SELECTIVE EPIDURAL ANALGESIA AND THE FORCEPS RATE

Sir,—We congratulate Dr. A. Doughty (Brit. J. Anaesth., 1969, 41, 1058) on his reduction of the forceps delivery rate to 21 per cent in association with selective epidural analgesia. This forceps rate and the Caesarean section rate of 0.75 per cent reflect, as Dr. Doughty states, the normality of his patients.

Dr. Doughty correctly quotes us as saying that "Epidural analgesia, because it produces perineal anaesthesia and so abolishes the reflex expulsive efforts of the second stage of labour, is usually associated with a high forceps delivery rate". This quotation (Moir and Willocks, 1967) is from a publication devoted specifically to epidural analgesia in inco-ordinate uterine action. It is our experience that the complete relief of pain in this condition nearly always requires blocking the sacral nerve roots which transmit backache and innervate the perineum. The high forceps rate in these circumstances is due partly to perineal anaesthesia, but principally to the associated obstetric factors. We seldom use epidural analgesia in normal labour. Our principal indications are inco-ordinate uterine action, occipito-posterior positions of the vertex, severe pre-eclampsia and cardiac and respiratory disease. The forceps delivery rate in any of these conditions will be high, whether epidural analgesia is used or not. Although pain is the primary indication for epidural analgesia, there is commonly an obstetric abnormality in unusually painful labour.

Dr. Doughty has made an important contribution to the management of normal labour and has perhaps given us a guide to the future. At the present time we suggest that anaesthetists' efforts should be directed towards making epidural analgesia more widely available to those women for whom it is specially indicated. In our experience in a National Health Service teaching hospital in an industrial city, there are specific indications for epidural analgesia in about 10 per cent of patients.

The immediate need is the provision of a 24-hour resident anaesthetic service in all major maternity hospitals. Without this, epidural analgesia cannot be offered to the patients who would benefit most from it. At the same time anaesthetic registrars, and sometimes consultants too, require training in the method. Along with most of our colleagues, we are enthusiastic about epidural analgesia and have now used the method in almost 1,400 labours. We certainly do not decry Dr. Doughty's approach, but we would first wish to see epidural analgesia made available to the patients who need it most.

DONALD D. MOIR
JAMES WILLOCKS
Glasgow

REFERENCE

Sir,—I thank Drs. Moir and Willocks for their kindly remarks of appreciation of my paper. My purpose was solely to challenge the belief that epidural analgesia necessarily predisposed the mother to an operative delivery. The only way of "proving" its innocence in this respect would be to use epidurals alternately with conventional analgesic methods in normal labours where a midwife delivery is anticipated. However, as long as the "indications" laid down by Drs. Moir and Willocks are rigidly applied such an investigation would be impossible; indeed any other form of clinical research on epidural analgesia in labour would be hampered by a lack of patients whose responses are unconfused by obstetric complications.

I feel that one should question the need for restricting epidural analgesia only to labours where there is shown to be an obstetric abnormality. Could not its benefits be extended to those otherwise normal labours in which the conventional analgesic methods are palpably inadequate or to those mothers unduly apprehensive of a repetition of a previous harrowing experience? I cannot help wondering if a restrictive medical policy may be dictated by the obstetricians' insistence on restricting epidural analgesia to abnormal labours. Thus the refusal to allow the use of epidural analgesia for painful but normal labour tends to perpetuate the shortage of adequately trained anaesthetists which Drs. Moir, Willocks and I together deplore.

I agree with them that epidural analgesia should be available to about 10 per cent of mothers. However, I fear that many obstetricians continue to be unconviced of its value and that anaesthetists on the whole are quite unprepared to meet any further demands for it.

I must respect the impressive experience of Drs. Moir and Willocks in the management of inco-ordinate uterine action but I would like once again to draw attention to the paradoxical finding that severe sacral backache may be relieved by a low-volume lumbar interspace with the mother lying on her side afforded complete relief of pain but without apparent loss of perineal sensation or muscle tone. The only occasions when a selective block has given incomplete relief have been when the mother was already in the second stage of labour or when she had been allowed to become so demoralized that nothing short of complete loss of sensation below the waist would satisfy her. The explanation of the paradox and our differing views is open to speculation but I am restrained by the motto of your journal, "I would have every man write what he knows and no more".

