Sir,—I would like to refer to the interesting and informative paper by Dr. W. M. Wilkinson (Brit. J. Anaesth., 35, 711).

Like the author, we in Hong Kong have also found spinal anaesthesia of great value, and our cases over the past ten years amount to a similar number. The usefulness is particularly great in emergency operations on tuberculous patients, with bilateral or unilateral cavitations or other lung lesions, in whom general anaesthesia with intermittent positive pressure respiration may aggravate the pulmonary and general condition. The number of such patients is considerable. Another group of patients in whom spinal anaesthesia is of great value is in emergency surgery for the “patient with the full stomach”. Hong Kong, with its great density of population has a great number of these. As the staple diet of the Chinese population is rice, and this is eaten three times a day, sometimes not very thoroughly masticated, undigested rice grains are found in stomachs of patients following accidents for a considerable time. It is also in this type of patient that spinal anaesthesia has been found to be useful and safe and preferable to the risk of inhalation of regurgitated food particles and all its attending dangers.

Nevertheless the author’s method of performing lumbar puncture deserves some comment. He states that following local infiltration of the skin, “a transverse stab incision is then made using a No. 11 blade . . . . a gauge 20 spinal needle may then be introduced directly into the wound avoiding skin contact”, and farther down it is stated: “It has been found unnecessary to use an introducer . . . .”

We have been in the habit of using an introducer (Sine) for three main reasons:

(a) The “rough work” of piercing the skin, subcutaneous tissue and the (sometimes quite tough) ligaments is done by the introducer, ensuring the point of the spinal needle remaining sharp. This is of great value in minimizing tears of the dura mater and arachnoid, and also “post-spinal headache” due to seepage of c.s.f. and lowering of c.s.f. pressure.

(b) The part of the needle entering the subarachnoid space does not come into direct contact with the skin, thereby minimizing the chances of introduction of infective or sterilizing material from the skin surface.

(c) Should the patient inadvertently move during the lumbar puncture, the introducer will protect the thin spinal needle from breaking.

In 1954 it was the rule to have all gynaecological operations done under “spinal anaesthesia” and the general anaesthetic for these operations was an exception. Two days after an operation day I was called to see a patient who developed meningitis post-operatively. The patient had a spinal anaesthesia of tuberculous origin. She went to the ward, only to discover that this patient (owing to her hypertension) was the only patient that week who had general and not spinal anaesthesia. Was it “luck”! Had this patient had a spinal anaesthetic the principle of “res ipsa loquitur” might have been applied and a further case against the useful employment of spinal anaesthesia in suitable patients and conditions would have wrongly been brought out.

Z. LEWT
Hong Kong

Sir,—In answer to the letter from Drs. Dundee and Clarke (Brit. J. Anaesth., 36, 199), I should like to state the dose and techniques employed with the pregnant bitch. Six animals in all were injected intravenously with 40 mg of FBA.1420/kg body weight. Two animals were injected on alternate days for their entire gestational period; thus they received thirty doses of drug. Four animals were injected as above except that injections were terminated at mid-term; thus they received fifteen doses of drug. Two animals were then sacrificed and sectioned at mid-term. In one animal, ten grossly normal foetuses were encountered, while in the other, two areas (one in each horn) of necrotic tissue were encountered, suggestive of resorption of ova. The results encountered in the remaining four bitches was the subject of my previous communication.

The anaesthetic dose range for FBA.1420 in the mongrel dog is 30 mg/kg to 70 mg/kg. It is quite unlikely that these dosages would be encountered, particularly provided that FBA.1420 is limited to brief, minor procedures. Comparative data with thiopentone is not available at this time.

ERWIN LEAR
New York

Sir,—In his recent letter (Brit. J. Anaesth., 36, 66) Dr. Lear reported that pregnant bitches injected with 3-methoxy-4-N, N-diethylcarbamido-methoxyphényl-acetic acid-n-propylester (Bayer 1420, FBA.1420) were delivered of both small and damaged litters. In view of these preliminary findings he urged additional studies.

Reports on the effect of anaesthetic drugs in pregnant animals are rare. Experiments such as those of Dr. Lear who injected the anaesthetic at least every other day for the first half of pregnancy have never been reported with other anaesthetics.

Dogs have been used on a much smaller scale for teratogenic studies than small rodents. It is possible to contribute some findings in rats, using the method described by Lorke (1963). Eleven female rats were anaesthetized daily from the 9th to the 13th day of pregnancy with 0.1 g/kg FBA.1420. On the 21st day, 96 living foetuses were obtained by Caesarean section. There was no recognizable malformations or other damage and there was no increase in the percentage of intra-uterine deaths. The average weight of the foetuses was higher than in the control group. There was, therefore, no reason to suspect teratogenic activity in rats. The details of these studies will be published elsewhere (Lorke, 1964).

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REFERENCES


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