Distribution of Oral Contraceptives

SIR,—Discussion is going on at present as to whether or not nurses are to be allowed to prescribe the oral contraceptive pill. But what is really at issue is whether or not it is acceptable that doctors should be expected to cover a relatively unqualified person, a nurse, in history-taking, in medical and gynaecological examinations, and in the issuing by her on her own initiative of prescriptions for a scheduled drug—an unheard-of precedent. There would be no question here of the nurse taking responsibility. This would rest, as always, on the covering doctor.

If this procedure is to be called "delegation" what has to be considered is whether or not the skills and experience of a doctor can be delegated at all in this way. If not, then such delegation would be deception, for it would give the appearance of doctor care when in fact this was being carried out by a nurse. In such circumstances the covering doctor might well be vulnerable to action against him for negligence. The silence of the defence societies, who must be concerned, and the B.M.A. is curious. It is an issue which should be debated by the whole profession.

It would be foolish for doctors to allow themselves to be robbed of their professional rights, and thus have their earning power eroded, by acceding to a situation in which they will be placed in a position of accepting still more responsibility without any real control over the actions of the medically unqualified persons they would have to cover. The profession would be wise to retain the control of all prescribing in its own responsible hands and refuse to accept a dangerous precedent with perhaps far-reaching consequences for all doctors.—I am, etc.,

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Prophylactic Fluoride Treatment and Aged Bones

SIR,—We are stimulated to respond to the article by Dr. J. Inkovaara and others (12 July, p. 73).

Many investigations have clearly shown the deleterious effect of fluoride alone on bone and on the skeletal status of individuals who already have severe bone loss and osteoporosis. The authors of this article suggest that 25 mg of fluoride ion per day is too high. In fact, examination of the literature shows very clearly that it is not this amount of fluoride but the lack of accompanying calcium in the present study that was the important factor.

Our data on long-term treatment of patients with osteoporosis with fluoride and calcium have continued to suggest that this is a successful form of treatment. One should not expect cessation of vertebral collapse or of other fractures until bone mass is significantly increased. And, in fact, three of eight patients sustained further fractures during the first 12 months of this combined treatment. In the subsequent six years vertebral collapse appears to be significantly decreased in a group of 30 patients who have been on treatment for a year or more.

Our investigation of the treatment of osteoporosis now includes 11 years of experience and 55 patients and we believe that

there are some important considerations in this type of study. One is the need for long-term investigation, meaning at least two years and preferably longer. We also believe that it is necessary to have some objective means of evaluating change in bone mass, such as quantitative radiology or bone biopsy. Incidence of fracture is clearly related to stress as well as to bone mass and can be an unreliable index in short-term studies.—We are, etc.,

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Antibiotic Policy

SIR,—Briefly, Mr. O. J. A. Gilmore and Dr. P. J. Sanderson (13 September, p. 653) have convinced us neither of the development of bacterial resistance after a single intracutaneous dose of cephaloridine nor of the wickedness of coin-tossing for randomization.

Professor P. Armitage¹ states that "the choice of treatment for each unit should be made by an independent act of randomization such as the toss of a coin or the use of random number tables." Coin-tossing is an excellent method, but can result in an untidy inequality of numbers.

The criticism that in our comparison of povidone-iodine with cephaloridine² we had no untreated controls hints at a fundamental disregard of the purpose of controlled clinical trials. After such a trial,³ which showed the superiority of single-dose intracutaneous cephaloridine over untreated controls, we obviously felt it was impossible for ethical reasons to leave the control group untreated in future.—We are, etc.,

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- 1 Armitage, P., *Statistical Methods in Medical Research*, p. 182. Oxford, Blackwell Scientific, 1971.
- 2 Pollock, A. V., and Evans, M. *British Journal of Surgery*, 1975, **62**, 292.
- 3 Evans, C., Pollock, A. V., and Rosenberg, I. L., *British Journal of Surgery*, 1974, **61**, 133.

** This correspondence is now closed.—ED., B.M.J.

The Mite and Childhood Asthma

SIR,—In a leading article (2 August, p. 263) you discussed the importance of mite allergy as a cause of wheezing in childhood and described measures for reducing inhalation of mite dust. The rationale of these simple environmental control measures was based on original reports^{1,2} which showed higher numbers of mites in dust from the surface of mattresses than from other sites within the house. More recently high numbers have been found in blankets³ and inside the covers of an old quilt.⁴ These suggest that such coverings may also be important sources of mite allergen.

We would now like to report a few examples of very high levels of infestation inside bed covers and feather pillows. Samples from these were obtained by snipping off a small triangular corner section (10 × 10 cm) from each pillow or quilt, cutting open the stitching and seams, and carefully brushing out the contents, from which the mites were

extracted using a lactic acid flotation technique.⁵ In the quilts cotton padding and loose flock replaced feathers as the filling material.

Quilts. Samples from two old Indian quilts from the beds of a 7-year-old boy and a 43-year-old woman, both with mite-sensitive asthma, yielded 2000 and 6500 mites respectively.

