Primary Care Management of Nausea and Vomiting In Early Pregnancy

Nausea and vomiting affects up to 80% of pregnant women and is one of the most common indications for hospital admission in the first trimester of pregnancy. For many the symptoms can be controlled in primary care with dietary advice and medication. This should be diagnosed only when onset is in the first trimester and once the other causes of vomiting have been excluded.

Hyperemesis gravidarum is a severe form of nausea and vomiting in pregnancy that accounts for 0.3-3.6% of cases. It is a diagnosis of exclusion characterised by prolonged, severe nausea and vomiting, dehydration, electrolyte imbalance, ketosis and body weight loss >5% pre-pregnancy body weight.

**History:**
- Date of LMP
- Previous history of hyperemesis
- Onset and frequency of vomiting and effect on functioning
- Presence of symptoms suggestive of other causes eg diarrhoea, abdominal pain, dysuria, dyspepsia, any abnormal vaginal loss e.g. bleeding
- Consider using PUQE score (see appendix 2)

**Examination:**
- Signs of dehydration
- Weight,
- Temperature, pulse, BP, respiratory rate
- Abdominal tenderness
- Check urine for ketones/UTI

**Investigations:**
- Consider MSU
- FBC, U+Es, TFTs, LFTs
- Early scan to exclude molar pregnancy/multiple pregnancy

**Mild Symptoms + no ketonuria**
- Advice about dietary changes and coping strategies -see appendix 1

**Moderate Symptoms (or persistent symptoms despite dietary advice)**
- +/- ketonuria (++ or less on dipstick urine ketone test)
- Use antiemetics:
  - 1st line- *Cyclizine* (50mg tds) or *Promethazine* (25mg ON, upto 25mg qds)
  - 2nd line- *Prochlorperazine* (5-10mg tds PO or 3-6mg bd buccal)
  - 3rd line- *Ondansetron* (4-8mg bd- tds).
  - NB. Ondansetron orodispersible tablets and films are significantly more expensive than standard tablets.
  - Consider using a combination of 1st and 2nd line medications before introducing 3rd line medication. Use each line of therapy or combination of treatment for at least 24 hours before switching treatment.

**Severe Symptoms (or persistent vomiting)**
- +/- signs dehydration
- +/- ketonuria (+++ on dipstick urine ketone test)
- +/- 5% loss of pre-pregnancy weight
- +/- PUQE score >13
- Refer for intravenous fluids and parenteral antiemetics in gynaecology daycase

NB. There should be a lower threshold for seeking specialist advice if the woman has a co-existing condition (for example diabetes) which may be adversely affected by nausea and vomiting.

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If the onset of nausea and vomiting is after 10+6 weeks of gestation consider alternative diagnosis.

**Differential diagnoses:**  
GU- UTI, uraemia, pyelonephritis  
Drug induced- iron, antibiotics, opioids  
Neurological- vestibular disease, migraine  
Pregnancy related conditions- acute fatty liver, pre-eclampsia (if onset in second half of pregnancy)  
Psychological- eating disorders  
Metabolic/endocrine- Hypercalcaemia, thyrotoxicosis, DKA, Addison’s disease  
GI- gastroenteritis, peptic ulcer, pancreatitis, bowel obstruction, hepatitis, cholelithiasis, cholecystitis, Helicobacter pylori infection, appendicitis

- 90% of women find symptoms resolve by the 20th week.  
- Transient hyperthyroidism may be present in 60% of women with hyperemesis and is  
- usually self-limiting but may need treatment. Abnormal liver function tests are associated with severe hyperemesis.  
- There is no evidence of harm from the use of standard antiemetics in pregnancy but women may need re-assurance about their safety. A patient leaflet on antiemetics in pregnancy is available from the bumps website.  
- Decide when to stop medication using a pragmatic approach (for example it may be possible to stop antiemetic medication at around 12–16 weeks, by which time symptoms have usually improved) in conjunction with clinical judgment (for example severity of symptoms, response to treatment in previous pregnancies, preference of the woman).  
- Antiemetics should generally be prescribed as an acute prescription rather than added to a patient's repeat prescription to ensure appropriate review.  
- Hyperemesis tends to recur in subsequent pregnancies and women who are affected can benefit from the early use of antiemetics, and the issue of stand-by medication and Ketostix at the start of their pregnancies.

