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Title: Wernicke's Encephalopathy: A Complication of Hyperemesis Gravidarum.





INTRODUCTION: Hyperemesis gravidarum is a complex condition with multiple contributing factors, marked by severe, uncontrollable nausea and vomiting. The diagnosis of hyperemesis gravidarum is often based on key criteria such as ongoing vomiting with no other underlying cause, evidence of acute starvation (often seen as high levels of ketones in urine), imbalances in electrolytes and acid-base levels, and noticeable weight loss. [1] Wernicke's encephalopathy results from a deficiency of thiamine (vitamin B1), which plays a crucial role as a cofactor in multiple steps of carbohydrate metabolism. When cells with high energy demands lack sufficient thiamine, energy production declines, leading to neuronal injury. [2] Wernicke's encephalopathy is traditionally identified by a triad of symptoms: confusion or altered mental state, an unsteady or ataxic gait, and ophthalmoplegia. Diagnosis relies on clinical evaluation, though a definitive diagnosis is challenging, as up to 90% of patients may not display all three classic symptoms. A key indicator of Wernicke's encephalopathy is the presence of eye abnormalities, particularly nystagmus. An MRI may be useful in diagnosing WE but the 'Typical' lesions associated are only noted in about 58% of patients with presence of clinical signs and symptoms. [3]

CASE REPORT: 28y/o female, G5P1 L1 A 3 with 11+3 wks of gestation was brought to the emergency room with complaints of irrelevant talk in form of calling out

to her relatives who had passed away and Occasionally not being able to recognize place, Since 3-4 days. Pt also had complains of generalized weakness, inability to walk, blurring of vision, involuntary movement of eyes. Pt had nausea and vomiting since last 2 months for which patient did not take medications and leading to the consequent loss of appetite and resulting in weight loss. Pt has history two spontaneous abortions in the past, one of them associated with similar complains of intractable vomiting. An examination showed presence of ataxia and impaired walking as well as horizontal nystagmus. Lab investigations were sent including electrolytes revealing hyponatremia (124mEq/I). USG Scan for foetus was within normal limits. An MRI brain was done revealing Few small foci in the bilateral fronto-parietal white matter on T2 and FLAIR images, suggestive of non-specific white matter changes. A diagnosis of Wernicke's Encephalopathy was made based

DISCUSSION: The mainstay of therapy is to administer intravenous thiamine. Inj.
Thiamine 100mg tds was started for the patient along with correction of hyponatremia. The nausea and vomiting were controlled with appropriate antiemetics. Patient's complains of irrelevant talk and altered mental status resolved over time after treatment with thiamine.

CONCLUSION frequently preclesses diagnostic in addressing the is crucial for expectation. WE based on class may or may not findings as the most but not a section.

CONCLUSION: Thiamine (vitamin B1) frequently presents with symptoms that closely resemble psychiatric illnesses, potentially leading to diagnostic inaccuracies. Promptly addressing the underlying medical issues is crucial for expeditious symptom resolution. WE is a clinical diagnosis made based on classical triad of symptoms which may or may not be supported by MRI findings as the typical lesions are seen in most but not all patients of WE.

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Treasure Island(FL):StatPearl

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Ŷ	S. Sodium (139-145)
P	S. Potassium
	S.Magnesium( 1.6-2.3)
	S.Albumin (3.5-5mg)

TSH (0.4-5.5)

3.0mm ol/L	3.9mm ol/L
1.7mg	2.1mg
3.0mg	4.5mg

**Day 15** 

131m

mol/L

0.2

Day 1

124m

mol/L

0.06