Correspondence

Positive suggestion during surgery reduces post hysterectomy emesis

In some areas of anaesthetised brain information may be registered, processed or both,¹ leading to positive intraoperative suggestion to control post operative nausea and vomiting. However, these studies failed to establish a conclusive cause and effect relationship^{2,3} due to a lack of specificity of suggestions and standardisation for anaesthetic techniques/surgical procedures. We studied 50 ASA I or II patients, undergoing elective abdominal hysterectomy, for the effect of specific positive therapeutic suggestions on episodes of emesis. Patients were divided into two groups of 25 patients (Table). All patients received 4–5 mg·kg⁻¹ thiopentone for induction of anaesthesia and 0.1 mg·kg⁻¹ vecuronium to facilitate intubation and relaxation. Anaesthesia was maintained with O₂/N₂O (FiO₂ 0.35) and halothane 1–2%. Positive suggestions (consisting of a male voice in the patients dialect) were played via head phones throughout anaesthesia to Group II patients only while a blank tape was played to Group I. Emetic episodes (vomiting and/or retching) were recorded in the recovery area and over the first 24 hours in the ward by a person blind to the groups. Patients with two or more emetic episodes were administered metoclopramide 0.25 mg·kg⁻¹ *iv*. Postoperative pain was relieved with diclofenac sodium 1 mg·kg⁻¹ *im* on demand. Data were analysed using “Z” test.

None of the patients recalled the use of audiotape. Intraoperative suggestions reduced the incidence and severity of post-hysterectomy emetic episodes.

REFERENCES

- 1 Block RJ, Ghoneim MM, Sumpster ST, Ali MA. Human learning during general anaesthesia and surgery. *Br J Anaesth* 1991; 66: 170–8.
- 2 Millar K. Efficacy of therapeutic suggestions presented during anaesthesia: re-analysis of conflicting results. *Br J Anaesth* 1993; 71: 597–601.
- 3 Liu WHD, Standen PJ, Aitkenhead AR. Therapeutic suggestions during general anaesthesia in patients undergoing hysterectomy. *Br J Anaesth* 1992; 68: 277–81.

M. Maroof MD, S. Moied Ahmed MD,
Rashid M. Khan MD, S. Bano MD, A.W. Haque MD
Department of Anaesthesiology, King Fahad National
Guard Hospital, Riyadh, Kingdom of Saudi Arabia.

Output from a Drager Vapor 19.1 on a moving trolley

We commonly transport anaesthetised children from an induction room to the operating room on a trolley equipped with an oxygen cylinder and a rigidly mounted Drager Vapor 19.1 halothane vaporizer. In order to determine whether or not this alters halothane delivery, we compared the output of two such vaporizers when stationary and in motion. Under similar circumstances a Fluotec vaporizer (model unspecified) has been reported to cause no clinically relevant variation in delivered halothane concentration.¹

We collected gas into large plastic bags as our trolley was moved along a standardised route through our operating suite. An Ohmeda 5250 Respiratory Gas Monitor was used to measure the halothane concentrations. Twenty-eight pairs of vapour (stationary and in motion) from clinically relevant combinations of fresh gas flow and vaporizer dial settings were analysed from the first vaporizer. There was no clinically significant difference between the output during motion and the performance when stationary. However the output consistently measured 0.5% greater than the dial setting for 1, 2 and 3 % halothane at all flows. To confirm our findings, six further pairs of vapour were collected from a second vaporizer. The figure shows the mean and upper limit of measured halothane concentration.

Although we confirmed that our usual clinical practice does not change halothane delivery, an unexpected

TABLE

Groups	Emetic incidents	Emetic episodes	Rescue antiemetic
	n & %	n per pt.	n & %
I (No suggestion) n-25	15 (60%)*	3.1 ± 1.2*	10* (66.6%) 10/15
II (Suggestion) n-25	9 (36%)	1.7 ± 0.6	2 (22.2%) 2/9

* $P < 0.05$