In adults, what are the effects of different preoperative fasting regimens (duration, type, and volume of permitted intake) on perioperative complications and patient wellbeing?

**METHODS**

Questions of interest included (1) general anaesthesia or those at high risk of regurgitation or aspiration during anaesthesia, (2) studies of healthy patients having general anaesthesia or those at high risk of regurgitation or aspiration during anaesthesia, (3) trials included patients considered to be at a higher risk of regurgitation or aspiration (ie, pregnant, postpartum, obese, elderly, or had gastric disorders) (4) evidence is lacking that adults given fluids 1.5 to 3 hours preoperatively have a greater risk of aspiration or regurgitation than those who have a standard fast.

**MAIN RESULTS**

22 trials (38 randomised controlled comparisons, n = 2270) met the selection criteria. 15 trials reported patients' experience of the fasting process (ie, thirst, hunger, pain, nausea, vomiting, and anxiety). Most trials focused on generally healthy patients not thought to be at increased risk of regurgitation or aspiration during anaesthesia, although 3 trials included patients considered to be at a higher risk (obese patients in 1 trial and postpartum women in 2 trials). Trials primarily examined patients having elective surgery. Few trials reported outcomes of aspiration, regurgitation, or related morbidity; intraoperative gastric volume and pH were more common outcomes. 6 trials compared a shortened fluid fast (fluids given 1.5 to 3 h preoperatively) with a standard fast, and none reported any aspiration or regurgitation. 24 comparisons examined a shortened fluid fast v a standard fast and found no differences in volume or pH of gastric contents. Fluids permitted preoperatively included water, coffee, fruit juice, clear fluids, and other drinks. In 9 comparisons, patients given a drink of water preoperatively (n = 319) had a lower volume of intraoperative gastric contents than those who had a standard fast (n = 292) (weighted mean difference –6.16 ml 95% CI –9.41 to –2.91). 24 comparisons examined different volumes of preoperative intake (ie, low, medium, high, or unlimited) versus a standard fast and found no differences in perioperative outcomes.

**CONCLUSION**

Evidence is lacking that adults given fluids 1.5 to 3 hours preoperatively have a greater risk of aspiration or regurgitation than those who have a standard fast.
Review: evidence is lacking that adults given fluids 1.5 to 3 hours preoperatively have greater risks of aspiration or regurgitation than those given a standard fast

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