

Seizures and loss of vision in a patient with systemic lupus erythematosus

ABSTRACT

Posterior reversible encephalopathy syndrome (PRES) is a rare neurological condition identifiable by clinical presentation and MRI appearance.¹ Patients present with headache, seizures, loss of vision and altered mental function.¹ The pathogenesis of the syndrome is poorly understood. One hypothesis is that cerebral vasospasm results in cerebral ischaemia and subsequent development of T2 hyperintensity, and the other is a temporary failure of the autoregulatory capabilities of the cerebral vessels, leading to hyperperfusion, breakdown of the blood-brain barrier, and consequent vasogenic oedema. It is believed that a rapid rise in blood pressure overcomes cerebral autoregulatory mechanisms with abrupt dilatation of cerebral arterioles.^{2,3} We report a patient with systemic lupus erythematosus and PRES after recurrent spontaneous abortion.

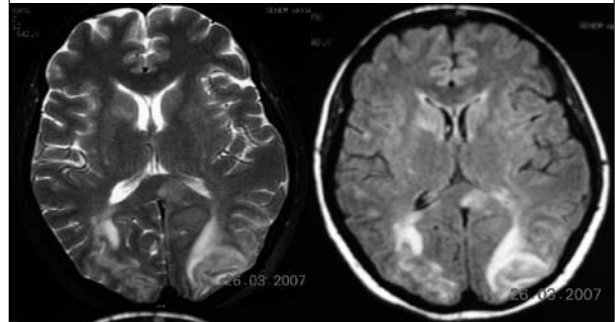
CASE REPORT

A 31-year-old woman who was 15 weeks' pregnant was admitted to our ICU with respiratory failure after her 14th recurrent abortion. Steroid therapy had been initiated previously for suspected immunological syndrome. Arterial pressure was 186/112 mmHg and esmolol infusion was initiated. She had oliguric renal failure. On the second day, the diagnosis of disseminated intravascular coagulation was made, and plasmapheresis was carried out every day for six days. On the third day, a haemodialysis programme was initiated. Based on the immunological laboratory tests, the diagnosis of systemic lupus erythematosus and antiphospholipid antibody syndrome was made. On the 11th day she began to complain of headache and loss of vision and she developed generalised tonic-clonic seizures. MRI revealed high-intensity signals in bilateral occipitoparietal regions (figure 1) compatible with PRES. Epanutin 100 mg three times a day orally was started to control the seizures. MRI, performed ten days later, showed a complete resolution of the lesions. She was discharged without any complications.

CONCLUSION

PRES has usually been described in association with hypertensive encephalopathy, eclampsia, renal failure,

Figure 1. High-intensity signals in bilateral occipito-frontoparietal regions, predominantly involving the white matter



or following immunosuppressive or cytotoxic therapy; associations with connective tissue diseases, thrombotic thrombocytopenic purpura, porphyria, and organ transplantation are rarely seen.⁴ Treatment consists of lowering the mean arterial blood pressure to <125 mmHg and anticonvulsant therapy in addition to other supportive measures. Early diagnosis and treatment is essential because irreversible neurological deficits or death may occur. Efforts need to be aimed at educating patients and health care workers to report symptoms early since a prompt diagnosis and treatment may result in complete resolution.

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REFERENCES

1. Kur JK, Esdaile JM. Posterior reversible encephalopathy syndrome an underrecognized manifestation of systemic lupus erythematosus. *J Rheumatol* 2006;33:2178-83.
2. Port JD, Beauchamp NJ. Reversible intracerebral pathologic entities mediated by vascular autoregulatory dysfunction. *Radiographics* 1998;18:353-67.
3. Ay H, Buonanno F, Schaefer P, et al. Posterior leukoencephalopathy without severe hypertension. Utility of diffusion-weighted MRI. *Neurology* 1998;51:369-76.
4. Hinchey J, Chaves C, Appignani B, et al. A reversible posterior leukoencephalopathy syndrome. *N Engl J Med* 1996;334:494-500.