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.,

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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.,

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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.,

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REFERENCES

- ¹ Shearman, R. P., *Lancet*, 1968, 1, 325.
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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.,

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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.,

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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-