## Vd. Management of Nausea and Vomiting of Pregnancy (NVP)/ Hyperemesis Gravidarum (HG) as an In-patient



Initial assessment	
History:  Previous history of NVP/HG Ptyalism (hypersalivation) Weight loss Poor oral intake Effect on quality of life Effect on mental health/mood  Consider other causes in those with: Abdominal pain Urinary symptoms Infective symptoms Possible drug cause Chronic H. mylori infection  Examination: Observations: Heart rate Blood pressure Respiratory rate Physical examination: Signs of dehydration Signs of malnutrition Abdominal examination Neurological signs Pressence of confusion, nystogmus or catalla should raise suspiction of	Investigations:  Urine dipstick +/- MSU nitrites may indicate urinary tract infection  NB. Ketones are not a marker of dehydration  Urea and electrolytes to assess for hypo/hyperkalaemia, hyponatraemia, kidney injury  Full blood count infection, raised Hb or Hct may indicate dehydration  Blood glucose to assess for diabetes  In refractory cases:  Thyroid function tests  Liver function tests  Bone profile to monitor calcium and phosphate  Amylase to exclude pancreatitis  VBG to exclude metabolic disturbance
Diagnosis and severity assessment Document: PUQE	score /15 Weight kg
Diagnosis:  NVP:  onset of nausea and/or vomiting in early pregnancy with no other cause is identified  HG:  Nausea and vomiting (one of which is severe)  Onset <16 weeks' gestation Inability to eat and drink normally symptoms limit daily activity  PUQE-24 scoring system: In the last 24 hours: How long have you felt nauseated or sick to your stomach for?  How many times have you vomited?  How many times have you had retching or dry heaves?	Not at ≤1h 2-3hrs 4-6hrs >6hrs all [1] r[2] [3] [4] [5]  Ox 1-2x 3-4x 5-6x ≥7x [1] [2] [3] [4] [5]  Ox [1] 1-2x 3-4x 5-6x ≥7x [5] [2] [3] [4]
Admit if any of the following:  Admit if any of the following:  Any PUQE score plus:  Prescribe antiemetics IM or IV	
<ul> <li>Unresponsive to outpatient management</li> <li>Clinical dehydration</li> <li>Inability to tolerate oral intake</li> <li>Weight loss &gt;5% body weight</li> <li>Confirmed or suspected comorbidity e.g. UTI or diabetes mellitus</li> <li>Co-morbidity and unable to take medications e.g. hypoadrenalism, epilepsy, psychiatric disorder and HIV</li> <li>Prescribe IV fluids:         <ul> <li>0.9% saline with potassium chlorine guided by daily monitoring of electrolytes</li> <li>Prescribe thiamine supplementation either:</li></ul></li></ul>	
Antiemetic therapy	On discharge
1st Doxylamine and pyridoxine 20/20mg PO at night, increase to additional 10/10mg in line morning and 10/10mg at lunchtime if required.  Cyclizine 50 mg PO, IM or IV 8 hourly Prochlorperazine 5–10 mg 6–8 hourly PO (or 3 mg buccal); 12.5 mg 8 hourly IM/IV; 25 mg PR daily Promethazine 12.5–25 mg 4–8 hourly PO, IM or IV Chlorpromazine 10–25 mg 4–6 hourly PO, IM or IV	Up titrate antiemetic therapy and reassure regarding safety     Encourage oral hydration     Offer dietary advice eat little and often to prevent an empty stomach     Provide contact number for early pregnancy unit
2 <sup>nd</sup> Metoclopramide 5–10 mg 8 hourly PO, IV/IM/SC line Domperidone 10 mg 8 hourly PO; 30–60 mg daily PR	Up titration of antiemetics
Ondansetron 4 mg 8 hourly or 8 mg 12 hourly PO; 8 mg over 15 minutes 12 hourly IV;  16mg daily PR  Women taking ondansetron may require laxatives if constipation develops  3rd Hydrocortisone 100mg twice daily IV; then convert to prednisolone 40–50 mg daily PO,  line with the dose gradually tapered until lowest maintenance dose that controls the symptoms is reached  Corticosteroids should be reserved for cases where standard therapies have failed; when initiated they should be prescribed in addition to previously started antiemetics. Women taking them should have their BP monitored and a screen for DM	Initially select a 1st line antiemetic     Use combinations of drugs in women who do not respond to a single antiemetic     When up titrating add drugs as opposed to replacing them     different classes of drugs may have symergistic effects and some women will require a combination of 3+ antiemetics to control symptoms
Post-partum care, planning for future pregnancy and signposting	

- Patients with severe HG are risk of PTSD if required they should be referred to appropriate services
- In future pregnancy early use of lifestyle modifications should be used
- Pre-emptive use of doxylamine and pyridoxine can be used to reduce severity of disease in subsequent pregnancy 20/20mg PO at night to be started on confirmation of positive pregnancy test



- Pregnancy Sickness Support
- HER Foundation



