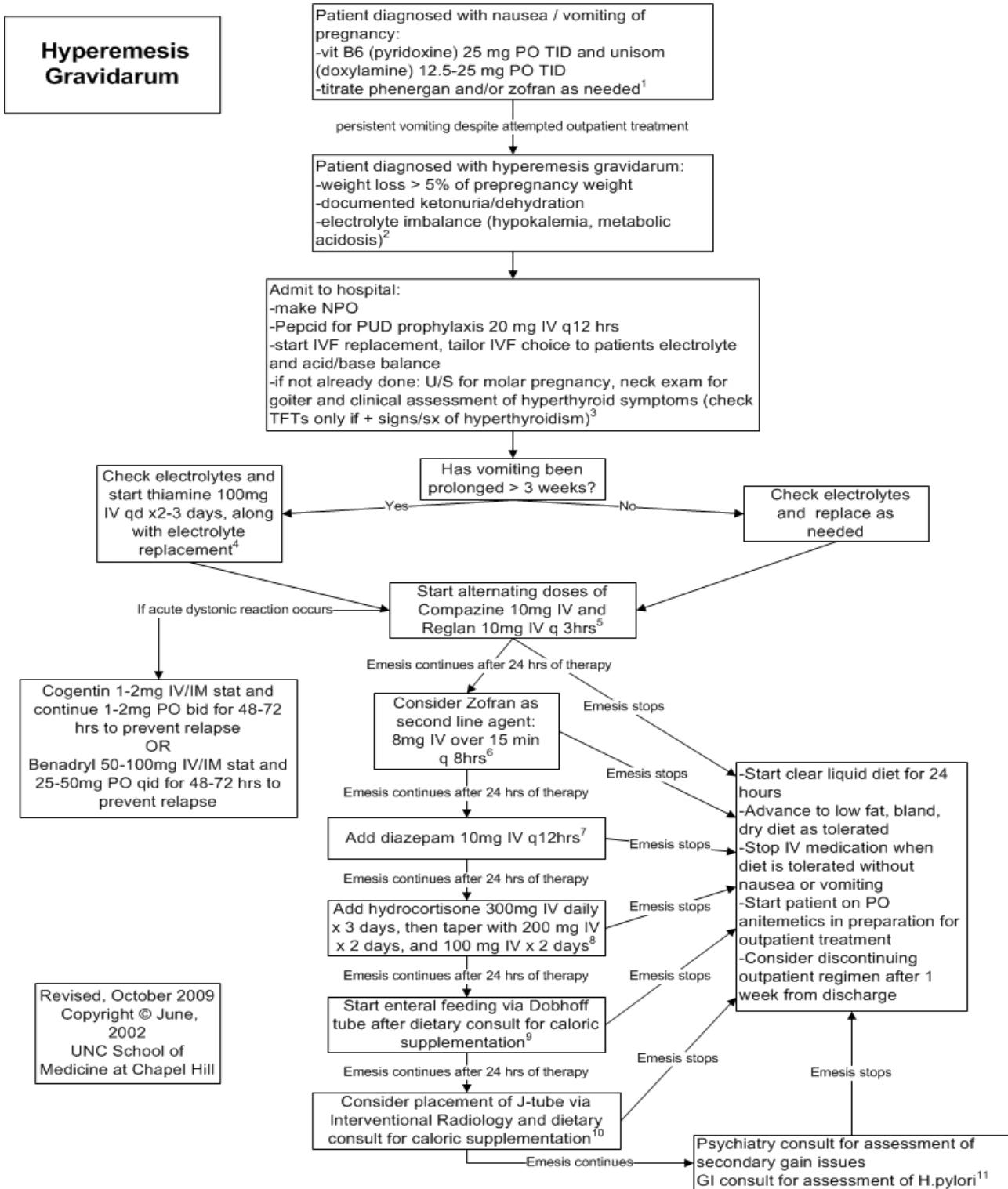




Hyperemesis



References

- 1. ACOG Practice Bulletin, Number 52, April 2004.**
Nausea and vomiting of pregnancy affects 70-80% of pregnancies. Most patients will do well with outpatient treatment.
- 2. Broussard C, Richter J. Nausea and vomiting of pregnancy. Gastroenterology Clinics 1998; 27:123-51.**
Hyperemesis gravidarum (HEG) has an incidence of 0.3-2.0% of all deliveries and is characterized by intractable nausea and vomiting, causing dehydration, electrolyte and metabolic disturbances and nutritional deficiency necessitating hospitalization.
- 3. Broussard C, Richter J. Nausea and vomiting of pregnancy. Gastroenterology Clinics 1998; 27:123-51.**
Thyroid function abnormalities are transient and concurrent with HEG...whether these abnormalities represent true hyperthyroidism vs. a biochemical alteration of pregnancy has been questioned because T3 is not consistently elevated.
- 4. Association of Professors of Gynecology and Obstetrics. Nausea and vomiting of pregnancy. APGO Educational Series on Women's Health Issues. 2001.**
Use Lactated Ringer's solution to correct hypovolemia. Large volumes of normal saline may cause hyperchloremic acidosis. Thiamine supplementation should be administered to anyone requiring IV hydration that has vomited for more than 3 weeks.
- 5. Association of Professors of Gynecology and Obstetrics. Nausea and vomiting of pregnancy. APGO Educational Series on Women's Health Issues. Washington, DC. 2001.**
Combinations of antinauseant/antiemetic agents (H1-receptor antagonists and phenothiazines) are commonly used to treat NVP, but their anticholinergic properties may drowsiness, dry mouth/eyes, urinary hesitancy, and extrapyramidal effects.
- 6. Magee L, Mazzotta P, Koren G. Evidence-based view of safety and effectiveness of pharmacologic therapy for nausea and vomiting of pregnancy (NVP). Am J Obstet Gynecol 2002; 186: S256-61.**
No malformation was reported with first trimester exposure to ondansetron in a randomized controlled trial of first trimester patients. Compared with promethazine, ondansetron offered no benefits.... Its use should be reserved until other agents have failed.
