



POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME ASSOCIATED WITH ALCOHOL WITHDRAWAL

Psychiatry

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ABSTRACT

Posterior reversible encephalopathy is a neurological condition with clinico- radiological- diagnosis characterized with headache, confusion, seizure, visual disturbance. Clinical and imaging characteristics are usually reversible. 24 year old male patient with a history of consumption of alcohol, last drink 1 day back, presented to department with one episode of seizure, on day 2 complain of loss of vision with BP: 166/102 mmHg PR = 114 bpm and other neurological examinations are within the normal limit. Non contrast MRI shows diffuse oedema noted in the bilateral cerebral hemispheres predominantly in the bilateral occipital lobes continued alcohol withdrawal treatment and started on antihypertensive medication improved well and discharged on day 9. Posterior reversible encephalopathy is the clinico- radiological- diagnosis with exact pathophysiology of PRES in alcohol withdrawal is still not clear, treatment is symptomatic with use of antihypertensive.

KEYWORDS

INTRODUCTION

Posterior reversible encephalopathy is a neurological condition with clinico- radiological- diagnosis characterized with headache, confusion, seizure, visual disturbance [1]. Syndrome was first described in 1996 by hinchey and colleagues [2]. Both clinical and imaging characteristics are usually reversible [3]. Interestingly there is only few case linked with alcohol withdrawal and chronic alcoholic. We report a rare case of PRES associated with alcohol withdrawal with acute hypertension.

CASE

A 24 year old male patient with a history of consumption of alcohol since 4 years, around 240-360 ml of 40% alcohol daily, last drink 1 day back, presented to department with one episode of seizure in morning. On examination patient is conscious and oriented, BP = 142/92 mmHg and PR = 106 bpm, tremors are present, other neurological examinations are within the normal, with CIWA-A score of 16 suggestive of modest withdrawal. electrocardiogram showed a normal sinus rhythm with tachycardia. He is not a known case of type 2 diabetes mellitus, hypertension with no previous history of seizure and not on any other substance use and medication confirmed with family members. By the history and clinical presentation was treated as Alcohol withdrawal Seizure started on injection lorazepam, injection thiamine. On 2nd day morning patient slept well with no episode of any seizure and by evening patient complained of headache followed by complain of loss of vision. On examination vision was just hand movement positive and BP = 166/102 mmHg and PR = 114 bpm and other neurological examinations are within the normal limit. Non contrast MRI were advised and shows diffuse oedema noted in the bilateral cerebral hemispheres, predominantly in the bilateral occipital lobes in subcortical white matter no other significant abnormality noted in brain. Based on clinical and MRI report Posterior Reversible Encephalopathy Syndrome was diagnosed, anti-hypertensives tab telmisartan 40 mg were started and continued injection lorazepam. patient vision started improving vision on 4th day and BP IS 136/84mmHg and was discharged on 9th day

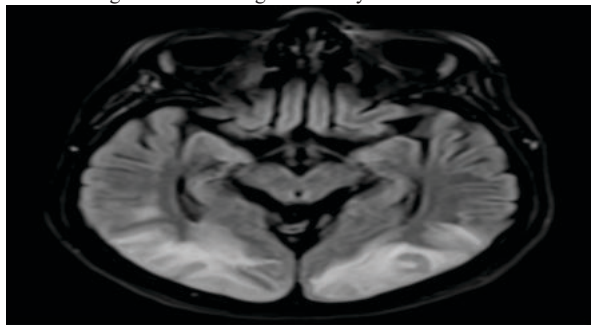


Fig 1

T2 FLAIR Hyperintense signal is seen in bilateral occipital lobes predominantly in subcortical white matter

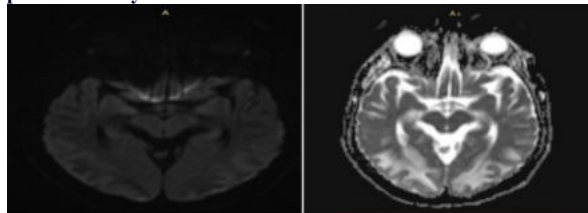


Fig 2

DWI/ADC :No diffusion restriction is seen

DISCUSSION

Posterior Reversible Encephalopathy syndrome is mainly seen in Acute Severe Hypertension, Pre-eclampsia and Eclampsia. Many other etiologies are Renal diseases, Autoimmune disorders, Cytotoxic substances and Sepsis. The exact pathophysiology of PRES in alcohol withdrawal is still not clear, however mainly 1) sudden severe hypertension/elevation in blood pressure resulting in dilation of cerebral vessels causing leakage and vasogenic oedema 2) endothelial dysfunction caused by circulating endogenous toxins can be attributed as cause (4). Most of the cases age in between range of 28-59. In all the previous cases of PRES associated with alcohol withdrawal no one had history of hypertension as Index case and most of them presented with visual hallucinations and disturbances but in Index case patient just hand movement positive only. Treatment of PRES is generally symptomatic, in hypertensive patient should use antihypertensive medication and few use steroid still no proper evidence for that. Along with alcohol withdrawal treatment should continue but no specific guideline as noted.

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