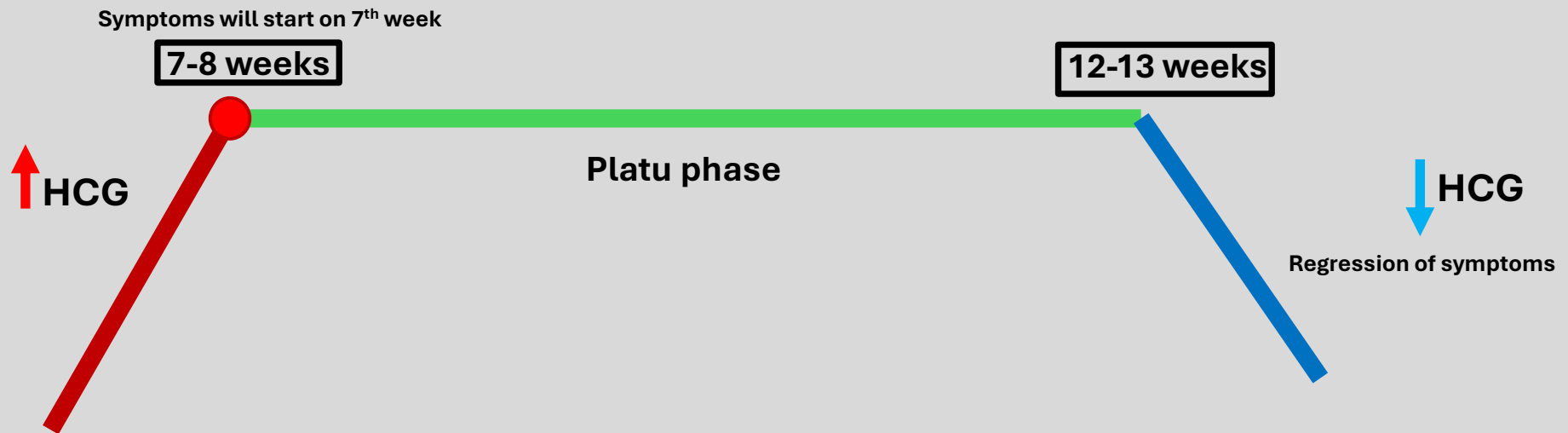


The background features a stylized illustration of a pregnant woman with long brown hair, wearing a grey top. She has a distressed expression, with her hand to her forehead and a single tear visible. The background is dark blue with dark, swirling clouds. A large, light yellow triangle is positioned behind the woman. Overlaid on the image is the title 'Hyperemesis Gravidarum' in a large, white, outlined font. The letters 'H', 'p', 'e', 'm', 'e', 's', 'i', 's', 'G', 'r', 'a', 'v', 'i', 'd', 'a', 'r', 'u', 'm' are white with black outlines. The letter 'v' is green, 'e' is yellow, and 'i' is blue.

Hyperemesis Gravidarum

High HCG will cause :

- Nausea
- Vomiting



After 12-13 weeks the symptoms will regress ,but if the symptoms never regress,so why ?

- Molar pregnancy
- Malignancy
- Multiple pregnancy

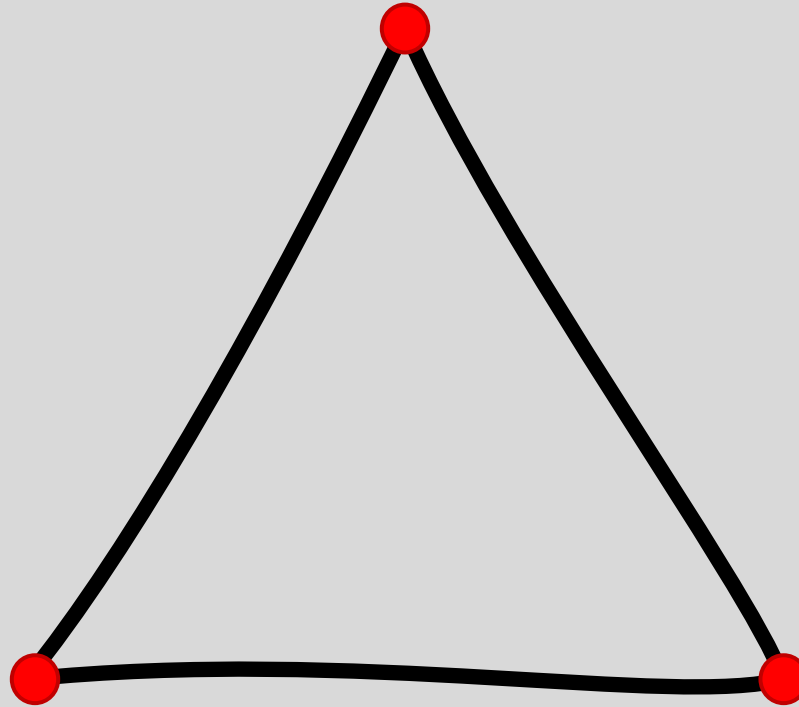
So if patient came to u with persistent symptoms from 7-13 weeks ?
hyperemesis gravidarum

