



[PICTURES IN CLINICAL MEDICINE]

Bilateral Optic Nerve Edema in Central-variant Posterior Reversible Encephalopathy Syndrome

Hideki Doi, Hiroaki Yokote, Toshiki Uchihara and Shuta Toru

Key words: posterior encephalopathy syndrome, optic nerve edema, central-variant PRES, MRI, visual disturbance

(Intern Med 59: 2333-2334, 2020) (DOI: 10.2169/internalmedicine.4919-20)





A 73-year-old man with subacute hydronephrosis due to metastasis of the colorectal cancer presented with suddenonset visual disturbance. An examination revealed macular edema and hypertensive retinopathy with severe hypertension. The visual acuity was at the 'counting fingers' level. Brain magnetic resonance imaging showed diffuse T2prolonged lesions in the brainstem and spotty lesions in the cerebellum, with elevated apparent diffusion coefficient values (Picture 1). In addition, short T1 inversion recovery images revealed hyperintensity in the optic nerves (Picture 2). After continuous administration of nicardipine under the diagnosis of central-variant posterior reversible encephalopathy syndrome (PRES), the visual acuity as well as the imaging abnormalities were rapidly improved (Picture 3), suggesting that vasogenic edema had been present not only in the brainstem and cerebellum but also in the optic nerves. Al-

Department of Neurology, Nitobe Memorial Nakano General Hospital, Japan Received: March 23, 2020; Accepted: April 13, 2020; Advance Publication by J-STAGE: June 2, 2020 Correspondence to Dr. Hiroaki Yokote, yktenuro@gmail.com



Picture 2.





though optic nerve involvement in patients with PRES has only been rarely reported (1, 2), patients with central-variant PRES can have optic nerve edema that may be associated with severe visual disturbance.

The authors state that they have no Conflict of Interest (COI).

References

1. Fugate J, Rabinstein A. Posterior reversible encephalopathy syn-

by-nc-nd/4.0/).

rology 62: 1417-1419, 2004.

drome: clinical and radiological manifestations, pathophysiology,

pertensive encephalopathy: clinical and radiological findings. Neu-

The Internal Medicine is an Open Access journal distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (https://creativecommons.org/licenses/

and outstanding questions. Lancet Neurol **14**: 914-295, 2015. **2.** Cruz-Flores S, Gondim F, Leira C. Brainstem involvement in hy-

© 2020 The Japanese Society of Internal Medicine Intern Med 59: 2333-2334, 2020