

## **Antacid Prophylaxis in Obstetric Anaesthesia**

Obstetric patients are at increased risk of aspiration of gastric contents during anaesthesia when compared with the non-pregnant population. This is because progesterone causes relaxation of the musculature at the gastro-oesophageal junction and delayed gastric emptying. In addition increased intra-abdominal pressure, due to the gravid uterus, tends to force stomach contents upwards.

By reducing the volume and raising the pH of gastric contents, this helps to minimise the possibility of aspiration and the damage that will be done if it occurs.

For elective procedures the standard starvation times (6 hours for solids, 4 hours for liquids and 2 hours for water) should be observed. However, this is not possible for more urgent procedures where there is a pathological CTG, bleeding or any other life threatening condition. In addition, it is known that the stomach does not empty well during labour, particularly when opiates have been given, so there may be no benefit in delaying action. If in doubt, seek advice from the consultant anaesthetist on-call.

### **Management:**

#### **1. Elective Procedures (starved woman):**

Ranitidine 150mg orally x 2, one dose to be taken the night before and the second dose on the morning of surgery

**Or** Ranitidine 300mg orally at least 2 hours before surgery

**Or** Ranitidine 50mg IV at least 30 minutes before surgery

#### **High risk patients in labour (see appendix 1):**

Ranitidine 150mg orally 6hrly

#### **3. Urgent or emergency procedures:**

##### *General anaesthesia:*

Ranitidine 50mg IV as soon as the possibility of surgery is known unless oral ranitidine has been started more than 2 hours previously.

Sodium Citrate 30mls 0.3M orally just before transfer to the operating table.

*Regional anaesthesia:*

Ranitidine 50mg IV as soon as the possibility of surgery is known unless oral ranitidine has been started more than 2 hours previously

Sodium citrate 30mls 0.3M orally just before transfer to operating table if oral ranitidine has not been given or less than 30 minutes has elapsed since the IV ranitidine was given

**Notes:**

1. IV ranitidine takes 30 minutes to have an effect in raising the pH of gastric contents. It is important for anaesthetists, obstetricians and midwives to liaise closely so that women who are likely to be transferred to theatre can be given IV ranitidine as soon as the possibility of surgical intervention is evident.
2. Oral ranitidine takes 90 – 120 minutes to work so if less than 2 hours have elapsed since the first dose of oral ranitidine an IV dose should be given as well.
3. Administration of IV ranitidine should not delay transfer to theatre in urgent cases.

Sodium citrate should be given and the ranitidine added as soon as possible.

4. Sodium citrate should ideally be given just before transfer to the operating table as the movement promotes mixing with stomach contents.

**Appendix 1:**

**Women at high risk of surgical intervention requiring antacid prophylaxis in labour**

- a. BMI > 40 at booking
- b. Multiple pregnancy
- c. Breech presentation
- d. Oxytocin for augmentation
- e. Pathological CTG / fetal scalp pH done
- f. Significant meconium staining of liquor
- g. Some women with epidural analgesia (consult anaesthetist)