Battered Babies

SIR,—Your leading article (20 September, p. 667) does less than justice to the possible contribution of family doctors to the battered babies and their families. Both the battered baby and the parent require not piecemeal help but long-term treatment and co-ordinated active social intervention. There is a sad lack of communication, let alone integration, between social workers and the profession. Having worked in a children's department as well as in general practice I can confirm what must be common experience, which is that the total background of these families is what needs assessment, and not the individual incident which brings the picture into focus.

Too much is made of the issue of confidentiality in relation to these cases. Many of us seem to have forgotten that confidential reports are dictated to secretaries, who may be private ones if we are lucky, but are more likely to be from the typing pool or even temporaries, and having disregarded confidentiality to this degree we proceed to make an immense fuss about passing on the reports to colleagues whose professional calling is not exactly the same as our own. It is unlikely that social workers and others who are banded together for the benefit of these patients are going to make unprofessional use of confidential information.

I would advocate closer liaison between family doctors and the social services, which could only serve to simplify the problems that these families impose on the community. We have to salvage the family as well as offer medical aid to the injured child.—I am, etc.,

Birmingham.

BERNARD BARNETT.

Metabolism in Parkinsonian Patients

SIR,—Dr. F. Carswell and Dr. I. W. Dymock (12 July, p. 117) have commented on our communication dealing with metabolism in Parkinsonian patients (31 May, p. 552). It is encouraging to find that they too have found an abnormality in the intestinal absorption of D-xylose in some of their Parkinsonian patients, confirming our observation. Their results suggest that this abnormality consists of a delayed absorption rather than malabsorption. In our patients anti-Parkinsonian drugs were discontinued several days before the tests were performed, suggesting that the abnormality was not related to the drug intake. Whether the differences between the patients and the control groups are merely secondary to autonomic nervous system disturbance in Parkinsonism, or have any bearing on the essential nature of the disease, is at present an unresolved though important question. It is at least of interest that one of the actions of a decarboxylase inhibitor RO IV 46.02 (Hoffman La Roche), which reduces considerably the required therapeutic dose of L-dopa, is to accelerate the absorption of this latter substance from the intestine.¹

Dr. Carswell and Dr. Dymock state that the delay in absorption would render invalid the oral L-phenylalanine and L-tyrosine loading tests used by us for the investigation of the possible deficiency of tyrosine hydroxylase, as they are based on the assumption that the time course of the absorption of these amino-acids are the same in patients and

controls. We would like to point out that no such assumption has been made by us in the interpretation of the results. On the contrary, we have suggested that, taking into account the presumably slow intestinal absorption of phenylalanine, the results of the loading tests were compatible with the hypothesis of a deficiency of tyrosine hydroxylase in Parkinsonian patients. A similar interpretation of our results was also suggested by the medical biochemistry correspondent in *Nature*.²

As we have stated in our communication, our observations are open to other interpretations because of the multi-diversional nature of phenylalanine and tyrosine metabolism. It is hoped that intravenous loading tests or preferably direct estimation of tyrosine hydroxylase activity in Parkinsonian patients will clarify the situation.—We are, etc.,

J. BRAHAM.

Department of Neurology,
Tel-Hashomer Government Hospital,
Tel-Aviv University Medical School,
Israel.

A. SZEINBERG.

Institute of Chemical Pathology,
Tel-Hashomer Government Hospital,
Tel-Aviv University Medical School,
Israel.

REFERENCES

- 1 Tissot, R., *Presse Médicale*, 1969, 77, 617.
- 2 Medical Biochemistry Correspondent, *Nature*, 1969 222, 1231.

Survival after 195 Defibrillations

SIR,—We have read with interest the letter from Dr. P. I. Parkinson and Dr. D. S. P. Dickson (19 July, p. 175) which appeared while we were preparing a report on a similar case.

A 56-year-old van driver was admitted on 9 May 1969 with an antero-septal myocardial infarction. He was normotensive on admission. On the fourth hospital day he suddenly collapsed. Ventricular fibrillation was diagnosed and cardioversion promptly restored sinus rhythm. A few minutes later he went into ventricular fibrillation again. A slow infusion of lignocaine, 1 mg./min., was started, preceded by an initial bolus of 50 mg. The next day the patient again went into ventricular fibrillation, became unconscious, cyanosed, and started to convulse. Sinus rhythm was restored by immediate counter shock. Up till midnight of the same day the patient was successfully counter-shocked for 12 attacks of

ventricular fibrillation. In between only rare ventricular extrasystoles were noted. The rate of lignocaine infusion was gradually increased to 5 mg./min. but with little effect.

The next day the patient was put on procainamide, 500 mg. four-hourly intramuscularly, instead of lignocaine. A day later, after 65 cardioversions in 17 hours, the administration of procainamide was changed to the intravenous route at 2 g./24 hours. Acid-base state at that time showed pH to be 7.45, PCO_2 107 mm. Hg, and standard bicarbonate 50 mEq/l. Plasma urea was 82 mg./100 ml. Serum sodium 146 mEq/l. and potassium 3.1 mEq/l. A regimen of 40 g. of glucose with 20 units of insulin and 40 mEq of potassium chloride per litre given intravenously at the rate of 2,000 ml. of the solution in 24 hours was started, and continued for three days.

