Lithotomy Position for Forceps

SIR,—Dr. Margaret J. Watt (26 August, p. 559) is of course absolutely right in stressing the need to avoid Mendelson's syndrome, this potentially fatal complication of obstetric anaesthesia.

In all four of the triennial reports on confidential inquiries into maternal deaths since 1952¹ it is stated with almost monotonous regularity that the commonest cause of death in forceps delivery under general anaesthesia is inhalation of stomach contents. In the third report (1958–61) there are two statements of the utmost significance which sum up the matter:

- (1) "The only safe assumption in any parturient woman is that the stomach is full," and
- (2) "The lithotomy position with full flexion of the lower limbs is more likely to favour regurgitation than any other posture."

Until some time between 1920 and 1930 the lateral position was used almost exclusively in Britain—indeed, in Australia it was spoken of as "the English position." In those days, though vomiting of course often occurred, inhalation of stomach contents did not, and I have several times been at pains to indict the adoption of the lithotomy position by obstetricians as the cause of this grave and (when it occurs) often fatal complication of labour.² I am not of course arguing in any way against regional analgesia in forceps delivery, but if general anaesthesia is employed, as it still is not infrequently, the use of the lithotomy position is just asking for trouble.

The responsibility for these disasters must lie with the obstetricians as long as they continue to use and teach a method of delivery so fraught with danger to the patient. It should be a sobering thought to them that the deaths in forceps delivery under general anaesthesia could certainly be halved by the simple application of common sense and the observance of the simplest law of physics.

As Dr. Watt points out, there is no method of treatment for Mendelson's syndrome which can guarantee 100% safety, but the simplest of preventive methods will ensure a complete freedom from risk never to be attained by any method of treatment of the established condition.—I am, etc.,

London N.W.7.

A. H. MORLEY.

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Safer Dental Anaesthesia

SIR,—Unlike Dr. J. G. Bourne (2 September, p. 616), I do not attribute primary importance to the upright position as the main cause of dental anaesthetic mortality. The upright position was, and is, a common feature in operations on the posterior cranial fossa, anaesthesia for which over several hours must be followed by rapid recovery of consciousness, a desideratum which every neurosurgical anaesthetist is familiar with and competent to provide. Moreover, the dental anaesthetic mortality rate fell substantially while the upright position for induction of anaesthesia was still in general use, as it is indeed to this day, and rightly. This decline in mortality was due to various

factors—gradual abandonment of deliberate hypoxia, better drugs, better selection of cases for referral to hospital, increased participation in dental anaesthesia by specialist anaesthetists, and latterly increased avoidance of accidental hypoxia by means of tracheal intubation in the dental surgery.¹ Adequate observation of the patient is indeed an important advantage of intubation which hardly exists without it, for in the latter case the anaesthetist is tethered to the support of the patient's jaw and extremely limited as to what he can observe and do.

Interference with the airway, with or without deliberate hypoxia, is a far commoner primary cause of dental anaesthetic difficulties which may lead to death than depression of the cerebral circulation from the upright position alone. In over 6,000 dental anaesthetics I have seen only one patient develop hypotension from the upright position. The semi-recumbent position, however, which is all that some modern dental chairs will permit at their most upright, must surely be condemned by Dr. Bourne as well as myself, for neither in his view nor in mine can it be considered safe for dental anaesthesia.

In my view, differing again from Dr. Bourne, the security and integrity of the airway of the anaesthetized patient are too important to be left to the divided attention of the dental surgeon who is performing the operation; too important to be left to his unqualified assistant; and in other than short cases too important to be left dependent on the reliability of the aspirator and the dental pack. These makeshifts are employed because the non-specialist cannot intubate the trachea even in emergency let alone in cases of above average duration. No matter how skilfully these makeshifts are applied, they cannot compare in safety or reliability with skilled tracheal intubation.

There is a strong case for insisting that those who administer dental anaesthetics should be trained at least to the level of competence in tracheal intubation, which implies considerably more knowledge of basic sciences and clinical anaesthesia and greater and wider experience than is at present the case.—I am, etc.,

Manchester.

ARNOLD M. DANZIGER.

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Phenylketonuria: A Reassessment of Screening by Napkin Test

SIR,—Drs. J. B. P. Stephenson and M. S. McBean (2 September, p. 582) rightly draw attention to the unreliability of Phenistix testing. They refer to my contributions to Lyman's book on phenylketonuria,¹ but our knowledge of inborn errors of metabolism in general, and of phenylketonuria in particular, is advancing so rapidly that much of this book must now be considered out of date. I wrote my sections on testing and detection in 1961, when Phenistix and similar tests, using ferric salts, were the only screening techniques in use or at the time possible; later Guthrie² published his method, and a paragraph on it was added before the book was printed.

In 1963 I began to come across tragic cases of phenylketonuria undetected by Phenistix testing in the neonatal period.² It seemed that "field" tests such as Phenistix

would have to be replaced by methods where a specimen of blood or urine is sent to a central laboratory for testing by more sophisticated techniques. Choice of a suitable technique poses problems in basic science, technology, economics, administration, and relations between mother and doctor, health visitor, midwife, or nurse. To ignore any of these aspects is to court disaster. Eight different laboratory techniques are currently in use: the Guthrie method using blood³; urine chromatography for o-hydroxyphenylacetic acid⁴; spectrophotofluorometry of blood^{5,6}; the Guthrie method using urine⁷; and chromatography of amino-acids in blood by the methods of Berry,⁸ Efron,⁹ Scriver,¹⁰ or Mellon.¹¹ All these methods except spectrophotofluorometry have the great advantage that they test for other inborn errors of metabolism as well as phenylketonuria. Two methods, the Guthrie method using blood³ and chromatography of urine,² have now been used long enough and on a large enough scale for us to say that they meet the criteria of a suitable test. Thanks to the co-operation of the medical officers of health of Buckinghamshire, Cardiff, Oxford, and Oxfordshire, about 25,000 newborn infants have had their urine examined here using chromatography. The advantage of this method is that the mother herself can collect a specimen of her baby's urine on filter-paper and post it.²

Dr. Stephenson and Dr. McBean may have been unfortunate in their small sample which gave a failure rate for Phenistix of at least 73%. Data collected from all over Great Britain suggests a lower failure rate, but even if only 10% of phenylketonurics go undetected by use of Phenistix this test should be regarded as unsatisfactory now that we have better ones.—I am, etc.,

Department of the Regius L. I. WOOLF.
Professor of Medicine,
Radcliffe Infirmary,
Oxford.

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Respiratory Distress Syndrome

SIR,—We read with interest the paper by Dr. J. M. Abraham and Dr. R. J. K. Brown (9 September, p. 640) comparing the effects of intragastric and intravenous glucose and sodium bicarbonate in the respiratory distress syndrome, and your leading article (9 September, p. 628) on management of the respiratory distress syndrome. We feel that the cases of Abraham and Brown are not truly comparable with those of Hutchison *et al.*,¹ as only 26 cases had positive radio-