Eiderdown. This sample, of feathers only (6.1 g), taken from inside the eiderdown of a 25-year-old man with severe mite asthma yielded 2061 mites.

Pillows. These samples, taken from the feather pillows (15-50 years old) of four mite-sensitive children aged 5-11 years yielded 1640, 240, 120, and 3415 mites respectively. All came from homes with high standards of domestic hygiene.

These articles formed extensive reservoirs of infestation largely unaffected by normal hygiene control measures, and until their removal from the patients' bedrooms they continued to act as major vectors of mite allergen. Further work is now needed to relate the age of such articles and the conditions under which they are kept to the levels of infestation and to discover whether bed covers and pillows filled with other materials are also susceptible to infestation.

It is therefore suggested that much greater emphasis be placed on the removal, as early as possible, of old articles of bedding such as these from the bedrooms of patients with mite allergy. They are so often overlooked that careful questioning of the parent or adult patient may be necessary to discover their existence.—We are, etc.,

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- 1 Cunnington, A. M., *Acta Allergologica*, 1969, **22**, 408.
- 2 Maunsell, K., Wraith, D. G., and Cunnington, A. M., *Lancet*, 1968, **1**, 1267.
- 3 Sessay, H. R., and Dobson, R. M., *Acarologia*, 1972, **14**, 384.
- 4 Pickering, C. A., and Gabriel, M., *Bulletin of the Hong Kong Medical Association*, 1973, **25**, 95.
- 5 Stenius, B., and Cunnington, A. M., *Scandinavian Journal of Respiratory Diseases*, 1972, **53**, 338.

Loperamide in Treatment of Persistent Diarrhoea in Children

SIR,—The paper by Drs. G. N. Tijtgat and K. Huibregtse (21 June, p. 667) on the use of loperamide in ileostomy patients was of special interest to us. This drug has recently been reported to be effective also in the management of acute infectious gastroenteritis in children. Over a period of one year we have evaluated loperamide in 10 children presenting with various chronic disorders who were all affected by severe persistent diarrhoea.

The patients' ages ranged between 2½ and 52 months (mean 16½ months). The underlying disorders were cow's milk intolerance (3 cases), coeliac disease (1 case), intractable diarrhoea (1 case), bone marrow transplant in amegakaryocytic purpura (1 case), acute myeloblastic leukaemia (1 case), neuroblastoma (1 case), congenital uropathy (1 case), and irritable colon (1 case). The drug was given in a dosage of 0.08-0.24 mg/kg body weight daily in two or three doses. In eight patients a positive response was observed within a median time of 2½ days. The patient with cow's milk tolerance relapsed after

discontinuation of the therapy and the patient with intractable diarrhoea relapsed while on therapy and died. No response was observed in the patient with acute myeloblastic leukaemia after two months of continuous therapy. No adverse or side effects were noted.

On the basis of this limited experience we believe that loperamide is a valuable adjunct to the management of life-threatening diarrhoea of varying aetiology and that further studies are warranted in larger series of patients.—We are, etc.,

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¹ Dubru J. M., and Lambrechts, A., *Revue Médicale de Liège*, 1974, 29, 579.

Screening of the Newborn for Duchenne Muscular Dystrophy

SIR,—Your leading article (24 May, p. 403) raises the following questions concerning the method proposed by Zellweger and Antonik.¹

(1) Is the test ethically justified? Yes—at least that is the opinion of most parents of children with Duchenne muscular dystrophy (D.M.D.). We asked D.M.D. parents the following question: Would you have liked to have been informed at the time of birth that your child would eventually develop D.M.D.? Seventy per cent. of the parents with one D.M.D. child and 80% of the parents with more than one D.M.D. child answered "yes." The following reasons for their affirmative answers were given: "We would have selected another house (one storey with ramps and no steps, with wider doors to circulate more easily with the wheelchair, etc.)." "We would have moved to a town with better educational facilities for the handicapped than we have in our town." "We would have guided the child's interest in different directions than sports and physical activities." "We would not have disciplined our child so frequently for stumbling and falling when he was a toddler." "We could have prevented the birth of our affected son(s)." "We would have begun earlier with physical therapy and contracture prevention."

(2) Is screening financially justified in a disease as rare as D.M.D.? Yes, since the cost of the proposed firefly test is less than one dollar per sample, which is well within the cost range of other screening procedures and since D.M.D. is not at all a rare disease. The incidence of D.M.D. has been estimated to be 1 in 3600 liveborn boys.² Thus D.M.D. is more frequent than phenylketonuria or galactosaemia, for which screening is widely accepted.

(3) Is D.M.D. a preventable disease? Yes, it is in some instances. We have presently in our files 175 D.M.D. patients who came from 144 sibships. Thus 31 of them (17.8%) were born after one D.M.D. child was already in the family. These second and later cases could have been prevented if the D.M.D. of the first affected child had been diagnosed at birth or soon thereafter since a reliable method for carrier detection (in vitro protein synthesis by muscle ribosomes) is now available.³ Thus the possible prevention of 17-18% of all cases of D.M.D. would certainly justify this D.M.D. screening pro-

cedure. Screening of the newborn for D.M.D. can no longer be considered "controversial," as suggested in your article, so far as the medical and genetic aspects are concerned.—We are, etc.,

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¹ Zellweger, H., and Antonik, A., *Pediatrics*, 1975, 55, 30.