No beneficial effect was observed, and the patient had a further 45 attacks of ventricular fibrillation during 16 May 1969. At midnight he went into complete asystole, and it took four minutes to restart the heart. Acid-base state at this stage was H^+ 38 nN, pH 7.42, PCO_2 97 mm. Hg, and standard bicarbonate 45 mEq/l. In the evening of the next day the patient's heart stopped again and cardiac massage for two minutes was required.

On 18 May, during a further attack of ventricular fibrillation, attempted cardioversion resulted in a complete asystole. External cardiac massage was carried out, and, after about five minutes, the heart was restarted with ventricular fibrillation successfully converted to sinus rhythm. Plasma urea was then 72 mg./100 ml., pH 7.45, PCO_2 107 mm. Hg, and standard bicarbonate 51 mEq/l. The intravenous procainamide was increased to 3 g./24 hrs. with no adverse effect on blood pressure. While on this regimen the patient had 21 further attacks of ventricular fibrillation, but the intervals between the last four attacks were considerably longer, and in the morning of 19 May his last ventricular fibrillation was successfully converted. This brought the total to 195 attacks of ventricular fibrillation with three episodes of complete cardiac standstill in six days. Further progress was uneventful and the patient was discharged on 7 July feeling very well.—We are, etc.,

M. MICHAEL KUBIK.
P. K. DAS GUPTA.

Burton Road Hospital,
Dudley, Worcs.

Methoxyflurane for Obstetric Analgesia

SIR,—Dr. J. S. Crawford's queries (30 August, p. 530) following our own series of papers (2 August, pp. 255, 259) are already adequately answered either in these or in previous publications.^{1,2}

We can however furnish further information from the field trial about the effect of longer periods of inhalational analgesia on the baby (Table). There are no important or statistically significant differences between

Inhalation of Agent for 3 or More Hours

Agent	No. of Babies	Apgar Scores at 1 Minute		
		0-6	7-9	10
Methoxyflurane				
Pethidine	78	1	24	53
No pethidine	28	1	5	22
Total	106 (100%)	2 (2%)	29 (27%)	75 (71%)
Nitrous oxide/oxygen				
Pethidine	44	2	17	25
No pethidine	16	0	3	13
Total	60 (100%)	2 (3%)	20 (33%)	38 (64%)
Trichloroethylene				
Pethidine	64	2	13	49
No pethidine	18	1	1	16
Total	82 (100%)	3 (4%)	14 (17%)	65 (79%)

any of the agents for periods of inhalation of longer than three hours (a few up to eight hours). Our records also show that there are no important differences when the Apgar scores of the babies whose mothers inhaled methoxyflurane for three hours or less are compared with those who did so for longer periods.—We are, etc.,

M. ROSEN,
W. W. MUSHIN.
P. L. JONES.
E. V. JONES.

Department of Anaesthetics,
Royal Infirmary,
Cardiff.

REFERENCES

- ¹ Major, V., Rosen, M., and Mushin, W. W., *British Medical Journal*, 1966, 2, 1554.
- ² Major, V., Rosen, M., and Mushin, W. W., *British Medical Journal*, 1967, 4, 767.

Clinical Data and Statistical Interpretation

SIR,—Dr. J. Nielsen and his colleagues (13 September, p. 634) report a study of chromosomal abnormalities in the leucocytes of patients receiving perphenazine and chlorpromazine and control subjects. Between-group comparisons of proportions of abnormal cells give very high values of χ^2 and a number of significant differences are reported. For example, five patients treated with chlorpromazine had 14 hypodiploid cells out of 299 cells counted (4.7%), compared with 30 controls who had 20 hypodiploid cells out of 1,030 cells counted (1.9%). χ^2 is 5.925 and with one degree of freedom P is less than 0.025.

However, though the authors attribute all this χ^2 to variation between their two groups, is it not possible that some of it is due to variation between individuals within the groups? The authors do not present their data in a form which makes it possible to eliminate this possibility, but perhaps a fanciful illustration might indicate the sort of situation which would lead to an inflated χ^2 with the use of this method of analysis.

Let us say that I suddenly have a wild surmise that there is an association between schizophrenia and red hair. I go to the ward and take a sample of five schizophrenic patients, and then select five control subjects matched for age, sex, social class, ethnic origin, early family environment, use of hair dyes, and all other relevant variables. From each subject I cut 100 hairs at random. I label each hair with a code number, randomize them, and send them to the laboratory with a request for assessment of redness. The result is clearcut. The hairs show a markedly bimodal distribution in redness and the pathologist has no difficulty in classifying each hair as red or not red. The schizophrenic group has produced 100 red hairs out of 500, whereas the control group has produced 0 red hairs out of 500. I calculate χ^2 and find it reaches a value well beyond the dreams of Fisher and Yates. My hypothesis is confirmed, but only because my schizophrenic group contains one redhead out of five, whereas the control group contains no redheads out of five—not a very unlikely chance occurrence. Practically all of my astronomical χ^2 is due to variation between individuals within the groups and not to variation between the groups.

