This particular pocket computer has several other facilities; diary, calculator, database and is programmable. Commercial programs which perform other functions, e.g., spreadsheet and finance packs may be bought. A bar-code reader may also be attached to the communications link and provides portable database of coded items. The programmable feature allows useful and varied procedures to be writen, e.g., drug dosages for different age groups, infusion doses and statistical tests (Student's t test and chi-squared test). We have also written a procedure which will allow the user to vary the timing of data input, and length of the data strings. Another modification to the Psion communication setup enables the data to be directly down-loaded to an Apple Macintosh computer (as <Tab> separated values). We plan to make these programs available to other Psion users.

At present the main interest in this system of data collection is for research into uptake of volatile agents, with special reference to the new agent, desflurane (formerly I-653). The rapid rise of alveolar concentration of this drug, conferred by the low blood–gas solubility (0.42), makes this system ideal for such measurement.

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Intranasal sufentanil

To the Editor:

Recently, Helmers *et al.*[1] demonstrated that sufentanil is well absorbed from the nasal mucosa, the plasma concentration 20 min after administration being similar to that following IV administration. Because onset of sedation was rapid, the authors suggested that intranasally administered sufentanil may be a useful premedication. Their recommendations must be interpreted cautiously: because the authors did not assess the effects beyond the preoperative period, they did not evaluate possible interactions with drugs administered during anaesthesia. When we preinduced anaesthesia in paediatric patients using nasally administered sufentanil,[2] ventilatory compliance was mildly or markedly decreased in many children. Of note, one patient who received sufentanil, 4.5 $\mu g \cdot kg^{-1}$ intranasally, required succinylcholine, oxygen, and positive pressure ventilation when a marked decrease in compliance during induction of anaesthesia compromised arterial oxygen saturation. This interaction between sufentanil and inhaled anaesthetics may markedly limit the utility of nasally administered sufentanil.

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2 *Henderson JM, Brodsky DA, Fisher DM, Brett CM, Hertzka RE.* Preinduction of anesthesia in pediatric patients with nasally administered sufentanil. Anesthesiology 1988; 68: 671–5.

REPLY

We wholeheartedly agree with Henderson et al. *that high dose opiates may cause rigidity. However, in our study we used so small a dose that rigidity was not noticed during the observation period, nor thereafter. Our induction was at least 60 min after the intranasal administration of a small dose of sufentanil (0.21 $\mu g \cdot kg^{-1}$ vs 1.5–4.5 $\mu g \cdot kg^{-1}$ in their study), so the peak-effect and maximal concentration were already "passed," whereas they continued their administration induction within ten minutes of intranasal sufentanil, when the plasma concentration of sufentanil reaches its peak. Preinduction with an anaesthetic dose of intranasally administered sufentanil is very different from premedication with a very small dose of intranasal sufentanil. We firmly stay with our conclusion that intranasal sufentanil in a low dose may be an attractive alternative as a preoperative premedicant.*

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