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Letter to the Editor

Before Diagnosing Postpartum Extrapontine Myelinolysis due to Hypernatriemia, All Differential Diagnoses must be Ruled Out

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Letter to the Editor

We read with interest the article by Rathore *et al*. about a 19-year-old woman who developed spastic tetraparesis, drowsiness, and restlessness two weeks after an uncomplicated delivery, which were attributed to extrapontine myelinolysis [1]. The study is interesting, but some points deserve discussion.

The first point is that we disagree with the diagnosis of extrapontine myelinolysis [1]. Multimodal MRI in pontine/extrapontine myelinolysis typically shows hyperintensity on T2/FLAIR, DWI, hypointensity on T1, isointense signal on ADC, and usually no contrast enhancement [2]. However, Figure 1 of the index study does not show hyperintensity on T2/FLAIR (panels b-d) [1]. In addition, the periventricular DWI hyperintense lesions are hypointense on ADC, suggesting an ischemic lesion. Another argument against myelinolysis is that the sodium level was only slightly elevated.

The second point is that neither the results of cerebral angiography nor those of venography were reported [1]. In order to rule out a vascular cause of the imaging findings, it is essential to also report vascular information. Since the D-dimer was significantly elevated, venous sinus thrombosis must be ruled out.

The third point is that no cerebrospinal fluid examination was performed on the patient to rule out immunological or infectious encephalitis. There is also no explanation for the elevated C-reactive protein level, increased erythrocyte sedimentation rate, and leucocytosis [1].

The fourth point is that no results from EEG recordings were reported. To rule out an unobserved seizure, it would have been useful to record an EEG. The patient had a creatine kinase level of 2975 U/L [1]. Was this due to a generalized seizure, ischemic stroke, myocardial infarction, or rhabdomyolysis?

Finally, no reference ranges were provided, making it difficult to assess what is normal and what is abnormal. In addition, no parameters for thyroid function were provided.

In summary, postpartum extrapontine myelinolysis should be diagnosed if the imaging findings are consistent with the diagnosis and if all differential causes for the clinical picture, laboratory abnormalities, and imaging findings have been thoroughly ruled out.

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