I do not know whether this situation applies to the data of Dr. Nielsen and colleagues. But chlorpromazine and perphenazine are rather widely used in psychiatric practice, and before we attribute to them the property of causing chromosomal damage we ought to have more data and a more rigorous statistical analysis.—I am, etc.,

JOHN SCOTT PRICE.

Bethlem Royal Hospital and
the Maudsley Hospital,
London S.E.5.

Inappropriate Lactation

SIR,—Drs. N. E. F. Carlidge and P. Hudgson describe secondary amenorrhoea with inappropriate lactation in a young woman following oral contraceptives (30 August, p. 529). They indicated that there have only been two other reports of this complication of treatment with oral contraceptives.

I would draw their attention to a paper published from this department¹ dealing with the problem of secondary amenorrhoea developing after treatment with oral contraceptives. Three of the patients described in this paper had associated galactorrhoea. We have now studied a large number of patients with secondary amenorrhoea and galactorrhoea. In a group of 26 such patients the apparent aetiological feature most frequently present (10 patients) was prior treatment with oral contraceptives. These results will shortly be reported in full.²—I am, etc.,

RODNEY P. SHEARMAN.

Department of Obstetrics
and Gynaecology,
University of Sydney,
N.S.W., Australia.

REFERENCES

- ¹ Shearman, R. P., *Lancet*, 1968, 1, 325.
- ² Shearman, R. P., and Turtle, J. R., *American Journal of Obstetrics and Gynecology*, 1969, in press.

Congenital Anomalies of the Vas Deferens

SIR,—Your correspondent Mr. R. E. B. Tagart (25 October, p. 233) has raised several important points regarding the operation of vasectomy which appears to have been overlooked far too widely by other surgeons. I have now operated on a number of patients who have had attempts at vasectomy carried out elsewhere where a vas has not been divided.

A most important point in these cases is the preoperative examination. A double vas can be palpated in some cases where the two are separated. In these there is no difficulty so long as the surgeon takes care to fix the structures firmly behind the finger and thumb until they have been securely gripped by an instrument after making the incision. In other cases, however, the two structures may lie in close apposition, and here it is not always possible to recognize the double nature of the vas preoperatively. If, however, the anomaly is borne in mind it may well be recognized at the time of operation, even though a local anaesthetic is being used. In cases where spermatozoa are still present after apparently successful operation, then it would appear logical to use a general anaesthetic for re-exploration.

Recanalization is often blamed for failure of vasectomy, but in my experience that is not usually the cause of failure. More usually the mishap has occurred because an artery has been divided instead of the vas. Contrary to usual belief, this does not always result in atrophy of the testis. I have never felt it worth while subjecting the tissue to histology, because sperm counts will reveal a failure just as adequately.

The other anomaly which Mr. Tagart mentions is congenital absence of the vas. This is a not uncommon cause of infertility. In cases where the vas cannot be palpated easily preoperatively the vas may be absent or congenitally small. Under these circumstances a general anaesthetic is essential, as these patients may in fact have a double or single vas. Absence of the vas on one side alone is most uncommon.

The difficulties which Mr. Tagart mentions in manipulating and isolating the vas can easily be overcome if the testis is first drawn downward and then pulled upwards and over to the opposite side, stretching the cord over the index finger of the left hand. The vas can then be felt easily and gripped firmly between the index finger and thumb of this hand until the incision has been made down on to it.—I am, etc.,

G. T. WATT.

Birmingham, Warwicks.

Unwanted Blessings

SIR,—I was interested to read your legal correspondent's comment (1 November, p. 312) upon the settlement by the Medical Defence Union of a claim by a married man who fathered a child after vasoligation. Our solicitors studied many reports of such cases tried in the United States and considered if an attempt should be made to persuade the English courts that public policy prohibited an award of damages for the blessing, however unwanted, of a child. This is a principle which is applied in some, but by no means all, of the American States.

The Union was, however, advised by leading counsel that there was no prospect of such an argument succeeding in our courts.—I am, etc.,

PHILIP H. ADDISON,
Secretary,
Medical Defence Union.

London W.C.1.

Solitary Confinement

SIR,—I have read the letter from the chairman and medical director of the National Addiction and Research Unit (1 November, p. 297), which rightly shows concern over the incompatible experiences of treatment and solitary confinement which are alleged to occur in Holloway Prison Hospital. Despite the reports of the vigilant press, I can give assurance that "solitary confinement" does not occur in Holloway Prison Hospital.

Segregation does occur into a special observation and treatment unit, which can accommodate up to eleven patients and is usually accommodating some of the most disturbed women in Britain, who are either undergoing psychiatric and physical assess-