Wernicke's Encephalopathy: A Rare Complication of Hyperemesis Gravidarum

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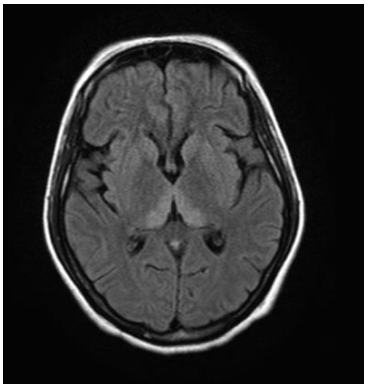

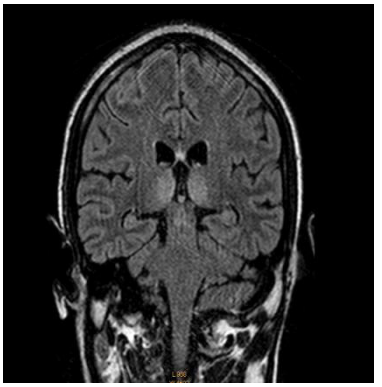

Fig. 1- 2: MRI Brain(Flair) showed bithalamic, periaqueductal hyperintensities suggestive of wernicke's encephalopathy

A 32 yrs-old woman at 20 weeks' gestation admitted with history of recurrent vomiting for 4 months for which she received intravenous glucose, saline, anti-emetic containing therapy and parenteral nutrition throughout at the hospital. On examination, patient was lethargic,confused, extra ocular movements was normal,normal fundus, gaze evoked nystagmus, there was incoordination of both upper and lower limbs present. All deep tendon reflexes were present with bilateral plantars extensors . In view of recurrent vomiting in a pregnant patient, history of treatment with intra venous fluids and reduced alertness, horizontal nystagmus,ataxia,diagnosis of wenickes encephalopathy was made. Routine Blood investigations including blood biochemistry were normal. MRI Brain (Flair) showed bithalamic, periaqueductal hyperintensities suggestive of wernicke's encephalopathy (Figures 1-2). MRA and MRV were normal..The patient was admitted to the intensive care unit. She was started on immediate intravenous thiamine replacement at doses of 300 mg/day. Over the first 48 hours of thiamine therapy, mental status improved, nystagmus started to decrease. On follow up of the patient, ataxia was also improving.

Wernicke's encephalopathy (WE) caused by thiamine deficiency due to severe hyperemesis gravidarum (HE), is reported uncommonly (0.1-0.5%).[1] WE was reported for the first time in 1881 by Carl Wernicke. It develops due to deficiency of vitamin B1 and presents with neurological signs dominantly and most frequently seen in alcoholics. In pregnancy, In the diagnosis of WE, the classic triad of symptoms, ocular abnormalities (93%), confusion (80%) and ataxia (76%) can be detected in 66% of the cases.[2] The differential diagnosis of WE includes stroke, cerebral venous thrombosis, acute alcoholic and drug toxicity.

In the treatment of WE induced by hyperemesis, oral nutrition cannot be adequately managed because of severe vomiting and neurological symptoms. Thus, intravenous thiamine supplementation (300mg/day) is recommended in order to achieve rapid recovery. Neurological symptoms reduce as soon as appropriate treatment is initiated. Hence, in all cases of severe hyperemesis gravidarum, we should watch for treatable complications like WE.

References

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