

POSTER 55

ATYPICAL PRESENTATION OF POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME IN A PATIENT WITH SEPSIS

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Reversible Posterior Encephalopathy Syndrome (PRES) is characterized by confusion, drowsiness, vomiting, seizure and visual loss. This neurologic syndrome was first described in 1996. Almost half of those patients had undergone bone marrow or solid organ transplant, and were under treatment with Cyclosporin or Tacrolimus.

During the past decade its association with other co-morbidities including hypertensive encephalopathy, pre-eclampsia/eclampsia, autoimmune diseases, post-streptococcal glomerulonephritis and Henoch-Schonlein has been shown.

A 64 year old female with septic shock admitted to ICU. 24 hours after transferring to the floor, she had sudden decline in her mental status and developed a seizure. Her mental status was back to the baseline by the following morning. A follow up MRI at 5 weeks demonstrated a complete resolution of the abnormal MRI findings.

In 2006, for the first time the occurrence of PRES in the setting of infection/sepsis/ shock, was described. This study interestingly demonstrated greater edema on brain MRI in normotensive patients. In 40% of patient with PRES due to infection/sepsis/ shock and overall in 25% of all patients, blood pressure is within normal range.

Hypertension with failed autoregulation and resulting hyperperfusion remains a popular presumed pathophysiology although, the presence of mild hypertension or the absence of hypertension especially in patients with infection/sepsis/shock raises another theory which assumes endothelial injury/vasoconstriction as the primary insult.

This syndrome has unique radiologic appearance of bilateral white matter vasogenic edema, predominantly in parietal/occipital and temporal/occipital lobes. It may rarely occur in superior frontal lobe and cerebellar hemispheres like in this case.