

Posterior Reversible Encephalopathy Syndrome

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A 15-year-old boy undergoing chemotherapy for acute lymphoblastic leukemia presented with new-onset headaches and visual disturbances. Clinical evaluation revealed moderate hypertension, and no focal neurologic deficits were identified. Magnetic resonance imaging demonstrated bilateral regions of cortical and subcortical signal abnormality predominantly within the occipital (image A) and posterior parietal (image B) lobes, consistent with posterior reversible encephalopathy syndrome. After successful treatment for hypertension, the patient's symptoms completely resolved.

In posterior reversible encephalopathy syndrome, autoregulation of the intracerebral perfusion is thought to be hindered during a hypertensive episode, resulting in vasogenic edema.¹ Owing to a relative decrease in sympathetic innervation, the posterior circulation (posterior temporal, parietal, and occipital lobes) is most often affected.¹⁻³ Common causes include preeclampsia or eclampsia,

renal failure, autoimmune disorders, and chemotherapeutic drug toxicities. Patients frequently present with headache, nausea and vomiting, visual disturbances, or seizures.³ Symptoms and imaging findings typically resolve after management of the hypertensive episode. However, complications, including superimposed infarct, necessitate early detection and treatment. (doi:10.7556/jaoa.2015.082)

References

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