



Maternal Death Due to Undiagnosed Brain Tumour Masked by Hyperemesis Gravidarum

This case illustrates how anchoring bias toward hyperemesis gravidarum led to repeated dismissal of red flag neurological symptoms.

Key Issues for Review

- **Dismissal of red flag symptoms:** Headaches, visual changes, and confusion were attributed to dehydration without further investigation.
- **Failure to consider neurological differentials:** No imaging was performed despite progressive neurological signs.
- **Anchoring bias toward hyperemesis gravidarum:** The presence of vomiting led to anchoring bias, obscuring other serious causes.

Case Presentation*

Patient: Laura, 35 years old, G3P2 **Gestation:** 9 weeks
Presentation: Persistent vomiting, severe headaches, blurred vision

Laura presented to her general practitioner with nausea and vomiting. She was reassured that these symptoms were consistent with morning sickness. Simple anti-emetics were prescribed. No laboratory tests or imaging were ordered. Her symptoms worsened. She reported persistent headaches, photophobia, and intermittent blurred vision. She had lost 6 kg since her last visit. The GP continued anti-emetics and advised rest. No further investigations were initiated. Laura attended the emergency department with confusion and ongoing vomiting. She was diagnosed with hyperemesis gravidarum and treated with IV fluids. She was discharged without neurological assessment or imaging.

Her partner observed slurred speech and imbalance. Laura collapsed at home and was urgently admitted to the ICU. A head CT and MRI scan revealed a large frontal lobe mass with midline shift. Biopsy confirmed glioblastoma multiforme. Despite neurosurgical intervention, she succumbed to cerebral herniation.

*Fictional story based on comparable clinical incidents to illustrate key learnings

Key Learnings

Vomiting in early pregnancy is not always benign. While hyperemesis gravidarum is common, it should not be assumed when other symptoms are present. A thorough history is essential to exclude serious differentials, including gastrointestinal, neurological, labyrinthine, endocrine, metabolic, and toxicological causes.

Headaches and neurological symptoms require urgent neurological evaluation and imaging- regardless of gestational age. Consider intracranial pathologies such as brain tumours, cerebral venous sinus thrombosis, Wernicke's encephalopathy, intracranial haemorrhage, and migraine with aura.

Visual disturbances and confusion are red flags. These warrant neuro-imaging regardless of gestational age.

Anchoring bias can be fatal. Clinicians must remain open to alternative diagnoses even when a common condition like hyperemesis is present.

Good Practice Points

- ✓ **Early escalation for atypical nausea and vomiting in pregnancy.**
- ✓ **Routine use of Pregnancy-Unique Quantification of Emesis and Nausea (PUQE) score to assess severity of vomiting.**
- ✓ **Thorough neurological history and examination in cases of headache and vomiting.**
- ✓ **MRI is safe in pregnancy and should be considered when neurological symptoms are present.**
- ✓ **Multidisciplinary involvement—include general and obstetric medicine, obstetrics, neurology, and radiology early.**
- ✓ **Education for primary care and emergency teams on red flags in early pregnancy.**

Useful links / References:

- [SOMANZ Guideline](#)— Management of Nausea and Vomiting in Pregnancy and Hyperemesis Gravidarum

