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Management of Hyperemesis and Severe Nausea and Vomiting in Pregnancy

Introduction and Aim

To provide guidance on the ambulatory and inpatient care of women with troublesome vomiting in pregnancy

Objectives

- **To outline the initial assessment of patients presenting with vomiting in pregnancy**
- **To standardise the classification of severity of nausea and vomiting in pregnancy**
- **To provide guidance on the medical assessment and treatment of severe nausea and vomiting in pregnancy**

Scope

This policy applies to all healthcare professionals in all locations including those with honorary contracts

Equality Health Impact Assessment	*An Equality Health Impact Assessment (EHIA) has not been completed.*
Documents to read alongside this Procedure	
Approved by	*Gynaecology Professional Forum*

Accountable Executive or Clinical Board Director	*Ruth Walker, Executive Nurse Director*
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Summary of reviews/amendments			
Version Number	**Date of Review Approved**	**Date Published**	**Summary of Amendments**

Nausea and vomiting in pregnancy is a common symptom, occuring in around 70% of pregnancies. Mild and moderate NVP (86% of cases) is not thought to significantly harm mother or baby and often resolves spontaneously by 20 weeks with supportive care.

Severe nausea and vomiting occurs in up to 14% of pregnancies (with or without severe dehydration and electrolyte disturbance (1.5%)) and is associated with significant maternal and fetal morbidity and is a common reason for hospital admission in early pregnancy. It can be a source of psychosocial and financial morbidity, with feelings of guilt, depression, social isolation and suicidal ideation expressed. Post-traumatic stress disrder has also been reported in association with severe NVP.

Termination of wanted pregnancies because of severe NVP is thought to occur in 10-15% of cases. In those cases in which pregnancy is continued, there is an association with preterm labour, small-for-gestation age babies and low birthweight.

Diagnosis and Assessment

Severe NVP is diagnosed when

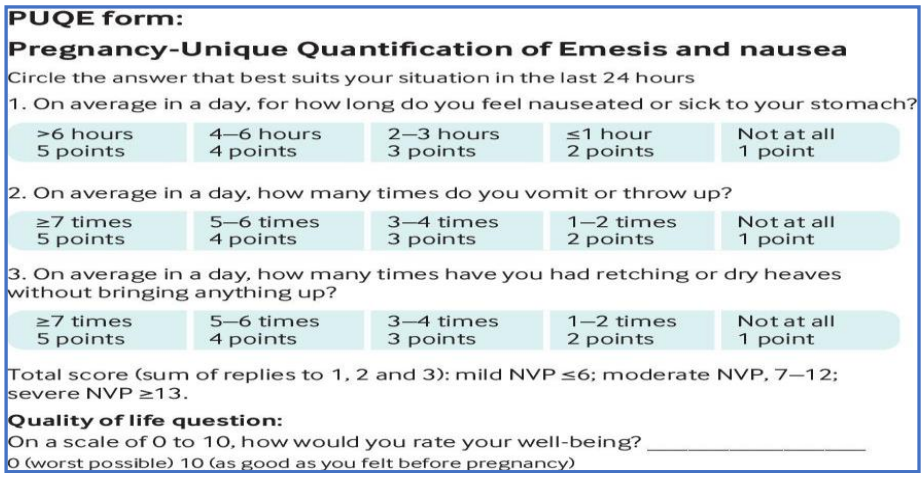
- there is protracted nausea and vomiting which does not respond to first-lin oral antiemetics
- symptoms start in the first trimester of pregnancy
- no other medical cause is identified (eg urinary tract infection, pancreatitis, cholecystitis, GERD)

Hyperemesis gravidarum is identified when severe NVP is complicated by

- significant weight loss (5% of pre-pregnancy weight)
- electrolyte imbalance and
- severe dehydration.

Obtain a complete medical history with specific attention to symptoms associated with other causes of nausea and vomiting in pregnancy. Do not diagnose NVP when symptoms begin after the first trimester. Previous sensitivity to antiemetics must be clearly documented.
Measure weight and height and calculate BMI.
Perform BP, pulse, temperature, respiratory rate. Document on NEWS chart in clinical pathway.
Perform clinical assesment of dehydration as per Figure 2.

Quantify symptoms using a PUQE score and record admission score in the clinical pathway.



PUQE form:

Pregnancy-Unique Quantification of Emesis and nausea

Circle the answer that best suits your situation in the last 24 hours

1. On average in a day, for how long do you feel nauseated or sick to your stomach?

>6 hours 5 points	4–6 hours 4 points	2–3 hours 3 points	≤1 hour 2 points	Not at all 1 point

2. On average in a day, how many times do you vomit or throw up?

≥7 times 5 points	5–6 times 4 points	3–4 times 3 points	1–2 times 2 points	Not at all 1 point

3. On average in a day, how many times have you had retching or dry heaves without bringing anything up?

≥7 times 5 points	5–6 times 4 points	3–4 times 3 points	1–2 times 2 points	Not at all 1 point

Total score (sum of replies to 1, 2 and 3): mild NVP ≤6; moderate NVP, 7–12; severe NVP ≥13.

