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Authors: Zheng Chen, Gui-Quan Shen, Alexander Lerner, Bo Gao

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Immune System Activation in the Pathogenesis of Posterior Reversible Encephalopathy Syndrome

Zheng Chen[a], Gui-Quan Shen[a], Alexander Lerner[b], Bo Gao MD[c]

[a]The Affiliated Hospital of Guizhou Medical University, Guiyang 550004, Guizhou, China

[b]Division of Neuroradiology, Department of Radiology, Keck School of Medicine, University of Southern California, Los Angeles CA 90033, Uinted States

[c]Department of Radiology, Yantai Yuhuangding Hospital, Yantai 264000, Shandong, China

Corresponding author: Bo Gao, Department of Radiology, Yantai Yuhuangding Hospital, Yantai 264000, Shandong, China. E-mail: gygb2004@163.com

Highlights

- The pathogenesis of PRES is incompletely understood, and still controversial.
- Most PRES-related conditions result in a systemic toxicity response process.
- In this process the cells of immune system and cytokines act on all systems of the organism.
- These conditions induce T cell activation, cytokine release, and subsequent leukocyte adhesion.
- Immune system activation and endothelial dysfunction may represent critical steps in the mechanism of the pathogenesis of PRES.

Abstract

Posterior reversible encephalopathy syndrome (PRES) is a clinical-radiological syndrome characterized by a variable combination of headaches, seizures, altered mental status, visual impairment, focal neurological signs and symmetric vasogenic edema in bilateral posterior cerebral circulation territory. The pathogenesis of PRES is still controversial. Most of the clinical conditions