

EXTRACTS FROM THE JOURNALS

*Dr Henk Haisma, University Hospital Groningen,
PO Box 30001, 9700 RB Groningen
e-mail H.J.Haisma@anest.azg.nl*

PREOPERATIVE FASTING

The duration of fasting before elective surgery remains an area of debate. Two editorials and one paper about fasting before surgery concluded that in patients scheduled for an elective operation the rule “nil per mouth after midnight” should be abandoned. Instead, both day-cases and inpatients, may take clear fluids by mouth up to 2 hours before surgery. There were no differences in gastric fluid volume or pH between patients who were allowed to drink free clear fluids until 2 hours before surgery (up to the time of premedication) and a control group who were fasted for 6 hours. However it should be noted that patients with factors likely to delay gastric emptying, such as pregnancy, trauma or opioid administration were excluded from the study. In addition, one would not advocate abandoning rapid sequence induction with cricoid pressure in those patients who come for emergency operations “with a full stomach”.

1. Strunin L. How long should patients fast before surgery? Time for new guidelines. *British Journal of Anaesthesia* 1993;70:1-3

2. Brock-Utne JG. Clear fluids, not breakfast, before surgery. *Acta Anaesthesiologica Scandinavica* 1996;40:549-53

3. Philips S et al. Preoperative drinking does not affect gastric contents. *British Journal of Anaesthesia* 1993;70:6-9

MANAGEMENT OF RAISED INTRACRANIAL PRESSURE

A recent review by Pickard and Czosnyka [1] summarises the pathophysiology of patients with severe head injuries. Although the monitoring techniques described in the article may not be widely available for readers of *Update* the management strategies mentioned are very clear. The details on preventing intracranial hypertension in terms of general medical and nursing care is particularly useful.

The posture that the patient is nursed in is of great importance, bearing in mind venous drainage and cerebral perfusion pressure (see *Update* Number 8). Hypovolaemia should be avoided and a stable circulation maintained. Colloid, with an adequate plasma half life should be combined with careful electrolyte replacement.

Hyperpyrexia and hyperglycaemia should be avoided. Osmotic diuretics (mannitol) removes

water from both normal and oedematous brain, and its effects may be potentiated by adding frusemide. However it is crucial to avoid dehydration and hypotension. Mannitol should not be given if serum osmolarity exceeds 330mmol/l, or serum Na⁺ exceeds 160mEq/l.

Aggressive hyperventilation may precipitate cerebral ischaemia. Systemic hypertension should not be treated directly with sodium nitroprusside. The majority of neurosurgical patients with

hyponatraemia do not have inappropriate secretion of ADH and it is unwise to use fluid restriction to treat them even if they do. External ventricular drainage is a rapid procedure in a patient with hydrocephalus. There is a very restricted place for decompressive craniotomy following head injury. There is no benefit in using high dose steroids in head injury patients.

1. Pickard JD, Czosnyka M. Management of raised intracranial pressure. *Journal of Neurology, Neurosurgery and Psychiatry* 1993;56:845-858)