

# GUIDELINE for PROPHYLAXIS of ACID ASPIRATION for MATERNITY PATIENTS



<b>TARGET AUDIENCE</b>	Any healthcare provider managing pregnant patients requiring anaesthesia
<b>PATIENT GROUP</b>	Any pregnant patient requiring anaesthesia, Any pregnant patient in labour at risk of regurgitation/aspiration

## Clinical Guidelines Summary

- Obstetric patients are at increased risk of regurgitation and aspiration of gastric contents during anaesthesia compared to the non-pregnant population.
- By reducing the volume and raising the pH of gastric contents the possibility and severity of aspiration are minimised.
- The appropriate acid prophylaxis depends on the potential anaesthetic input required.

## Guideline Body

This section will normally contain more detailed information to support summary and should have a **content** list to start with in this section.

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<b>Lead Author</b>	<b>H Fulton (Clinical Pharmacist)</b>	<b>Date approved</b>	<b>May 2025</b>
<b>Version</b>	<b>2</b>	<b>Review Date</b>	<b>May 2028</b>

**Introduction:**

Obstetric patients are at increased risk of regurgitation and aspiration of gastric contents during anaesthesia compared to the non-pregnant population. By reducing the volume and raising the pH of gastric contents the possibility and severity of aspiration are minimised. The appropriate acid prophylaxis depends on the potential anaesthetic input required.

**Risk factors for aspiration:**

Individuals in labour who meet one or more of the following criteria and are at risk of requiring a general anaesthetic during the intrapartum period:

Maternal factors:

- oxytocin infusion for induction or augmentation of labour
- previous lower segment caesarean section (CS)
- pre-eclampsia
- significant antepartum haemorrhage (APH)
- significant PPH with increased risk of needing anaesthesia
- epidural analgesia in labour
- remifentanyl PCA
- awaiting transfer to theatre for manual removal of placenta or perineal tear repair

Fetal factors:

- growth-restricted fetus < 2 kg
- oligohydramnios (AFI < 5cm)
- suspicious or pathological cardiotocograph (CTG)
- significant meconium staining of liquor

OR increased anaesthetic risk:

- raised body mass index (BMI >35)
- contraindication to regional anaesthesia (e.g. thrombocytopenia, previous back surgery with metalwork)

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## Management

Indication	Drug/Dose	Route	Frequency
<b>All at risk patients in labour *</b>	Omeprazole 20mg	Oral	12 hourly until delivery of the placenta, up to a maximum of 3 doses.
<b>Elective Operative Procedure (including caesarean section) *</b>	Omeprazole 20mg	Oral	2 doses before surgery: 1 <sup>st</sup> at 2200 hours the night before surgery 2 <sup>nd</sup> at 0600 hours on the morning of surgery
<b>Emergency/Urgent Procedure in Theatre (including caesarean section) General or Regional Anaesthesia</b>	Omeprazole 40mg	Intravenous	Not required if administered oral omeprazole within the last 12 hours.  Follow Medusa instructions for preparation of infusion  Intravenous omeprazole takes at least 20minutes to infuse and does not affect existing stomach secretions therefore sodium citrate is also required for these patients
	AND  Sodium Citrate 0.3M solution 30ml	Oral	To be given no more than 30minutes before induction of anaesthesia
* See PGD "Supply/Administration of Omeprazole Pre Caesarean Section by Midwives" for details of criteria for midwife supply and administration without a prescription within maternity services.			

**IF THERE ARE ANY QUERIES REGARDING ANY PATIENT'S ANTACID PROPHYLAXIS, PLEASE CONTACT THE ON CALL ANAESTHETIST (PAGE 134).**

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## References/Evidence

Calthorpe N, Lewis M. Acid aspiration prophylaxis in labour: a survey of UK obstetric units. Int J Obstet Anesth. 2005 Oct;14(4):300-4. doi: 10.1016/j.ijoa.2005.04.011. PMID: 16154737.

Caesarean birth - NICE Clinical guideline (NG192) January 2024

<https://www.nice.org.uk/guidance/ng192>

Intrapartum care - NICE Clinical guideline (NG235) September 2023

<https://www.nice.org.uk/guidance/ng235>

Intrapartum care for women with existing medical conditions or obstetric complications and their babies - NICE Clinical guideline (NG121) April 2019

<https://www.nice.org.uk/guidance/ng121>

Practice guidelines for Obstetric Anaesthesia: An updated report by the American Society of Anesthesiologists Task Force on Obstetric Anaesthesia. Anesthesiology 2016; 124; page 270-300 <https://doi.org/10.1097/ALN.0000000000000935>

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## Appendices

### 1. Governance information for Guidance document

<b>Lead Author(s):</b>	H Fulton
<b>Endorsing Body:</b>	ADTC
<b>Version Number:</b>	2
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CONSULTATION AND DISTRIBUTION RECORD	
<b>Contributing Author / Authors</b>	
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<b>Distribution</b>	

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CHANGE RECORD			
Date	Lead Author	Change	Version No.
October 2020	Dr H McKay (Anaesthetics) + H Fulton (Pharmacist)		1
June 2024	H Fulton (Pharmacist)	Omeprazole dose for active labour changed to 20mg in line with agreed dosing in the Maternity Omeprazole PGD to remove dosing discrepancies/conflicts. Added the "at risk" criteria from the omeprazole PGD to make it clearer which patients require acid prophylaxis, to standardize practice.	2
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			4
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**2. You can include additional appendices with complimentary information that doesn't fit into the main text of your guideline, but is crucial and supports its understanding.**

e.g. supporting documents for implementation of guideline, patient information, specific monitoring requirements for secondary and primary care clinicians, dosing regimen/considerations according to weight and/or creatinine clearance

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