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Aspiration Prevention in Obstetrics Policy

Hutt Maternity Policies provide guidance for the midwives and medical staff working in Hutt Maternity Services. Please discuss policies relevant to your care with your Lead Maternity Carer.

Purpose

Pregnant women are at increased risk of gastric regurgitation – the risk during general anaesthesia for caesarean section being approximately five times higher than in the general surgical population.

In the Peripartum period there is a chance of requiring general anaesthesia and therefore a risk of pulmonary aspiration and pneumonitis (Mendelson's syndrome). Once the potential need for surgery is identified, pregnant women should receive ranitidine prophylaxis to reduce the acidity and volume of stomach contents in order to reduce the harm associated with pulmonary aspiration.

Scope

- All obstetric and midwifery staff employed by Hutt Valley DHB
- All Hutt Valley DHB maternity access agreement holders
- Anaesthetic staff
- Day Surgery Unit staff

Assessing Risk

Women at higher risk will be identified by a clinical assessment that takes in to account pre-existing risk factors, the likelihood of needing to go to theatre and the potential for difficulty with anaesthesia.

Risk factors may include, but are not limited to:

- Previous caesarean section
- Previous post-partum haemorrhage or retained placenta
- Previous anaesthetic problems or predicted difficult airway management
- Breech presentation
- Multiple pregnancy
- Diabetes
- Obesity (BMI > 35)
- Intra-uterine growth restriction or other chronic foetal compromise
- Pre-eclampsia
- Failure to progress in labour, persisting malposition or unengaged head
- Acute foetal compromise

- Systemic opioid administration
- Antepartum haemorrhage

Ranitidine: Ranitidine is a selective histamine H₂-receptor antagonist that decreases the acidity and volume of gastric acid. Time until onset of action is 1 hour; duration of action 24 hours.

Sodium Citrate: Sodium citrate is a non-particulate antacid that neutralises gastric acid that is already present in the stomach. Onset of action is immediate; duration of action 10 minutes.

Metoclopramide: Metoclopramide is a dopamine antagonist that reduces nausea and vomiting and increases gastric emptying.

Guideline

Indications

- Pregnant women who are more likely to need surgery based on clinical assessment and/or pre-existing risk factors.
- Women booked for elective caesarean section.

Exclusions

- Other indications for the use of ranitidine, (for example, symptomatic relief of gastro-oesophageal reflux disease).

Contra-indications

- Allergy to Ranitidine.

Risks and Precautions

- Renal impairment may need dose reduction if severe.
- Acute porphyria may precipitate acute porphyria attacks.

Procedures

Elective caesarean section

- Ranitidine 300mg should be given to women booked for elective caesarean section.
- Instructions should be given to take this at 6am the morning of their planned caesarean section.

Oral administration for high risk women

Oral Ranitidine 300mg once daily should be prescribed in the 'Regular Medicine' section of the 'National Medication Chart' as soon as there is thought to be a significant risk of progressing to caesarean section or other operative intervention. A low threshold for prescribing is appropriate when women have pre-existing risk factors. If not given prior, it should be administered as soon as the decision for operative intervention is made.

- Administration should continue for the duration of the delivery suite admission, ceasing after birth when there is a low postnatal risk of needing to go to the operating theatre.

Intravenous administration for high risk women (Anaesthetist only)

- Ranitidine 50mg intravenous (IV) injection may be a more appropriate mode of administration if:
 - the woman is under general anaesthesia in the operating theatre
 - **and** no oral Ranitidine has been given

Sodium Citrate

- Due to a short duration of action sodium citrate is only indicated for anaesthetic administration in the operating theatre immediately before induction of general anaesthesia and should not be given at other times.

Metoclopramide

- Due to limited evidence of benefit in preventing aspiration in obstetrics, Metoclopramide should not be given routinely.

References

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Informed Consent

The right of a consumer to make an informed choice and give informed consent, including the right to refuse medical treatment, is enshrined in law and in the Code of Health and Disability Consumers' Rights in New Zealand. This means that a woman can choose to decline treatment, referral to another practitioner, or transfer of clinical responsibility. If this occurs follow the process map on page 18 of the Referral Guidelines (Ministry of Health, 2012).