



Nausea and Vomiting - Pregnancy

1. Purpose

Nausea and vomiting is the most common medical condition in pregnancy, affecting 50-90% of women. Persistent vomiting that leads to weight loss of greater than 5% of pre-pregnancy weight occurs in 1% of pregnancies and is referred to as hyperemesis gravidarum. This is associated with electrolyte abnormalities and dehydration.

Nausea and vomiting of pregnancy usually begins at 6-7 weeks of gestation, peaks at 9-13 weeks, and resolves in most cases by 12-14 weeks. In up to 10% of pregnancies, symptoms continue beyond 20 weeks. Despite being commonly known as "morning sickness", it is not confined to the morning.

Nausea and vomiting of pregnancy may be classified as mild, moderate or severe, although this may not correlate with the distress caused. Nausea and vomiting of pregnancy can have a profound effect on a woman and her family's health and quality of life, therefore early recognition and management is important.

This guideline outlines the details for the care of women who experience nausea and vomiting during pregnancy at the Women's.

Where processes differ between campuses, those that refer to the Sandringham campus are differentiated by pink text or have the heading **Sandringham campus**.

2. Definitions

Hyperemesis gravidarum is a severe form of morning sickness, with excessive pregnancy-related nausea and/or vomiting that prevents adequate intake of food and fluids.

Morning sickness symptoms include nausea and vomiting. For most women, morning sickness begins around the sixth week of pregnancy and resolves by the 12th week. However, one in five women endure morning sickness into their second semester, and an unfortunate few experience nausea and vomiting for the entire duration of their pregnancy.

3. Responsibilities

Medical Staff to order appropriate investigations, medications and intravenous fluid replacement.

Nursing/midwifery staff to provide nursing care and observation of woman during hospital admission.

Dietitian to provide support and advice for ongoing diet and nutrition.

4. Guideline

4.1 Management

History and examination

The pathogenesis of nausea and vomiting of pregnancy and hyperemesis gravidarum is poorly understood and probably multifactorial. Idiopathic nausea and vomiting of pregnancy must be distinguished from that caused by gestational trophoblastic disease or multiple pregnancy and from other causes of nausea and vomiting such as gastrointestinal (peptic ulcer disease, GI obstruction, hepatitis, pancreatitis), genitourinary, central nervous system and toxic / metabolic problems (thyroid disease, adrenocortical insufficiency).

Investigations include:

- urinalysis & MSU
- electrolytes (consider calcium), LFTs, plasma glucose, TSH once (beware interpretation of TFT in early pregnancy)
- early pregnancy ultrasound.

Dietary & Lifestyle Changes

Dietary and lifestyle changes should be encouraged. Women should be advised about appropriate foods and fluids to prevent dehydration and minimize aggravation of symptoms. Sleep requirement increases in early pregnancy and fatigue exacerbates nausea and vomiting of pregnancy. A liberal attitude towards leaves-of-absence from work should ultimately shorten the number of days lost from work.

Suggestions include:

- adequate oral fluid intake to prevent dehydration
- suitable multivitamin supplement if poor oral intake persists
- dietitian referral
- P6 (Nei Guan) acupressure – using wristbands e.g. SeaBand® (some evidence of efficacy)
- Ginger (as either tablets or syrup) has been compared to placebo and pyridoxine in a number of small randomised controlled trials. Three out of four studies suggested benefit of ginger when compared to placebo. Although there is no evidence of harm from the use of ginger, women should not take more than 1g per day.

4.2 Drug guideline (Outpatient management)

Mild or moderate symptoms

Previous severe nausea and vomiting of pregnancy or hyperemesis gravidarum (pre-emptive therapy recommended).

Progress through the following list of medicine options until symptoms controlled.

