This guideline has been prepared with reference to the following:

NICE. Caesarean section. London: NICE, 2004

**Is general anaesthesia for caesarean section as safe as regional anaesthesia?**

A Cochrane systematic review of 16 studies in 1586 women (Afolabi, 2006) found no significant differences for a range of maternal or neonatal outcomes between regional and general anaesthesia. Women having regional anaesthesia were found to have a significantly lower difference between pre and postoperative haematocrit (WMD 1.70, 95% CI 0.47 to 2.93, one trial, 231 women) and (WMD 3.10, 95% CI 1.73 to 4.47, one trial, 209 women). They also had a lower estimated maternal blood loss (WMD -126.98 millilitres, 95% CI -225.06 to -28.90, two trials, 256 women) and (WMD -84.79 millilitres, 95% CI -126.96 to -42.63, two trials, 279 women). More women preferred to have general anaesthesia for subsequent procedures when compared with epidural (OR 0.56, 95% CI 0.32 to 0.96, one trial, 223 women) or spinal (OR 0.44, 95% CI 0.24 to 0.81, 221 women). The incidence of nausea was also less for this group of women compared with epidural (OR 3.17, 95% CI 1.64 to 6.14, three trials, 286 women) or spinal (OR 23.22, 95% CI 8.69 to 62.03, 209 women). No significant difference was seen in terms of neonatal Apgar scores of six or less and of four or less at one and five minutes and need for neonatal resuscitation with oxygen.

A study in 303,834 Taiwanese women (Tsai, 2011) found general anaesthesia (GA) was associated with a higher risk of surgical site infection, compared with neuraxial anaesthesia (NA): (multivariate-adjusted OR of having post-CD SSIs in the GA group was 3.73 (95% CI, 3.07-4.53) compared with the NA group (P<0.001)

Afolabi BB, Lesi AF, Merah NA. Regional versus general anaesthesia for caesarean section. Cochrane Database of Systematic Reviews 2006, Issue 4. Art. No.: CD004350


**Evidence Level: I**

The risk of failed intubation in the obstetric population is approximately 10 times greater than in the non-obstetric population?

A retrospective case study (Samsoon, 1987) found the incidence of failed intubations in the obstetric group over a 3-year period was seven out of 1980 cases (1/282), whereas in the surgical group the results were six out of 13,380 patients (1/2230). This equates to an incidence approximately 8 times greater in the obstetric population.

Another retrospective survey, carried out over a 6-year period (1993 -1998) in the South Thames (West) region (Barnardo, 2000), recorded 36 failed tracheal intubations occurring in 8970 obstetric general anaesthetics (incidence 1/249). There was no significant difference in the incidence of failed tracheal intubation in each of the six years. The results of this survey give an overall 6-year incidence of failed tracheal intubation in obstetrics of 1/249 (95% CI 1/370±1/187).

Barnardo PD, Jenkins JG. Failed tracheal intubation in obstetrics: a 6-year review in a UK region. Anaesthesia 2000;55:690-4


**Evidence Level: IV**

**Antacids are indicated, to reduce the risk of gastric aspiration?**

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A Cochrane systematic review of 22 studies in 2658 women (Paranjothy, 2010) found that, compared to no treatment or placebo, there was a significant reduction in the risk of intragastric pH < 2.5 with antacids (RR 0.17, 95% CI 0.09 to 0.32, two studies, 108 women). The combined use of 'antacids plus H₂-antagonists' was associated with a significant reduction in the risk of intragastric pH < 2.5 at intubation when compared with placebo (RR 0.02, 95% CI 0.00 to 0.15, one study, 89 women) or compared with antacids alone (RR 0.12, 95% CI 0.02 to 0.92, one study, 119 women).

Paranjothy S, Griffiths JD, Broughton HK, et al. Interventions at caesarean section for reducing the risk of aspiration pneumonitis. Cochrane Database of Systematic Reviews 2010, Issue 1. Art. No.: CD004943

Evidence Level: I

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