Quality of life question:

On a scale of 0 to 10, how would you rate your well-being? _____

0 (worst possible) 10 (as good as you felt before pregnancy)

Obtain blood samples for baseline full blood count; urea, electolytes, and creatinine; and liver function tests. Consider thyroid function, amylase, blood glucose and blood ketone testing if indicated by medical history and in resistant/recurrent cases.
Perform urinalysis and send MSU sample for culture if signs of infection. Record urine ketones,if present, in clinical pathway.

Perform VTE risk assessment and prescribe required prophylaxis.

Consider pelvic ultrasound scan to confirm viable intrauterine pregnancy and rule out multiple pregnancy or trophoblastic disease.

Treatment – Outpatient

Patients should be managed as outpatients unless

1. There are significant medical comorbidities et Type 1 Diabetes; hyperthyroidism; evidence of infection such as UTI and patient unable to tolerate oral medication
2. They have been managed as outpatients twice without improvement in symptoms, particularly where there is continued weight loss, oliguria or electrolyte imbalances

3. There has been no benefit obtained from first and second line antiemetics

Manage patients based on PUQE and clinical assessments.

Mild NVP (PUQE< 6)

Advice re: fluid intake, avoidance of triggers, contact information for the ward

Prescribe TTOs: Cyclizine 50mg oral tds for 2/52
Metoclopramide 10mg tds for 5/7
Thimaine 50mg tds x 2/52

Moderate NVP (PUQE 7-12, evidence of dehydration)

Insert IV cannula – small bore

Parenteral antiemetics	Cyclizine 50mg i.m. or
	Stemetil 12.5mg i.m. or
	Ondansetron 4-8mg im/iv (second line only)
IV vitamins	Pabrinex I and II 1 vial of each stat
	(do not repeat if given within last week)
Rapid IV hydration	Hartmanns 1000mls over 2 hours *then*
	Normal saline with 20mmol potassium chloride 1000ml
	over 2 hours

Repeat PUQE score and urine ketones. Encourage small oral intake.

Discharge home if improving and able to tolerate fluid and /or diet. The presence of ketonuria should not deter discharge of an otherwise well women.
Ensure blood results are normal before discharging patient..
Provide thromboprophylaxis as recommended in VTE risk assessment guidance.

Prescribe medication to take home as per mild NVP. Avoid prescribing medication which has not worked in past, although first and second line drugs of different classes can be combined.
Consider adding Omeprazole 20mg od.
Provide ward contact information. Advise to self refer if unable to tolerate fluids, worsening vomiting despite medication, weight loss or decreased urine output.

Severe NVP (PUQE>13)

Manage initially as per moderate NVP.
Admit if no improvement on first or second level antiemetics or if evidence of electrolyte imbalance.

Perform observations a minimum of every 12 hours and doument these on the gynaecology NEWs chart.
Monitor fluid balance carefully.
Perform weight daily.
Ensure senior medical review (ST4 and above) at least once daily.
Prescribe regular antiemetics and titrate to symptoms.
If severe symptoms persist despite the above, consider intravenous hydrocortisone 100mg bd with conversion to oral prednisolone 50-60mg od when tolerated. Taper dose to lowest effective.
Prescribe omeprazole 20mg iv, converting to 20mg od when tolerating oral medication.
Prescribe low molecular weight heparin as per departmental protocol. Patient may need to be discharged on LMWH.

Protracted vomiting and electrolyte imbalance should prompt referral to dietician and consideration of parenteral nutrition if standard fluid and antiemetic regime is unsuccessful.
Central intravenous access (eg PICC line) may need to be secured.

Address the question of termination of pregnancy openly: women may be wary of mentioning that they are considering this option for fear of judgement or disapproval. Ensure all treatment options explored rapidly if termination of a wanted pregnancy is being considered for symptomatic relief.

Clinical improvement should be evaluated formally using

- PUQE score
- Fluid balance chart
- Urea and electrolytes
- Assessment of clinical dehydration
- Urine ketones – these correlate poorly with the severity of illness and should not be the sole determinant of the need for admission or readiness for discharge.

Patients who are discharged home should be provided with contact information and allowed to self-refer back to the ward if symptoms worsen.
If pregnancy is continues, women with severe NVP should be referred to a consultant antenatal clinic for ongoing care.

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