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| 1. Pyridoxine (vitamin B6) 50mg orally up to QID or 200mg orally at night. |
| 2. Add doxylamine (Restavit®) (H1 antagonist/antihistamine) 12.5mg orally nocté, increase to 25 mg nocté then add 12.5mg mané and afternoon as required. |
| 3. Add another sedating antihistamine: 3.1 Promethazine (Phenergan®) 10 to 25mg orally three to four times a day OR 3.2 Dimenhydrinate (Dramamine®) 50 mg orally three to four times a day (Not available at RWH) |
| 4. Add either of the following if not improving: 4.1 Metoclopramide (Maxolon®, Pramin®) 10mg orally three to four times a day OR 4.2 Prochlorperazine (Stemetil®) 5 to 10mg orally two to three times a day OR 25mg PR once to twice a day. |

Consideration should be given to thiamine (Betamin®) supplementation to prevent the complication of Wernicke's encephalopathy. The suggested dose of thiamine is 100mg orally daily. Refer to the section below:

Severe, persistent or resistant nausea and vomiting

If severe, persistent or resistant nausea and vomiting is not relieved by the above measures **consider:**

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| 5. Ondansetron (Zofran®) 4mg orally (tablet or wafer) two or three times a day. Must be approved by Head of Unit. |
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Note: Ondansetron is a class B1 drug and should not be prescribed as a first line treatment.

Women with nausea and vomiting or hyperemesis gravidarum may require treatment with parenteral anti-emetics and intravenous fluids. If planning to manage the woman as an outpatient, consider administering medications intramuscularly, otherwise administer intravenously.

And if symptoms persist:

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| 6. Consider changing regimen to any of the following: <ul style="list-style-type: none"> • Metoclopramide 10mg IV/IM every 8 hours • Prochlorperazine 12.5mg IM every 8 hours • Promethazine 12.5 to 25mg IM every 4 to 6 hours • Ondansetron 4mg IV/IM every 8 to 12 hours |
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- Prednisolone 50 mg orally daily for 3 days, then reduce to 25mg at 3 days then reduce by 5mg as tolerated until resolved (monitor blood glucose levels and consider prophylaxis with ranitidine 300 mg daily to prevent GI upset).

Note: Steroids use in the first 10 weeks of gestation may increase risk for oral clefts.

4.3 Admission for intravenous fluids

- Admit if dehydrated +/- ketotic for IV fluid resuscitation and electrolyte restoration with Sodium Chloride 0.9% – administer IV fluid volume as per clinical assessment. If hypokalaemic, the woman may require potassium supplementation (oral route preferred).
- A water soluble vitamin solution (I.V. B Dose® - contains thiamine 10mg) should be added to IV fluids - 1 ampoule may be administered in the 'stat' litre **or** the second (2 hourly) litre.
- Thiamine 100mg IV daily for 2 to 3 days in women needing rehydration should only be considered if there is an established risk of thiamine deficiency.
- If adequate oral fluid intake cannot be maintained, IV hydration should be administered regularly (e.g. 2 to 3 times per week) in order to prevent dehydration. This can be performed in the Pregnancy Day Care Centre (PDCC) during normal working hours.
- Women may require antacids, H2 antagonists [ranitidine] if gastritis develops.

Note: Cimetidine (Tagamet®) has more significant drug interaction, therefore ranitidine is preferred.

Note: Women who fail to respond to the above management should be assessed for enteral feeding (refer to a Dietitian [at Parkville](#) for consultation).

5. Evaluation, monitoring and reporting of compliance to this guideline

Compliance to this guideline will be measured by review of incidents reported in VHIMS.

