method was used to study drugs given before anaesthesia for this purpose by Dundee, Moore and Nicholl in 1962. This event in an adequate way.

needs of the patient to prepare himself for such a stressful group differed from the other in actual levels of preoperative psychometric indices. Thus it cannot be excluded that one psychological ratings.

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our randomization—which was successful with respect to psychological indices before premedication, but we doubt that account for this purpose. It is true that we did not study during the study; haemodynamic variables were not taken into only on the anaesthetist's subjective view and experience operative procedures. The judgement of excitement was based amnesic actions of this drug; on the contrary, patients are judged not to be anxious. It cannot be ruled out that the asked whether the felt anxious or not. The patients asleep were the only subjective rating, but all patients not asleep were also 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 the 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 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.

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.

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S. HÖPLING
München

REFERENCE

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 "dispensable" 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. LENNOX
London

REFERENCE

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
TABLE I. Results (mean values ± SD)

<table>
<thead>
<tr>
<th></th>
<th>Papaveretum + hyoscine (n = 40)</th>
<th>Pethidine + promethazaine (n = 40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aural canal temp. (°C)</td>
<td>Before: 36.7 ± 0.6</td>
<td>Before: 36.8 ± 0.4</td>
</tr>
<tr>
<td></td>
<td>60 min: 36.7 ± 0.5</td>
<td>60 min: 36.7 ± 0.6</td>
</tr>
<tr>
<td>Mean skin temp. (°C)</td>
<td>Before: 32.6 ± 1.0</td>
<td>Before: 32.8 ± 1.2</td>
</tr>
<tr>
<td></td>
<td>60 min: 33.0 ± 0.9</td>
<td>60 min: 33.4 ± 0.8</td>
</tr>
<tr>
<td>Mean body temp. (°C)</td>
<td>Before: 35.3 ± 0.5</td>
<td>Before: 35.4 ± 0.7</td>
</tr>
<tr>
<td></td>
<td>60 min: 35.4 ± 0.6</td>
<td>60 min: 35.5 ± 0.4</td>
</tr>
</tbody>
</table>

premedications on the redistribution of body temperature in adult patients. We studied 80 patients, ASA I, aged from 15 to 55 yr, who were to undergo elective orthopaedic surgery. The study was conducted in the surgical wards of our hospital during the period June to August. Patients were randomly allocated to two groups, A and B, of 40 patients each. Group A received an i.m. injection of papaveretum 0.3 mg kg⁻¹ and hyoscine 0.006 mg kg⁻¹; group B received pethidine 1 mg kg⁻¹ and promethazaine 0.3 mg kg⁻¹. All patients were covered with one standard sheet and one blanket.

Skin surface (upper chest, arm, thigh and calf) and core (aural canal) body temperatures were measured in the ward before, and 60 min after, the administration of the premedications.

Ambient temperature, relative humidity and air speed of the surgical wards were measured.

The two groups were comparable for age, body weight and height. Aural canal temperature (core) did not change 60 min after premedication in either group. Mean skin temperature increased in both groups by 0.4 and 0.6 °C (ns), respectively. Nevertheless, this increase did not influence mean body temperature (core and surface) in either group (table I).

In conclusion, we were unable to demonstrate a decrease in body temperature 60 min after the administration of either form of premedication.

Z. ANWAR
F. CARLI
Stannmore

REFERENCES


PARANASAL SINUSITIS: A COMPLICATION OF NASOTRACHEAL INTUBATION

Sir,—We were interested to read the case reports (Willatts and Cochrane, 1985) of two patients who developed severe paranasal sinusitis in association with prolonged nasotracheal intubation. We have previously noticed redness and swelling of the skin over the maxillary sinus in some of our patients following nasal intubation. These patients had exhibited signs of infection, although the site was not obvious. Although we did not see a picture quite like that described by the authors, we did obtain x-rays to see if there were changes in the sinuses. These were suggestive of sinusitis. We wondered how common this might be.

Therefore, we decided to undertake a study in 50 patients after approval from the local ethics committee. We elected to take x-rays immediately after either oral or nasal intubation, and on the 4th and 10th days after intubation. The patient was to act as his own control by comparing the sound side with the intubated side. X-rays were obtained in 10 patients, but the study was terminated for technical reasons—the difficulty of obtaining reproducible films with portable equipment. We did, however, see signs suggestive of sinusitis in some “nasal” films, but we did not have sufficient numbers for statistical analysis.

We agree with Willatts and Cochrane (1985) and other authors (Caplan and Hoyt, 1981; O’Reilly et al., 1984), that sinusitis is a recognized complication of prolonged nasotracheal intubation and should be considered when the usual causes of “pyrexia of unknown origin” in the ITU have been eliminated.

C. M. KUMAR
P. G. P. LAWLER
Middlesbrough

REFERENCES

