With institutional approval and informed consent, 120 patients of ASA class 1-3, aged >18 yr, presenting for surgery were included. Stage I of the trial allowed investigators to familiarize themselves with Diprifusor® TCI (20 patients). Stage II was an open, randomized, multi-centre trial comparing Diprifusor® TCI with manually-controlled infusion of Diprivan 1% (100 patients). Only patients in Stage II were included in analyses. Routine clinical monitoring was commenced. Induction of anaesthesia was achieved by selecting a target concentration (TCI) or a bolus dose (manually-controlled infusion). Target concentrations and infusion rates were adjusted as required during surgery. Other drugs, including sedatives, analgesics, nitrous oxide and muscle relaxants were given as required. The induction time (time to loss of response to command), induction dose, total dose and recovery times (time to eye opening on command and orientation to time and place following cessation of infusion), technical problems and adverse events were noted.

Descriptive data from 83 patients analysed so far are presented. No adverse events have been reported.

	Diprifusor®	Manual infusion
Number of patients (n)	42	41
Target concentration at		
induction (μg/ml)	$6.5 \pm 2.6$	_
Induction time (s)	$66 \pm 31$	$54 \pm 17$
Induction dose (ml)	$13 \pm 5$	$18 \pm 12$
Total Diprivan®		
1% infused (m/l)	$83 \pm 43$	$82 \pm 43$
Time to eyes open (min)	$14.7 \pm 10.7$	$10.7 \pm 7.0$
Time to orientation (min)	$21.8 \pm 15.1$	$18.0 \pm 15.2$
Technical problems (n)	2	3

Target-controlled infusion of Diprivan® using the Diprifusor®, and manually-controlled infusion of Diprivan® appear to have similar safety and efficacy in this study.

## ANAESTHESIA: A POSTOPERATIVE REVIEW

Thomas Smith, Guy Ludbrook, Graham van Renen. University of Adelaide and Royal Adelaide Hospital, South Australia.

Knowledge of the patients' experiences of anaesthesia are important when reviewing the quality of anaesthesia care. Therefore 195 patients undergoing elective surgery at a public metropolitan hospital were interviewed on Day 1. Questions related to: (a) the background/role of the anaesthetist, (b) experiences of anaesthesia, (c) medical complications.

The results indicate that:

(a) Patients generally had a poor knowledge of

anaesthesia with 25% unaware an anaesthetist is medically qualified and 54% knowing only that an anaesthetist induces "sleep".

- (b) Patients had a high opinion of the service provided (<5% rated the service as poor). Fears about anaesthesia were common (30%). These fears were: PONV (31%), not awakening (26%), medical complications (21%) and pain (7%). Over half the patients had their fears reduced by seeing an anaesthetist. 50% of patients saw an anaesthetist in outpatients. These patients had improved knowledge of anaesthesia (P<0.05), and over 80% were not bothered by being anaesthetized by a different anaesthetist. A video on anaesthesia offered in outpatients was seen by 54% and felt helpful by 71% of these, but retention of information appeared poor.
- (c) The incidence of medical complications was: nausea 38%, vomiting 31%, sore throat 38%, headache 31%, shivering 33%, awareness 0%, uncomfortable degree of thirst 30%, unaffected by duration of fasting from liquids, (P=0.8).

Overall, there seems to be little difference either in patients' knowledge of anaesthesia or the profile of complications (apart from an increase in shivering) when compared to Australia in 1982. PONV remains a justifiably feared complication. It was evident, however, that an effective preoperative consultation can reduce patient fears, and improve their knowledge of anaesthetists and anaesthesia. It was also apparent that a postoperative visit was welcomed by patients and allowed both anaesthetist and patient useful insight into anaesthetic practice.

## Reference

1. Burrows BJ. Anaesth Intensive Care 1982; 10:20-24.

## CEREBRAL BLOOD FLOW RESPONSES TO ACUTE HYPERCARBIA IN AWAKE SHEEP

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There are relatively few studies examining the time-course and magnitude of changes in CBF following acute changes in P<sub>a</sub>CO<sub>2</sub> in the awake subject. The effect of hypercarbia on CBF was therefore examined in awake sheep.

Five Merino ewes were instrumented under general anaesthesia with a Doppler flowmeter and two arterial lines (for measurement of CBF<sup>1</sup>, MAP and arterial gas analysis, respectively). One week postoperatively, all parameters were measured while animals breathed spontaneously via an open circuit. Initially, the time-course of the CBF response to