We believe that there is a different effect of anaesthetics containing Cremophor-EL on blood viscosity, when they are administered for induction (i.e. for short periods and in low dose) when compared with continuous and long-term infusion. We conclude that, in anaesthetic practice whole-blood viscosity studied in vitro and its related haematological factors are of more interest than those factors which depend on plasma viscosity per se.

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R. Sanz
Madrid

REFERENCES

CONTINUOUS EXTRADURAL INFUSION OF 0.0625% OR 0.125% BUPIVACAINE

Sirs,—I am totally at a loss to identify what lessons Dr Li and colleagues (Li, Rees and Rosen, 1985) intended readers to draw from their report. If the objective of using a continuous infusion of either 0.0625% bupivacaine or 0.125% bupivacaine, at one of the specified rates, was to eliminate or markedly to reduce the hazard specifically associated with bolus top-ups, then manifestly their effort was unsuccessful. Only two of the 20 mothers receiving the more dilute solution did not require a bolus top-up (0.25% bupivacaine 10 ml) and six needed at least three intermittent doses. Among those in receipt of 0.125% bupivacaine, the respective numbers not requiring a bolus top-up were 1, 4, 6 and 7 (grouped according to the rate of infusion), and the numbers needing at least three top-ups were 6, 1 and zero.

Lin and colleagues have convincingly demonstrated that the technique of continuous infusion, as used by them, as a sole form of therapy (superimposed upon a loading dose), provided a very unsatisfactory standard of analgesia in labour. Indeed, it would appear that mothers would be likely to be equally as well satisfied by the receipt of systemic or inhalation analgesia.

No reference is made to the effect of continuous infusion, in contrast to that of intermittent topping-up, upon bladder sensation throughout labour. Was there a relative increase in the incidence of required bladder catheterization among those mothers who did not need supplementary top-ups?

Finally, the authors advocate midwifery assessment of the upper level of sensory block (and presumably of lower limb weakness). I doubt that that would become an accepted item of clinical care in a busy Delivery Suite.

J. Selwyn Crawford
Birmingham

REFERENCE

MIDAZOLAM, DIAZEPAM AND PLACEBO AS PREMEDICATION FOR REGIONAL ANAESTHESIA

Sirs,—Understanding of the above study by Reinhart and others (1985) would be enhanced if the authors clarified the points listed below:

(1) What is the concept of anxiety underlying the chosen psychometric procedure? Implicit in the efficacy score is an emphasis, not on anxiety, but on sedation, in that there are only three judgements of apprehension, but seven on sedation/excitement. The latter dimension is only a part of such a complex emotion as anxiety, and is far from being identical with it.

The only subjective rating also deals with the quality of sedation. At what time was this measurement taken? In a retrospective judgement, subjective ratings could have been influenced by the amnesic effects of midazolam. Sedation is not evidence of an anxiolytic effect. As there were no other assessments of emotions, maybe a drowsy patient felt helpless, a very common feeling before an operation.

(2) What kind of information did the anaesthetist use in order to rate apprehension and excitement? The report lacks a description of behavioural categories for rating anxiety and excitement, which are most important in observer ratings. Further, because there was no independent second rater, the reliability of the ratings is questionable. The anaesthetist also registered the physiological reactions—arterial pressure and heart rate. It is not clear to what degree these observations of...
the physiological variables could have determined the psychological ratings.

(3) The groups were not compared with regard to psychometric indices. Thus it cannot be excluded that one group differed from the other in actual levels of preoperative anxiety and in coping abilities.

I feel that this study does not help to clarify the preoperative needs of the patient to prepare himself for such a stressful event in an adequate way.

S. Höfling
München

REFERENCE

Sir,—To evaluate two different benzodiazepines as premedicants for regional anaesthesia, we chose a method introduced for this purpose by Dundee, Moore, and Nicholl in 1962. This method was used to study drugs given before anaesthesia for their sedative and anxiolytic properties as well as for undesirable side effects. The same authors re-evaluated their method after more than 10,000 observations and confirmed its usefulness under standardized conditions—number of visits paid to the patient, nature and duration of operation, surroundings, etc.—for collection of information concerning the subjective effects of different preoperative medications (Morrison, Hill and Dundee, 1968). Our study was not undertaken to clarify all the “preoperative needs of the patients”, but only to study the effects of midazolam compared with diazepam and placebo. The study design adequately fulfilled the postulated criteria for comparable conditions for all three groups and, therefore, in our opinion the observed differences in efficacy between the drugs are real and reproducible.

To some questions in detail. The quality of sedation was not the only subjective rating, but all patients not asleep were also asked whether they felt anxious or not. The patients asleep were judged not to be anxious. It cannot be ruled out that the amnesic effects of midazolam may have influenced the subjective ratings, but no patient complained about the amnesic actions of this drug; on the contrary, patients are usually happy to have no recollection of the anaesthetic and operative procedures. The judgement of excitement was based only on the anaesthetist’s subjective view and experience during the study; haemodynamic variables were not taken into account for this purpose. It is true that we did not study psychometric indices before premedication, but we doubt that our randomization—which was successful with respect to distribution of age, sex and type of urological intervention—led to group differences with respect to “anxiety and coping abilities”.

K. Reinhart
G. Dallinger-Stiller
R. Dennhardt
G. Heinemeier
Berlin

REFERENCES

HEWLETT–PACKARD HP47210A CAPNOMETER
Sir,—I was interested to read the article by Dr Kinsella (1985) assessing the Hewlett-Packard HP47210A capnometer. I appreciate that the accuracy of the equipment was being assessed, but I feel that, with the more widespread use of the capnometer, your readers’ attention should be drawn to a disconnection hazard associated with this device.

With only moderate pressure by an assistant leaning on the chest, the connections (Airway Adaptor Tubing Couplers No. 14373 A/B) joining the adaptor to the ventilator tubing and to the catheter mount are easily dislodged. This problem has been experienced by all the anaesthetists working at The National Hospital for Nervous Diseases on several occasions.

The couplers are recommended for single patient use only, but as with much so-called “disposable” equipment, it is not economical to use them once only. Even with a new coupler, repeated lateral pressure will soon dislodge the connections. This is not surprising, as their construction does not conform to British Standard BS 3849, in either dimension or deformability. A newer modification is, in fact, more rigid, but still does not conform to standards, in particular the depth of joint surface. Obviously, if the alarm is “on” one will be warned of a disconnection, but this is not always the case, and besides, is not sufficient excuse for poor design.

It is well recognized that disconnections of anaesthetic circuits can cause morbidity and mortality. I feel that an improved modification would reduce this risk.

R. J. Lenoir
London

PREMEDICATION AND BODY TEMPERATURE
Sir,—We have observed that adult patients scheduled for surgery arrive in the Anaesthetic Room with a body temperature lower than normal. This might be the result of fasting, the light covering provided during transport, or premedication.

Drugs currently used for premedication such as opiates and phenothiazines might affect central thermoregulation and cause peripheral vasodilatation. This can result in a decrease in body temperature as previously shown in animal studies (Lotti, Lomax and George, 1965). An increase in body temperature was observed after large doses of atropine and hyoscine (Scopolamine) (Eger, 1962).

We decided to investigate the effect of two widely-used