A Case of Transient Cortical Blindness in Posterior Reversible Encephalopathy Syndrome in the Late Postpartum Period

By Dr. Krishna. K. Nair, Dr. Jayanthi. R & Dr. Sahitya Meda

Introduction- Posterior reversible encephalopathy syndrome (PRES) is a reversible neurological entity characterized by seizure, headaches, visual symptoms, impaired consciousness and other focal neurological findings.

It is caused by a wide variety of causes ultimately leading to vasogenic cerebral oedema of occipital and parietal lobes of the brain.

The pathophysiology is failure of cerebral autoregulation and endothelial dysfunction.

GJMR-E Classification: NLMC Code: QS 675
A Case of Transient Cortical Blindness in Posterior Reversible Encephalopathy Syndrome in the Late Postpartum Period

Dr. Krishna. K. Nair *, Dr. Jayanthi. R ° & Dr. Sahitya Meda °

I. INTRODUCTION

Posterior reversible encephalopathy syndrome (PRES) is a reversible neurological entity characterized by seizure, headaches, visual symptoms, impaired consciousness and other focal neurological findings.

It is caused by a wide variety of causes ultimately leading to vasogenic cerebral oedema of occipital and parietal lobes of the brain.

The pathophysiology is failure of cerebral autoregulation and endothelial dysfunction.

II. CASE PRESENTATION

A 33 years old women, Para-2, Live-2, post elective LSCS on POD 10, with no prior co-morbidities, presented with the history of abrupt onset of blurring of vision since last 5 hours, which was progressive and developed transient loss of vision within 2 hours from the onset of the symptoms.

It was associated with deviation of angle of mouth to the right side and mild headache. No h/o loss of consciousness, seizure episode, vomiting, weakness in the upper or lower limbs or trauma. she has an otherwise uneventful pregnancy. No H/O gestational hypertension. No significant family history.

Intraoperative and postoperative period was uneventful. no H/O undue bleeding in the postpartum period. She was breastfeeding her newborn.

On examination: patient was conscious, alert and oriented. she was found to have elevated BP- 180/100mmhg. Rest of the vital signs were within normal limits. Systemic examination was done no abnormalities were detected.

Power was 5/5 in all 4 limbs. sensory function was intact .cranial nerve examination was unremarkable. cerebral signs were intact. no signs of neck rigidity. plantars were B/L flexors.

On ocular examination, visual acuity of both the eyes were 1/60 with bilateral pupils reacting well to the light with normal fundus.

Investigations: Laboratory findings were – Hb-11.6gm%, TLC-11500cmm, Platelet count-2.75 lakhs/cmm; No proteinuria; PT, APTT, INR -within normal limits. LFT, RFT- were within normal limits.

MRI – Bilateral occipital lobe hyperdensities noted in the T2 Flair images, consistent with posterior reversible encephalopathy syndrome (PRES).
Differential Diagnosis:
1. Ischemic stroke
2. Cerebral haemorrhage
3. Cerebrovenous thrombosis,
4. Posterior reversible encephalopathy syndrome (PRES)
5. Hypertensive emergency with retinal haemorrhage.

Treatment: The patient was transferred to the intensive care unit. LABETALOL infusion was started at a rate of 1mg/min with close monitoring of blood pressure. Patient’s symptoms gradually resolved and her vision improved to 6/6 after 8 hours.

Her Blood pressure was maintained at 130/80mmhg and Labetalol infusion was stopped and was started on Tab. Amlodipine 5 mg 12th hourly.

Patient continued to improve clinically and was discharged on 5th day of hospitalization. She was prescribed Tab. Amlodipine 2.5mg BD.

III. Discussion

Posterior reversible encephalopathy syndrome (PRES) was first described by Hinchey et al. in 1996. It is a reversible neurological entity characterized by the presence of white matter oedema affecting the occipital and parietal lobes. It can occur at any age and most commonly affects female.

A variety of clinical conditions are associated with the development of PRES, which include hypertensive emergency, renal disease, pre-eclampsia/eclampsia, immunosuppressive agents, sepsis, autoimmune disease.

MRI is the imaging modality of choice. Diffusion-weighted MRI helps to distinguish the Vasogenic oedema from cytotoxic oedema. Permanent neurological impairment or death occurs only in a minority of patients. Recurrence of symptoms has been observed in 8% of the cases.

IV. Conclusion

As indicated by its name, appropriate treatment is expected to ensure a full recovery. MRI of the brain is crucial to make the diagnosis.

The management of PRES involves early diagnosis, treatment of the symptomatology and correction of the causative factor.

References Références Referencias