The Reversible Corpus Callosum Splenium Lesion Associated With Hypoglycemic Encephalopathy

The Neurohospitalist
3(3) 169
© The Author(s) 2013
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1941874413476044
nhos.sagepub.com

Amer M. Malik, MD, MBA¹

Keywords

splenium of corpus callosum, encephalopathy, hypoglycemia

Figure 1. A, Magnetic resonance imaging diffusion-weighted imaging (MRI DWI) showing diffusion restriction in splenium of corpus callosum (arrow) when patient was known to be hypoglycemic and exhibiting neurological symptoms. B, The MRI DWI showing resolution of diffusion restriction in splenium of corpus callosum after the patient's hypoglycemia was treated and the neurological symptoms were resolved.

Images Clinical History

A 53-year-old male awoke with bilateral upper and lower extremity ataxia, optical apraxia, and binocular visual disturbance described as images jumping off the TV screen, and

mild encephalopathy. He presented to the emergency department, where blood glucose levels ranged from 32 to 51 mg/dL. Magnetic resonance imaging (MRI) of the brain showed diffusion-weighted imaging (DWI) restriction in the splenium of the corpus callosum with apparent diffusion coefficient (ADC) correlates when the glucose level was 46 mg/dL. He was admitted and started on D5NS intravenous drip until blood glucose levels normalized and stabilized. Repeat MRI of the brain 36 hours later showed resolution of the DWI lesion (Figure 1). It is important to consider hypoglycemia in the differential diagnosis of reversible splenium of corpus callosum lesions.¹

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

References

1. Kim JH, Choi JY, Koh SB, Lee Y. Reversible splenial abnormality in hypoglycemic encephalopathy. *Neuroradiology*. 2007; 49(3):217-222.

¹ Swedish Neuroscience Institute, Swedish Medical Center, Seattle, WA, USA

Corresponding Author:

Amer M. Malik, Swedish Neuroscience Institute, 550 17th Avenue, James Tower, Suite 500, Seattle, WA 98122, USA.
Email: amermalik78@gmail.com