- 7. Tasci Y, Demir B, Dilbaz S and Haberal A. Use of diazepam for hyperemesis gravidarum. J Matern Fetal Neonatal Med 2009; 22(4):353-6**
The addition of diazepam to IV fluids is associated with less hospitalization and greater patient satisfaction.
- 8. Bondok RS, El Sharnouby NM, Eid HE and Abd Elmaksoud AM. Pulsed steroid therapy is an effective treatment for intractable hyperemesis gravidarum. Crit Care Med 2006; 34(11):2781-3.**
A short course of hydrocortisone is effective in the treatment for intractable hyperemesis gravidarum. No good evidence exists to show any increase in malformations from glucocorticoid exposure, as the placenta readily inactivates them.
- 9. Hsu J, Clark-Glena R, Nelson D and Kim C. Nasogastric enteral feeding in the management of hyperemesis gravidarum. Obstet Gynecol 1996;88: 343-6.**
Enteral nutrition has less potential for serious complications than TPN (i.e. thrombosis, infection, pneumothorax, intrahepatic cholestasis, fatty infiltration of the placenta), and is substantially cheaper.

10. Saha S, Loranger D, Pricolo V, Degli-Esposti S. Feeding jejunostomy for the treatment of severe hyperemesis gravidarum: a case series. *J Parenteral Enteral Nutr* 2009; 33(5):529-34.

Feeding jejunostomy is a potentially safe and effective mode of nutritional support in hyperemesis gravidarum.

11. Erdem A, Arlan M, Erdem M, Yildirim G, Himmetoglu O. Detection of Helicobacter pylori seropositivity in hyperemesis gravidarum and correlation with symptoms. *Am J Perinatol* 2002; 19: 87-92. and Jacoby E, Porter K. Helicobacter pylori infection and persistent hyperemesis gravidarum. *Am J Perinatol* 1999; 16: 85-8.

Erdem found no direct causal relationship between *H. pylori* infection and HEG. Jacoby described successful treatment of 3 persistent HEG cases with clarithromycin and amoxicillin. However, consideration must be given to the possible harmful effects of clarithromycin in pregnancy, as well as a 2-5% rate of resistance of *H. pylori*.

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Notification to Users

These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities.

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