A 28-year-old woman, gravida 2 para 1, presents to the emergency department at 10 weeks of gestation with complaints of **persistent nausea and vomiting for the past two weeks**. She reports being unable to keep any food or fluids down and has lost approximately 5 kg since the onset of symptoms. She also notes feeling dizzy and weak. On examination, she appears dehydrated with dry mucous membranes and a heart rate of 110 bpm. Laboratory tests reveal ketonuria, hyponatremia, hypokalemia.

Dehydration

**Electrolyte
disturbance**

Ketonuria



Sign & symptoms

- Dehydration**
- weight loss (due to starvation)**
- electrolyte disturbance**
(vomiting =loss of K⁺ , Diarrhea = loss Na).
- ketonuria**
- long term starvation will cause thiamine (Vitamin B1)deficiency.→ dementia-like syndrome (Korsakoff's).**

DDX

- DKA**
- GERD**
- gastritis**
- cholecystitis**
- Meningitis**
- otitis media**
- UTI**

Investigations

LAB:

-CBC

-Fasting blood glucose

-urinalysis (WBC=infection , ketone bodies)

-KFT (check for ARF).

-LFT

-TFT (why ? Bc HCG MIMIC Thyroid hormone).

imaging

Ultrasound if I suspected :

Molar pregnancy

EP

How to manage ?

1-Admission

2-IV fluid (Normal saline , ringer lactate) in slow rate to prevent (pontine demyelination) + Electrolyte and thiamine repletion

3-antiemetic (Metoclopramide , domperidone)

4-after we stabilize the pt. we can add dextrose (orally or iv)

5-still recurrent vomiting with blood(Mallory–Weiss syndrome) ? We give her PPI

**6-after we do all this and no improvement ?
Check the psychological cause**

A 23-year-old primigravid woman is brought to the physician by her husband because of a 4-week history of nausea and vomiting. Nausea persists throughout the day and keeps her from eating larger meals. She vomits 4–5 times per day. Since the onset of symptoms, she has had a 5-kg (10-lb) weight loss. A home pregnancy test was positive 9 weeks ago but she has not seen a physician yet. Medical history is remarkable for migraine headaches and motion sickness. She takes no medications. Her temperature is 37.0°C (98.6°F), pulse is 112/min, respirations are 22/min, and blood pressure is 100/64 mm Hg. She is 164 cm (5 ft 4 in) tall and weighs 55 kg (121 lb); BMI is 20 kg/m². Physical examination shows decreased skin turgor, dry mucous membranes, and hypersalivation. There is mild ataxia and ophthalmoplegia. Urine dipstick shows 2+ ketones. A serum pregnancy test is positive. Which of the following additional findings is most likely in this patient?

≡ KEY INFO ? ATTENDING TIP 📄 LABS

✍ ADD NOTES

🚩 MARK

★ GET ANKI CARDS

...



This pregnant patient's nausea, **vomiting**, significant weight loss (> 5% of prepregnancy weight), signs of dehydration (e.g., tachycardia, poor skin turgor, dry mucous membranes), hypersalivation, and ketonuria are consistent with **hyperemesis gravidarum**.

💬 GIVE FEEDBACK

A Hyperchloremic metabolic acidosis on blood gas analysis

B Two heartbeats on pelvic ultrasonography



Hyperemesis gravidarum is a complication of pregnancy that is most commonly seen during the first trimester in young primiparous women. **Multiple gestation**, which is confirmed by the presence of multiple heartbeats on ultrasound, is a **strong risk factor** for developing hyperemesis gravidarum due to the **elevated levels of hCG** and progesterone. Women with a history of migraines or motion sickness are more likely to develop hyperemesis gravidarum.

Inadequately treated hyperemesis gravidarum may cause thiamine deficiency and consequent **Wernicke encephalopathy**, which typically manifests with ophthalmoplegia and ataxia, both of which are observed here. This patient is at increased risk due to the absence of prenatal vitamin supplementation. All patients with severe hyperemesis gravidarum (including patients who already have signs of Wernicke encephalopathy) require early high-dose **thiamine supplementation**.

THANK YOU