[LETTERS TO THE EDITOR]

Could the Possibility of Secondary Central Nervous System Lymphoma be Ruled Out in This Patient?

Key words: central nervous system, choroid plexus, lymphoma, periventricular dissemination

(Intern Med Advance Publication)
(DOI: 10.2169/internalmedicine.7060-21)

To the Editor I read with interest the article by Hirato et al. describing a patient with “intraventricular primary central nervous system lymphoma mimicking ventriculitis” (1). I would like to know whether or not the possibility of secondary central nervous system lymphoma was able to be ruled out in this patient, as the article does not mention the findings of truncal contrast-enhanced computed tomography (CT) or gastrointestinal endoscopy.

Tumor cells may enter the brain through the choroid plexus (2), which consists of, from the inner side, many capillaries, loose connective tissue, and choroidal epithelium. Like the renal glomeruli, the capillaries have fenestrated endothelium through which solutes can pass (3). This is one possible reason why the choroid plexus serves as the portal of entry into the cerebrospinal fluid for hematogenously disseminated pathogens. We previously reported two patients with systemic lymphoma presenting with periventricular dissemination (4, 5). The brain MRI abnormalities of these patients resemble those of the patient reported by Hirato et al. In our patients (4, 5), the lymphoma cells were thought to

enter the periventricular parenchyma through the choroid plexus. Was the possibility of secondary central nervous system lymphoma ruled out in the patient reported by Hirato et al.?

The author states that he has no Conflict of Interest (COI).

Zen Kobayashi

References

1. Hirato T, Komatsu K, Nishida N, Matsumoto S. Intraventricular Primary Central Nervous System Lymphoma Mimicking Ventriculitis. .
2. Johanson C, Stopa E, McMillan P, Roth D, Funk J, Krinke G. The distributional nexus of choroid plexus to cerebrospinal fluid, ependyma and brain: toxicologic/pathologic phenomena, periventricular destabilization, and lesion spread. *Toxicol Pathol* **39**: 186-212, 2011.
3. Levine S. Choroid plexus: target for systemic disease and pathway to the brain. *Lab Invest* **56**: 231-233, 1987.
4. Kobayashi Z, Tsuchiya K, Machida A, et al. Metastatic CNS lymphoma presenting with periventricular dissemination - MRI and neuropathological findings in an autopsy case. *J Neurol Sci* **277**: 109-113, 2009.
5. Suzuki M, Kobayashi Z, Ito T, Akaza M, Tomimitsu, Shintani S. Lymphoma presenting with choroid plexus infiltration and periventricular dissemination. *J Neurol Sci* **353**: 179-180, 2015.

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/by-nc-nd/4.0/>).