ANDREW DOUGHTY
Thames Ditton, Surrey

EDWARD LAWRIE OF THE HYDERABAD CHLOROFORM COMMISSION

Sir,—We would like to congratulate Dr. A. H. B. Masson and his colleagues on their fascinating review of some of the activities of Major E. Lawrie and their account of the Hyderabad Commission and the cause of death associated with chloroform (Brit. J. Anaesth., 1969) 43, 1002.)
While holding no brief for the eccentric Major Lawrie, we think that, in justice to his memory, it should be pointed out that the phrase he used, as quoted by Dr. Masson and his colleagues, "Deaths which result from the fatal method of taking the pulse as a guide amounts to homicide", is not quite as absurd as it sounds. Reference to Dr. Barbara M. Duncum's excellent book The Development of Inhalation Anaesthesia, page 435, shows that while he had no interest in monitoring the pulse during chloroform anaesthesia, nevertheless, he was most scrupulous in paying attention to the patient's respiratory activity, even going so far as to suggest that respiratory depression was a serious sign of overdosage and hence needed appropriate treatment—"The administrator should be guided as to the effect by the respiration. His only object, while producing anaesthesia, is to see that the respiration is not interfered with."

In a letter to the Lancet, May 11, 1889, as quoted by Dr. Barbara Duncum, page 431, he states:

"Neither I nor the Hyderabad Commission have any desire to inculcate a disregard of the heart as a factor in chloroform dangers... The Lancet... would trust to the heart and circulation for signals of danger in chloroform administration. Our contention is that if the administration is ever pushed far enough to cause the heart to show signs of danger, the limits of safety have already been exceeded, and a fatal result must almost inevitably ensue... But we say, further, that respiration invariably gives warnings when a dangerous point is approached and, consequently, that it is possible to avert all risk to the heart by devoting the entire attention to the respiration during chloroform administration."

M. AKHTAR

J. A. Lee

Southend-on-Sea

REFERENCES


Sir,—We would agree that Lawrie's argument about the importance of watching respiration to avoid overdosage with chloroform was perfectly valid. However, his advocacy of this point of view became more and more hysterical and unreasonable as time went on. In 1889 he said he had no desire to inculcate a disregard of the heart as a factor in chloroform but, a few years later, it amounted to homicide in his eyes even to feel the pulse during an anaesthetic.

A. H. B. Masson, Edinburgh

PENTAZOCINE AND PHENOPERIDINE

Sir,—The following observation concerning the use of the technique of neuroleptanalgesia together with pre-mixed nitrous oxide and oxygen (Entonox) (Baskett et al., 1969) may be of interest.

A 12-year-old boy was admitted to Frenchay Hospital with 60 per cent burns and required prolonged administration of powerful analgesics. In view of the danger of addiction it was considered that pentazocine should be the analgesic of choice in this case.

When the dressings were changed, using the neuroleptanalgesia technique very large doses of phenoperidine were required to produce an adequate degree of sedation for the procedure (table I), and even with these doses the patient was more restless than is usual when this technique is used. It is of interest that this greatly increased dose was not associated with clinically significant respiratory or cardiovascular depression.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dosage (mg)</th>
<th>Time interval from previous analgesic (hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentazocine</td>
<td>15</td>
<td>–</td>
</tr>
<tr>
<td>Papaverine</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Phenoperidine</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Pentazocine</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Phenoperidine</td>
<td>3.5</td>
<td>8</td>
</tr>
<tr>
<td>Pentazocine</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Phenoperidine</td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
</table>

Calculated average total dose of phenoperidine for a patient of this weight, 35 kg, 1.5 mg.

It is presumed that, in this instance, pentazocine, a nalorphine derivative, was antagonizing the narcotic, analgesic, and depressant effects of phenoperidine. This effect of pentazocine may be of some importance not only when the above technique is used, but also when pentazocine is used in premedication, anaesthesia or postoperative medication either before, in association or following the administration of other powerful analgesics.

Peter J. F. Baskett

A. W. Diamond

Bristol

REFERENCE


BOOK REVIEW


The author himself coined the new word in the title and defines it as the study of needles. The dust cover describes the book as "The indications and technic for diagnostic and therapeutic injections into the spine". It is unlikely that the average anaesthetist will find much of interest here, for the book brings together, sometimes by the skin of their teeth, a wide-ranging assortment of procedures linked only by the fact that they involve a spinal needle. The headings of the chapters give an indication of the scope: anatomy, lumbar puncture, pneumoencephalography, myelography, discography, spinal and paraspinal blocks, corticosteroids, percutaneous cordotomy, miscellaneous injections, arachnoiditis. Nevertheless, those who wish to know something about the various procedures described will find useful information and helpful illustrations.

William W. Mushin