References:  

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Appendix 1- Nausea and Vomiting In Early Pregnancy – patient information

Nausea and vomiting in pregnancy, also known as morning sickness, is very common in early pregnancy. It is unpleasant, but it does not put your baby at any increased risk and usually clears up by weeks 16 to 20 of pregnancy.

Practical advice
If you have morning sickness, your GP or midwife may initially recommend that you try a number of changes to your diet and daily life to help reduce your symptoms. These include:

- drinking plenty of fluids, such as water, and sipping them little and often rather than in large amounts, as this may help prevent vomiting
- getting plenty of rest – tiredness can make nausea worse
- if you feel sick first thing in the morning, give yourself time to get up slowly – if possible, eat something like dry toast or a plain biscuit before you get up
- eating small, frequent meals that are high in carbohydrate (such as bread, rice and pasta) and low in fat – most women can manage savoury foods, such as toast, crackers and crispbread, better than sweet or spicy foods
- eating small amounts of food often rather than several large meals – but don't stop eating
- eating cold meals rather than hot ones as they don't give off the smell that hot meals often do, which may make you feel sick
- avoiding drinks that are cold, tart (sharp) or sweet
- asking the people close to you for extra support and help – it helps if someone else can cook, but if this is not possible, go for bland, non-greasy foods, such as baked potatoes or pasta, which are simple to prepare
- distracting yourself as much as you can – the nausea can get worse the more you think about it
- wearing comfortable clothes without tight waistbands
- eat foods or drinks containing ginger – ginger has been used to treat nausea and vomiting during pregnancy for many years, but there is little scientific evidence for it.
- acupressure on the wrist has been used to treat nausea and vomiting during pregnancy for many years, but there is little scientific evidence for it. Acupressure involves wearing a special band or bracelet on your forearm.

If you have severe morning sickness, your doctor or midwife might recommend medication.

When to see a doctor for morning sickness
If you are vomiting and cannot keep any food or drink down, there is a chance that you could become dehydrated or malnourished. Contact your GP or midwife immediately if you:

- have very dark-coloured urine or do not pass urine for more than eight hours
- are unable to keep food or fluids down for 24 hours
- feel severely weak, dizzy or faint when standing up
- have abdominal (tummy) pain
- have a high temperature (fever) of 38°C (100.4°F) or above
- vomit blood
- repeated unstoppable vomiting
- have lost weight

This information is taken from the NHS Choices website. Further information is available on the NHS choices website and from www.pregnancysicknesssupport.org.uk. Pregnancy Sickness Support also offer a helpline: 024 7638 2020 or email: support@pregnancysicknesssupport.org.uk.

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Appendix 2- Pregnancy-Unique Quantification of Emesis (PUQE)

An objective and validated score of nausea and vomiting that can be used to classify/monitor the severity of symptoms.

<table>
<thead>
<tr>
<th>In the past 24 hours, how long have you felt nauseated or sick to your stomach?</th>
<th>Not at all (1)</th>
<th>1 hour or less (2)</th>
<th>2-3 hours (3)</th>
<th>4-6 hours (4)</th>
<th>More than 6 hours (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the past 24 hours have you vomited or thrown up?</td>
<td>7 or more times (5)</td>
<td>5-6 times (4)</td>
<td>3-4 times (3)</td>
<td>1-2 times (2)</td>
<td>Nil (1)</td>
</tr>
<tr>
<td>In the past 24 hours how many times have you had retching or dry heaves without bringing anything up?</td>
<td>No time (1)</td>
<td>1-2 times (2)</td>
<td>3-4 times (3)</td>
<td>5-6 hours (4)</td>
<td>7 or more times (5)</td>
</tr>
</tbody>
</table>

PUQE score: Mild ≤6; Moderate 7-12; Severe 13-15