

#### GUIDELINE UPDATE NOV 2019 - KEY POINTS

- Ondansetron use before 10 weeks gestation has been associated with increased an incidence of cleft lip / palate (14/10,000 vs 11/10,000)
- Ondansetron should be used 4th line, only after failure of treatment with Cyclizine / Prochlorperazine / Metoclopramide.
- Women should be counselled that there is a very small increased risk of cleft lip / palate if prescribing Ondansetron before 10 weeks gestation (3 extra cases per 10.000 live births).
- Ketones should no longer be used in assessing women with Hyperemesis Gravidarum. They should not be a factor in deciding on admission / treatment or discharge planning.
- Alternatively, signs and symptoms of dehydration should be used i.e. reduced fluid intake, reduced urine output, BP and tachycardia, dry mucous membranes.

#### **Management of Hyperemesis Gravidarum**

Indications for day case treatment:

Unable to maintain hydration.

Weight loss of >5kg over time of hyperemesis

Indications for inpatient management:

Transfer/Transport problems

Intercurrent illness - diabetes, cardiac disease, UTI (as will need IV antibiotics)

More than 20 weeks pregnant

MEWS >2

Alert O and G reg if other pathology suspected, or if hyperthyroid, or has diabetes.

## **Daycase management of Hyperemesis Gravidarium**

### 1. On admission

Plan to admit for 4-5 hours for rehydration and antiemetics.

Admit to recliner.

Full MEWS chart on admission- alert medical staff if MEWS>2.

Site IV line (green venflon most appropriate). Obtain FBC, U and Es, LFTs, HCO<sub>3</sub>, glucose.

Alert O and G reg on 6017 if abdominal pain or Diabetic Ketoacidosis.

Arrange ultrasound to look for multiple pregnancy/ hydatidiform mole (non urgent).

### 2. Fluid and Electrolyte replacement

Commence NaCl 0.9% 1 litre with 20mmol KCl- no need to wait for U& Es. Give over 2 hours.

Correct any other electrolyte deficiency. Follow hospital guidance:

[http://intranet/new\\_intranet/resource?uid=8517](http://intranet/new_intranet/resource?uid=8517)

Give a further 1 litre NaCl 0.9% with KCl 20mmol over a further 2 hours.

**\*\*\* Avoid dextrose. Do not use NaCl 1.8% Do not give more than 10mmol KCl/ hour \*\*\***

### 3. Antiemetics

Give regularly rather than PRN. Combinations of antiemetics can be used.

First line: Cyclizine 50mg IM or orally 8 hourly.

Second line: Prochlorperazine 5-10mg oral 8 hourly or 12.5mg IM 8 hourly. 25mg/day rectally.

Third line: Metoclopramide 10mg IM /oral 8 hourly.

**\*\*\* Stop Cyclizine if starting Metoclopramide- these are antagonistic. Dystonic reactions can occur with metoclopramine -give Beztopine 1-2mg slow IV injection.\*\*\***

Add Thiamine 100mg/ day if need third line antiemetics/ persisting hyperemesis

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Fourth line: Ondansetron 4-8mg orally . 6-8 hourly; 8mg over 15mins IV 12 hourly; or 16mg PR for up to 5 days.

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#### 4. Thromboprophylaxis

Give TEDs- use at home and in hospital until well.

Consider Dalteparin if other risk factors.

#### 5. Additional treatment

Ranitidine 50mg IV

Folic acid if < 14 weeks - 400mcg od /5mg od if high risk.

#### 6. Nutrition

If able start with small portions of starchy or protein rich foods.

Foods with ginger may be helpful.

Avoid lying down for 2 hours after meals.

Cold food and drinks sometimes are helpful.

#### 7. Once rehydrated

Give supply of oral or PR antiemetics to take at home.

Remove cannula.

Give ward phone number in case of any problems overnight.

Arrange to review the following day- if still vomiting treat again as before, with repeat bloods and MEWS chart.

#### 8. Criteria for discharge

Vomiting better since last treatment.

No clinical signs of dehydration.

## **Inpatient management of Hyperemesis Gravidarum**

### 1. On admission

Admit to ward.

Full MEWS chart on admission- alert medical staff if MEWS>2.

Site IV line (green venflon most appropriate).

Obtain FBC, U and Es, LFTs, HCO<sub>3</sub>, glucose.

Alert O and G reg on 6017 if abdominal pain or Diabetic Ketoacidosis.

Arrange ultrasound to look for multiple pregnancy/ hydatidiform mole (non urgent).

### 2. Fluid and Electrolyte replacement

Commence NaCl 0.9% 1 litre with 20mmol KCl- no need to wait for U and Es. Give over 2 hours.

Correct any other electrolyte deficiency. Follow hospital guidance:

[http://intranet/new\\_intranet/resource?uid=8517](http://intranet/new_intranet/resource?uid=8517)

Give a further 1 litre NaCl 0.9% with KCl 20mmol over a further 2 hours.

**\*\*\* Avoid dextrose. Do not use NaCl 1.8% Do not give more than 10mmol KCl/ hour \*\*\***

Continue with rehydration NaCl 0.9 % and 20mmol KCL/litre until keeping down fluid eg 125ml/hr.

### 3. Antiemetics

Give regularly rather than PRN. Combinations of antiemetics can be used.

First line: Cyclizine 50mg IM or orally 8 hourly

Second line: Prochlorperazine 5-10mg oral 8 hourly, 12.5mg IM 8 hourly or 25mg/day rectally

Third line: Metoclopramide 10mg IM /oral 8 hourly

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**\*\*\* Stop cyclizine if starting metoclopramide- these are antagonistic  
Dystonic reactions can occur with metoclopramine -give Bestropine 1-  
2mg slow IV injection \*\*\***

Add Thiamine 100mg/ day if need third line antiemetics/ persisting hyperemesis

Fourth line: Ondansetron 4-8mg orally . 6-8 hourly; 8mg over 15mins IV 12 hourly; or 16mg PR for up to 5 days.

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#### 4. Thromboprophylaxis

**Dalteparin 5000iu regularly till discharge- adjust to weight If supply problems enoxaparin (in appropriate weight adjusted dose) can be used.**

Give TEDs

#### 5. Additional treatment

Ranitidine 50mg IV

Folic acid if < 14 weeks 400mcg od /5mg od if high risk

#### 6. Nutrition

If able to eat start with small portions of starchy or protein rich foods.

Foods with ginger may be helpful

Avoid lying down for 2 hours after meals

Cold food and drinks sometimes are helpful

#### 7. Refractory cases

Use oral meds where possible:

**Consultant decision only** - Hydrocortisone 50-100mg IV 12 hourly for 24-48 hours. OR Prednisolone 10-20mg 12 hourly- up to (60mg per day max). Reduce slowly by 5mg/day for 3 days then by 1mg/day to 20mg /day then by 1mg/ week.