Hyperemesis Gravidarum: Definition and Treatment

See online here

Hyperemesis gravidarum is defined as severe, persistent nausea and vomiting during pregnancy leading to dehydration, electrolyte imbalance, ketosis, loss of more than 5% pre-pregnancy weight and can even result in mortality.

Epidemiology

Nausea and vomiting are experienced by up to 90% of all pregnant women. However, the prevalence of nausea and vomiting requiring hospital admission ranges from 0.3%–2%.

This condition, known as hyperemesis gravidarum, begins at 9–10 weeks of pregnancy, peaks at 11–13 weeks, and resolves in the second trimester. It is more common in urban areas and has no racial predilection.

Etiology and Risk Factors

Elevations in the levels of placental human chorionic gonadotropin (HCG) hormones typically cause nausea and vomiting during the first trimester of pregnancy. In most women, symptoms tend to diminish in the second trimester.

Common causes of elevated HCG include:

- Multiple gestations

- Female fetus
- Oral contraceptive intolerance pre-pregnancy
- Nulliparity
- Low socioeconomic status
- Hydatiform mole (trophoblastic disease)

Reduced risk has been associated with smoking and maternal age greater than 30 years.

Clinical Presentation

- Excessive and persistent nausea and vomiting
- Fatigue
- Excessive salivation
- Dizziness
- Insomnia
- Olfactory dysfunction
- Dysgeusia
- Anxiety
- Mood lability
- Diminished ability to concentrate

Diagnosis

Physical Examination

Physical examination should **include non-specific findings unless abdominal pain or bleeding is present**. Examination should evaluate orthostatic blood pressure changes, signs of dehydration (dryness of mucous membranes, poor skin turgor, collapsed neck veins, and mental status changes), as well as cardiac, pulmonary, abdominal, and neurologic organ systems.

Laboratory Tests

- Pregnancy test: urine and serum HCG to confirm pregnancy
- Complete blood count with differential and hematocrit
- Urinalysis for ketones
- Serum electrolytes and serum ketones
- Liver transaminases and bilirubin levels
- Serum amylase and lipase levels
- Free thyroxine and thyroid-stimulating hormone levels
- Serum calcium levels

Abdominal ultrasonography should also be performed to confirm the gestational sac and its age and to exclude multiple gestations, trophoblastic disease, and appendicitis.

Management

Mild Cases

Conservative management with reassurance and dietary modifications is recommended as first-line therapy. Alternative therapies such as acupressure and hypnosis should also

be considered.

Severe Cases

Pharmacotherapy

Doxylamine/pyridoxine is currently the only medication approved by the U.S. Food and Drug Administration for the treatment of hyperemesis gravidarum.

Other medications that may provide relief include antihistamines, phenothiazine antiemetics (eg, metoclopramide), ondansetron, and steroids.

Termination of Pregnancy

Medical termination of pregnancy is only indicated in cases of severe refractory hyperemesis gravidarum with a high risk to maternal life.

References

Hyperemesis via medlineplus.gov

Hyperemesis gravidarum via emedicine.medscape.com

Notes