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Case Report

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POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME: A RARE CASE REPORT

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ABSTRACT

Posterior reversible encephalopathy syndrome (PRES) is a neurological disorder characterized by a headache, visual impairment or visual deficits, consciousness impairment, confusion, seizures, and focal neurological impairment. In most of the patients, the clinical features present as increased in blood pressure leads to a hypertensive crisis. This paper presents a rare case of nonpost partum PRES. A 39 years female patient was admitted in female medicine ward with chief complaints of breathlessness, fever, stomach pain, vomiting, headache, giddiness, generalized weakness since 1 month. On examination, her hemoglobin levels were found to be 2.0 gm/dl and diagnosed with dimorphic anemia. After 15 days of admission, she had 3 episodes of generalized tonic-clonic seizures. CT-Brain showed that cerebral edema and MRI done for further evaluation. MRI showed hyperintense lesions in T1 hypo, T2-weighted, and fluid-attenuated inversion recovery (FLAIR) sequences. Fundoscopy showed normal. MRI lesions displaying vascular edema frequently follow a bilateral parieto-occipital pattern. Neurological diagnosing, especially MRI, is the most important diagnostic findings, suggestive of Posterior reversible encephalopathy syndrome (PRES). Symptomatic treatment was given since no specific standard therapy is currently available. Anticonvulsive treatment is frequently required. In conclusion, whenever possible, the abolition of the triggering factor or management of the underlying cause of pathology should be initiated early during the course of the disease.

KEYWORDS: PRES; seizures; MRI; neurological symptoms.

INTRODUCTION

Posterior reversible encephalopathy syndrome (PRES) is a neurological disorder characterized by a headache, visual impairment or visual deficits, consciousness impairment, confusion, seizures, and focal neurological impairment. In most of the patients, the clinical features present as increased in blood pressure leads to the hypertensive crisis.[1,2,4,7] There are two main causes involved in the pathophysiology of PRES. The first cause proposes a rapid increase in blood pressure leads to a hypertensive crisis. The second cause of PRES is triggered by an abnormality in endothelial cells due to circulating endogenous or exogenous toxins.[2]

CASE REPORT

A case of a 39 years female patient was admitted in female medicine ward with chief complaints of breathlessness, fever, stomach pain, vomiting, headache, giddiness, generalized weakness since 1 month. On examination, her hemoglobin levels were found to be 2.0 gm/dl and diagnosed with dimorphic anemia. After 15 days of admission, she had 3 episodes of generalized tonic-clonic seizures. B.P was found to be 150/90 mm. Hg and was reduced within a day by treating with antihypertensives such as T.Amlodipine 5 mg PO BD, T.Benidipine 8 mg PO BD and T.Telmisartan 40 mg PO OD. The patient had no history of blurring of vision. Fundoscopy showed normal. CT-Brain showed that cerebral edema and MRI done for further evaluation. MRI showed hyperintense lesions in T1 hypo, T2-weighted, and fluid-attenuated inversion recovery (FLAIR) sequences. MRI lesions displaying vascular edema frequently follow a bilateral parieto-occipital pattern. Neurological diagnosing, especially MRI, is the most important diagnostic findings, suggestive of Posterior reversible encephalopathy syndrome (PRES). Symptomatic treatment was given such as inj. midazolam 2cc IV, inj. Phenytoin 100 mg IV BD to prevent seizures and Inj. Mannitol IV 100 ml TID to treat cerebral edema. The patient was stabilized and discharged with antihypertensives and antiepileptic drugs and patient was reviewed for every 2 weeks but no other seizure attack recurred.

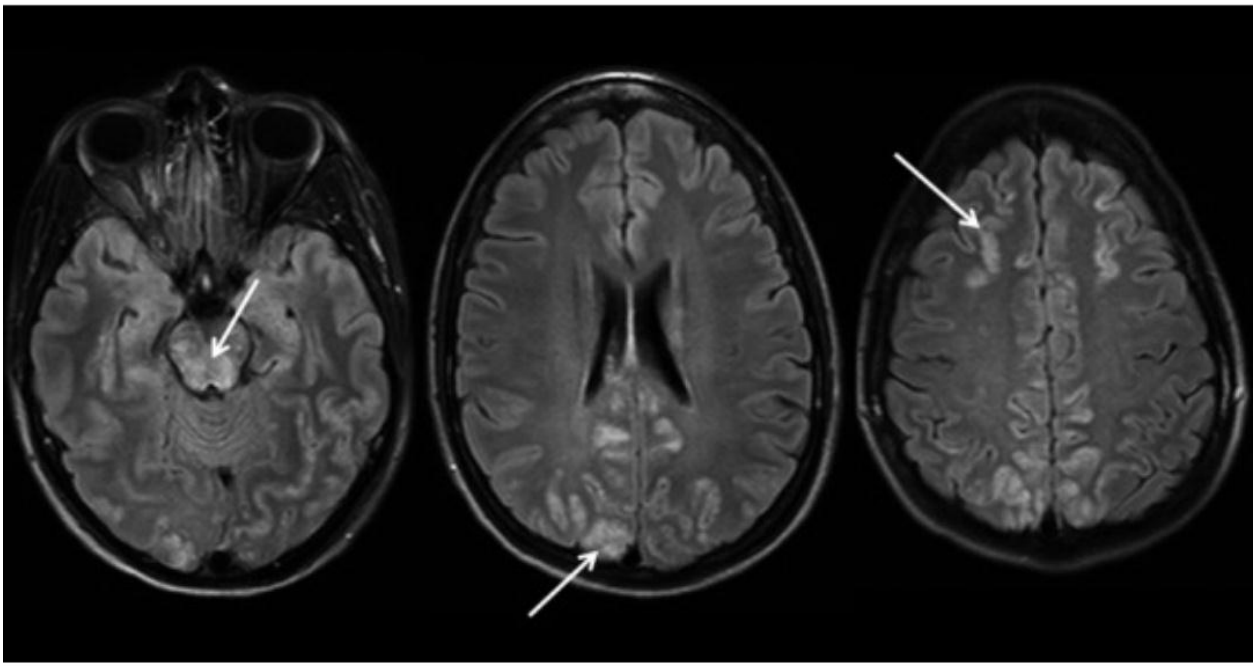

Fig. 1: MRI showing hyperintense lesions and FLAIR sequences.

DISCUSSION

To diagnose PRES emphasizes in this paper by using magnetic resonance imaging diagnostic tool. MRI showed that hyperintense lesions in T1 hypo, T2-weighted FLAIR sequences.[2,3,5,6,7] Normally in this condition blood pressure should hugely increase, but in this case, the slight increase in B.P was observed, i.e 150/90 mm. Hg was reduced with antihypertensives such as Amlodipine, benidipine and telmisartan instead of using higher antihypertensives such as labetalol etc Symptomatic treatment was given, since no specific standard therapy is currently available. Management of the underlying cause of pathophysiology of disease leading to the development of PRES is prominent.[2,4] Management of hypertensive episodes and safeguarding of normal blood pressure is an essential component of PRES treatment. Anticonvulsive treatment is frequently required.[2,5]

CONCLUSION

Here we reported a rare case of Posterior reversible encephalopathy syndrome (PRES) presented with anemia and new-onset seizures in the nonpostpartum period and without hypertensive crisis.MRI were a diagnostic tool used and hypertension was well controlled by routine antihypertensives. Whenever possible, the abolition of the triggering factor or management of the underlying cause of pathology should be initiated during the early disease.

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