter (C).

periventricular white matter lesions on FLAIR are also described.²

AUTHOR CONTRIBUTIONS

Dr. Sadullah Keles: study concept and design and acquisition of data. Dr. Hayri Ogul: analysis and interpretation. Dr. Lokman Can Pinar: acquisition of data. Dr. Mecit Kantarci: critical revision of the manuscript for important intellectual content.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

REFERENCES

1. Brazis PW, Stewart M, Lee AG. The uveo-meningeal syndromes. *Neurologist* 2004;10:171–184.
2. Lohman BD, Gustafson CA, McKinney AM, Sarikaya B, Silbert SC. MR imaging of Vogt-Koyanagi-Harada syndrome with leptomeningeal enhancement. *AJNR Am J Neuroradiol* 2011;32:E169–E171.

Neurology®

Teaching *NeuroImages*: Cerebral white matter involvement in a patient with Vogt-Koyanagi-Harada syndrome

Sadullah Keles, Hayri Ogul, Lokman Can Pinar, et al.

Neurology 2013;81:e85-e86

DOI 10.1212/WNL.0b013e3182a43b01

This information is current as of September 9, 2013

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/81/11/e85.full
Supplementary Material	Supplementary material can be found at: http://n.neurology.org/content/suppl/2013/09/08/81.11.e85.DC1
References	This article cites 2 articles, 1 of which you can access for free at: http://n.neurology.org/content/81/11/e85.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Demyelinating disease (CNS) http://n.neurology.org/cgi/collection/all_demyelinating_disease_cns All Headache http://n.neurology.org/cgi/collection/all_headache MRI http://n.neurology.org/cgi/collection/mri Retina http://n.neurology.org/cgi/collection/retina Visual loss http://n.neurology.org/cgi/collection/visual_loss
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 © 2013 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.