Teaching NeuroImages: Reversible splenial cytotoxic edema in acute mountain sickness

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A previously healthy 36-year-old woman developed a generalized tonic seizure. She had been in Tibet for 6 days at an altitude of 4,000 m and experienced mild symptoms of acute mountain sickness (AMS). The day after she came down, she developed a seizure. MRI showed cytotoxic edema in the splenium (figure), which disappeared 1 month later. High altitude cerebral edema is believed to be related mainly to vasogenic edema; however, there has been no report on MRI of AMS with cytotoxic edema. A recent study has reported MRI evidence of cytotoxic cerebral edema in AMS, which is concordant with our patient.

(A) Fluid-attenuated inversion recovery and (B) diffusion-weighted images reveal a lesion with high signal intensity in the splenium, and (C) an apparent diffusion coefficient map image shows restricted diffusion. (D–F) Follow-up MRI scans conducted 1 month later show resolution of the lesion.

AUTHOR CONTRIBUTIONS
Dr. Bin: drafting/revising the manuscript. Dr. Lee: drafting/revising the manuscript.

REFERENCES
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with NPH will exhibit low verbal fluency, but gives a more specific example of category fluency. The number of animals named in a minute is an example of category fluency that would be a specific subset of verbal fluency. It is unclear whether all verbal fluency or only category fluency will be affected. Studies have revealed that whereas letter fluency is more often decreased in patients with frontal lobe dysfunction, a reduction in category fluency is more commonly associated with temporoparietal dysfunction. In many degenerative conditions, depending on the disease, letter and category fluency may be affected differently. Thus, patients with AD often show a relatively greater impairment in category fluency; however, since NPH is often associated with frontal-subcortical dysfunction, the letter fluency test may be a better screening test for hydrocephalus than category fluency.


CORRECTION
Teaching NeuroImages: Reversible splenial cytotoxic edema in acute mountain sickness
In the article “Reversible splenial cytotoxic edema in acute mountain sickness” by Chang Hun Bin and Se-Jin Lee (Neurology® 2011;77:e94), there is an error in the figure legend. The legend should begin: "(A) Diffusion-weighted images and (B) fluid-attenuated inversion recovery reveal ….” The authors regret the error.