6. References

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7. Legislation related to this guideline

Not applicable

8. Appendices

Appendix 1: [Nausea and Vomiting of Pregnancy: Medical Treatment Algorithm](#)

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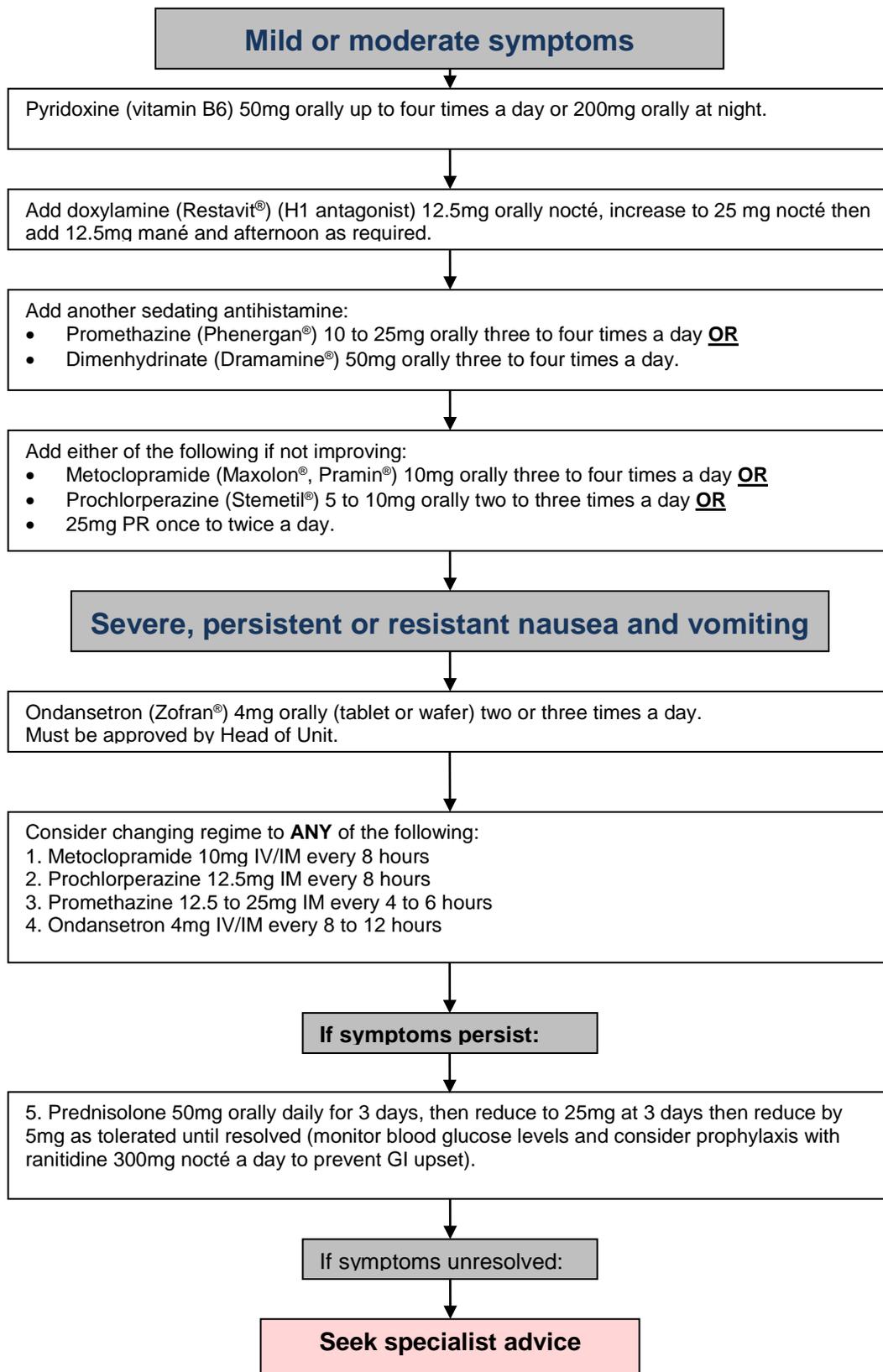
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Appendix 1: Nausea and Vomiting of Pregnancy: Medical Treatment Algorithm

**Note: Refer to Clinical Guideline for more detailed information.
Admit for intravenous fluids if dehydrated.
If the woman's condition does not improve go to the next step.**



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