Cyclosporine-related posterior reversible encephalopathy syndrome after cord blood stem cell transplantation

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A 17-year-old girl with chronic myeloid leukemia that transformed to acute myeloid leukemia was referred to our department to undergo umbilical cord blood stem cell transplantation. Conditioning consisted of fludarabine, cyclophosphamide and total body irradiation. Graft-versus-host disease prophylaxis consisted of cyclosporine by continuous infusion. Twenty-three days after transplantation she presented with headache and blindness without alteration in mental status. Cyclosporinemia was higher than the therapeutic range. Cerebral magnetic resonance imaging showed a wide signal intensity abnormality involving the fronto-parietal and occipital cortex as well as the subcortical white matter (Figure 1). Cyclosporine was immediately replaced by mycophenolate mofetil. Headache and visual disturbance were resolved within five hours. Posterior reversible encephalopathy syndrome is an uncommon entity characterized by headache, seizures, visual disturbance and altered mental function associated with reversible white matter edema affecting the posterior parietal and occipital lobes of the brain. Its etiologies include hypertension, cytotoxic medications like cyclosporine, sepsis, preeclampsia and multiple organ dysfunction.[1]

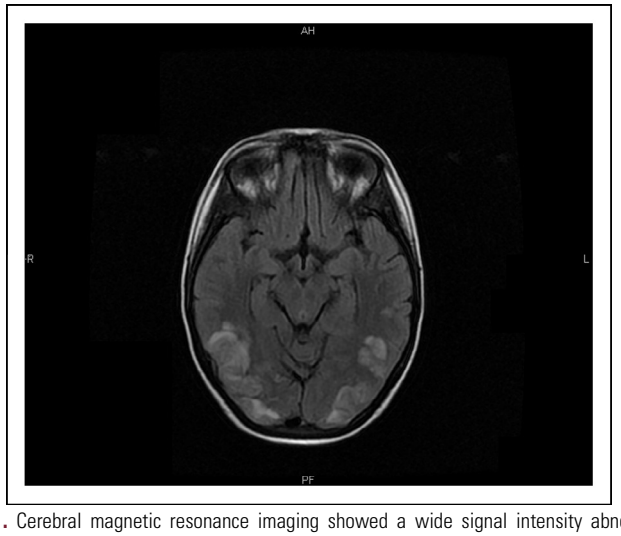

Figure 1. Cerebral magnetic resonance imaging showed a wide signal intensity abnormality involving the fronto-parietal and occipital cortex as well as the subcortical white matter.

CONFLICT OF INTEREST

The authors declared no conflict of interest.

REFERENCE

1. Fugate JE, Claassen DO, Cloft HJ, Kallmes DF, Kozak OS, Rabinstein AA. Posterior reversible encephalopathy syndrome: associated clinical and radiologic findings. Mayo Clin Proc 2010;85:427–32.