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This Medicines Information Leaflet is produced locally to optimise the use of medicines by encouraging prescribing that is safe, clinically appropriate and cost-effective to the NHS.

Anti-emetic therapy in pregnancy: A guide to safe prescribing

Introduction

Nausea and vomiting is a common problem which can affect between 50 and 90% of pregnancies. Women are usually affected during their first trimester of pregnancy, from around 6 to 8 weeks gestation. Nausea and vomiting tends to subside after week 12 and rarely extends into the second trimester. Only 1% of pregnant women will develop symptoms severe enough to warrant a diagnosis of "hyperemesis gravidarum."

Hyperemesis Gravidarum is the term used to describe severe nausea and vomiting in pregnancy which is associated with weight loss and dehydration.

Key features of hyperemesis gravidarum can include:

- persistent vomiting
- weight loss of greater than 5% of the pre-pregnancy weight
- dehydration
- deranged electrolytes
- raised levels of ketones in the blood.

If the pregnant woman is unable to keep down at least 500ml of fluid in the last 24hours and has 1+ or more ketones in the urine, they should be referred to Urgent Gynaecology Clinic (UGC) or the Gynaecology Ward (GW).

A serious complication of hyperemesis gravidarum can be Wernicke's encephalopathy, caused by a thiamine deficiency as a result of excessive vomiting. Treatment, therefore, often requires fluid and vitamin replacement, in addition to antiemetic therapy.

Approved treatment options for nausea and vomiting in pregnancy:

The following drugs are commonly used to treat nausea and vomiting in pregnancy. There is little evidence to support one antiemetic over another; however, there are varying side effects between these drugs which should be taken into consideration.

	Drug	Dosage	Cautions
Antihistamines			
	Cyclizine	***50mg TDS orally 50mg TDS intramuscularly***	***Side-effects: drowsiness***
AND/ OR	***Prochlorperazine***	***5mg TDS orally 3mg—6mg BD buccally 12.5mg TDS intramuscularly***	***Side-effects: drowsiness, extrapyramidal effects including dystonia's***
NB: *cyclizine & metoclopramide have an antagonistic effect and therefore this combination should be avoided.*			
Dopamine Antagonists			
	Metoclopramide	***10mg TDS orally 10mg TDS intramuscularly 10mg TDS intravenously***	***Side-effects: extrapyramidal effects (especially in children and young adults 15–19 years old)***
OR	***Domperidone***	***10mg TDS orally***	***Side-effects: extrapyramidal effects***
Caution: *Domperidone now has a MHRA warning attached, contra-indicating its use in patients at risk of QT-prolongation or with cardiac disorders.*			
$5HT_3$ Antagonists			
	Ondansetron	***4mg—8mg BD orally 4mg—8mg BD intramuscularly/ intravenously***	***Side-effects: susceptibility to QT-interval prolongation***
Corticosteroids			
	Prednisolone (If tolerating oral administration) OR Hydrocortisone (If not tolerating oral administration. Convert to oral prednisolone when appropriate)	***40mg – 50mg OM orally (followed by reducing regimen) 100mg BD IV***	***To be prescribed by senior clinicians as last-line option***

Intravenous Fluid Therapy:

- Initially, the preferred fluid would be 20mmol of Potassium Chloride in 1L of sodium chloride 0.9%
- Appropriate choices for fluid replacement also include sodium chloride 0.9% and Hartmann's solution for injection (sodium lactate intravenous infusion, compound).
- Fluids containing glucose should be avoided as intravenous glucose can precipitate Wernicke's encephalopathy in patients with a thiamine deficiency.
- Whilst fluid replacement is taking place electrolytes should be checked, at least, on alternate days.

Thiamine (vitamin B1):

Wernicke's encephalopathy can be prevented and treated by replacing thiamine. Thiamine should be given to all women who have suffered from persistent vomiting.

- Oral thiamine is poorly absorbed and therefore doses should be split in order to improve absorption. E.g. Thiamine 25-50mg BD - TDS
- If the patient cannot tolerate oral thiamine, an intravenous vitamin B preparation should be used e.g. Pabrinex®. (For doses, see BNF)
- Women with nausea and vomiting symptoms should be started on high- dose folic acid 5mg OD in order to prevent neural tube defects in the neonate.

Pyridoxine (vitamin B6):

- Pyridoxine is an alternative option, used in doses of 10 – 25mg TDS.

Corticosteroids:

The evidence base for the use of corticosteroids is controversial. As a result, the general consensus is that corticosteroid treatment should be initiated by a specialist as a last-line treatment option when standard therapies have failed. Corticosteroid therapy should be discontinued after three days if no clinical improvement is seen. Furthermore, if treatment with corticosteroids is successful, therapy should continue at the lowest dose to provide symptom control and for the shortest possible duration. A typical dosing regimen for this indication is hydrocortisone IV 100mg BD followed by prednisolone PO 40 to 50mg OM when symptoms show improvement, the oral dose should then be tapered down, gradually.

Ginger:

In recent years, systematic reviews have been carried out to assess the data; Ginger has been found to be significantly better at reducing the frequency of nausea and vomiting than placebo. The majority of trials used a maximum of 1 g of ginger daily (often as a divided dose of 250mg QDS). This is deemed to be a safe and effective dose.

Ginger biscuits were also found to reduce nausea in pregnant women when compared with placebo.

As with all herbal medications, the associated drug interactions should be taken into account on a patient-by-patient basis and therefore this treatment may not be suitable for all women.

A full guideline can be found on the maternity intranet page. Or, please click here.

References

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