² Morton, N. E., and Chung, C. S., *American Journal of Human Genetics*, 1959, 11, 360.

³ Ionasescu, V., Zellweger, H., and Conway, T. W., *Neurology*, 1971, 21, 703.

Airlift from Darwin

SIR,—Professor Philip Rhodes (16 August, p. 419) gives an account of the problems, medical and other, which followed the destruction of the city of Darwin by cyclone Tracy early on Christmas morning 1974.

While I appreciate that it would be impossible for Professor Rhodes to mention in detail the excellent work contributed by many people under the most adverse conditions during the Darwin emergency, I think it might be appropriate to record the role played by Australian civil aviation. Professor Rhodes mentions that the R.A.A.F. uplifted 22 000 people from Darwin. This total could be accurate, but our information leads us to believe that about 25 000 people in total were airlifted out of Darwin from 26 to 30 December. Of this total, Qantas Airways carried 4925, T.A.A. 3893, Ansett Airlines 3608, MacRobertson Miller Airlines 1004, and Connair 818—a total of 14 248. This left the R.A.A.F., assisted by the United States Military Airlift Command and one aircraft from the Royal New Zealand Air Force, carrying 10 752 people.

There is no criticism of the R.A.A.F. implied in this, nor have I any wish to enter into a comparative discussion of the work done by different organizations. In the Darwin emergency many pitched in and did whatever they could. Among this group were many people within the Australian civil aviation industry. Two Qantas medical officers positioned to Darwin on the first flight early on the morning of 26 December remained there for the following five days and the airline's nursing sisters who were positioned to Darwin worked on board all Qantas flights from Darwin to Sydney.—I am, etc.,

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Sick Sinus Syndrome

SIR,—Dr. R. Sutton and his colleagues (9 August, p. 367) are correct in stating that in the past the aetiology of the sick sinus syndrome (sinoatrial disease) has been attributed to coronary artery disease. However, post-mortem evidence for this is extremely sparse and the role of coronary artery disease in this condition has been inferred from the

absence of other obvious pathological conditions and the reported finding of "arteriosclerosis" of the sinoatrial node artery. On the other hand, we have found little evidence of disease of the sinoatrial node artery in eight patients dying with the sick sinus syndrome.¹ Furthermore, in our experience the incidence of a past history of cardiac infarction is no higher in patients with sinoatrial disease than in those with complete heart block. In the Devon heart block and bradycardia survey, up to 1972 11 (10%) out of 106 cases of chronic sinoatrial disease had a past history of myocardial infarction and 29 (13%) out of 222 patients with chronic complete heart block had suffered from a previous infarction. In the survey sinoatrial disease was defined as chronic sinus bradycardia (atrial rate below 50/min) associated with one or more of the following rhythm disturbances: tachyarrhythmias (atrial fibrillation, atrial flutter, paroxysmal atrial tachycardia, paroxysmal ventricular tachycardia), periods of sinus arrest or sinoatrial block in which cessation of atrial activity persists for two seconds or longer, or profound atrial slowing (below 40/min) with junctional rhythm.

Of the 43 patients fitted with pacemakers in Exeter for sinoatrial disease there have only been two instances of failure of inhibition and both turned out to be due to a faulty system. It is possible that the characteristics of the pacemakers in use are responsible for the difference between our findings and those of Radford and Julian² and of Dr. Sutton and his colleagues. The majority of our patients (37 out of 43) were fitted with Vitatron on-demand units, which specify inhibition to an R wave of approximately 1.5 mV at 70 Hz and 1 V at 30 Hz, whereas 15 of the 21 pacemakers used by Radford and Julian were Devices units, which, we understand, require a higher voltage for inhibition, particularly at the 70-Hz frequency. Dr. Sutton and his colleagues do not give information concerning their pacemakers.—We are, etc.,

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¹ Evans, R. C., Brownlee, W. C., and Shaw, D. B., *British Heart Journal*, 1975, 37, 779.

² Radford, D. J., and Julian, D. J., *British Medical Journal*, 1974, 3, 504.

Treatment of Clonorchiasis

SIR,—On the question of treatment of clonorchiasis Drs. J. P. R. Hartley and A. P. Douglas (6 September, p. 575) state that "treatment remains unsatisfactory" but make no mention of hexachloroparaxyol (HPX; chloxyle), a drug which has been used with success in China for over a decade.^{1,2} A few years ago, having been unable to obtain HPX from British or Continental sources, I was able to obtain a supply from Dr. Hatem in China, together with advice on dosage. Dr. Hatem recommended 30 mg/kg daily by mouth for 10 days or 30 mg/kg every alternate day for 10 doses and advised that the original dosage which I had quoted³ had since been shown to be unnecessarily high. Using this reduced dosage my colleagues at