whether to begin long-term antituberculosis therapy.—I am, etc.,

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Mandal, B. K., et al., British Medical Journal, 1972, 4, 413.
 Fallon, R. J., British Medical Journal, 1972, 4, 794.

Drug-precipitated Acute Attacks of Gout

SIR,—Though there has been little discussion about drug precipitation of acute attacks of gout, it is known that diuretics such as hydrochlorothiazide, ethacrynic acid, and frusemide induce hyperuricaemia and thus precipitate acute attacks.1 Among the other drugs implicated are pyrazinamide, niacin, pempidine, alcohol, mecamylamine, and salicylates if the dose is less than 4 g per day.2 It would be of interest, therefore, to add a little to this list, seeing that the incidence of gout in Asians is much higher than was formerly thought.2

A patient aged 40, of Chinese origin, who had been suffering from gout for the past five years with a serum urate level of 0.6 mmol/l (10 mg/100 ml) recently presented with an acute attack of gout after taking a hypnotic the night before. The patient was not stabilized on any drug, but had been relatively free from acute attacks and was familiar with the precipitating factors in his case. Regular estimations of the serum urate level once a week after this episode revealed fluctuations, depending upon his activities, from 0.32 to 0.74 mmol/l (5.4 to 12.5 mg/100 ml). The threshold for an acute attack was at about 0.54 mmol/l (9 mg/100 ml).

During the study period of three months the patient presented with an acute attack on five occasions after taking nitrazepam 10 mg and had a serum urate level of 0.6-0.7 mmol/l (10-12 mg/100 ml). Diazepam 5 mg and chlordiazepoxide 15 mg also precipitated acute attacks. His treatment was then changed to Mandrax (methaqualone 250 mg and diphenhydramine 25 mg) but he again suffered an acute attack with raised serum urate levels. All attacks were successfully controlled with colchicine 0.6 mg and niflumic acid 250 mg six-hourly.

It seems possible that hypnotic drugs can now be included into the list of medications which can precipitate acute attacks of gout, a list which physicians should be well aware of.-I am, etc.,

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- 1 Healey, L. A., Majid, G. J., and Decker, J. L., New England Journal of Medicine, 1959, 261, 1358.
- 1358. ² Khaira. B. S., Far East Medical Journal, 1967, 3, 406.

Pseudocyanosis Neonatorum

SIR,—I should like to report a case of pseudocyanosis in the newborn-pseudocyanosis neonatorum.

The patient, a Caucasian male weighing 3.62 kg, was born to a 23-year-old primigravida of good health and barely adequate pelvis. At delivery the infant presented the appearance of gross cyanosis affecting the face and lips and this persisted despite a lusty and continuous cry.

The diagnosis of pseudocyanosis was apparent for reasons similar to the case of pseudocyanosis in an adult reported by Dr. N. G. Gold (13 July 1974, p. 119) in that there were no other features of cardiorespiratory disease and the simulated

cyanosis involved neither the limbs nor the mucous membranes within the mouth. The cause was thought to be facial contusion consequent to a degree of cephalopelvic disproportion, and this was subsequently confirmed by the characteristic evolution of colour which the face underwent.-I am,

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"Nasal FEV"

SIR,-Dr. J. Morrison-Smith and his colleagues (3 May, p. 255) state that "no completely satisfactory and simple measure of changes in nasal airway is available." Conscious of the need for a simple method of demonstrating changes we developed a "blockage index." This measurement correlates very well with nasal airways resistance as measured using more complex apparatus. The peak expiratory flow rate (PEFR₀) is measured in the usual way using a Wright peak flow meter, after which the mouthpiece is replaced by a semirigid rubber face-mask and the patient breathes out forcibly through his nose, keeping his mouth firmly closed. This measurement is the peak expirator flow rate through the nose (PEFR_n). The blockage index is then: (PEFRo- $PEFR_n) = PEFR_o$.

Unlike the "nasal FEV" described by Dr. Morrison-Smith and his colleagues the blockage index is independent of variations in the lower airways and is therefore valid for use before and after allergen challenge. -We are, etc.,

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¹ Taylor, G., MacNeil, A. R., and Freed, D. L. J., Journal of Allergy and Clinical Immunology, 1973, 52, 193.

Emigration of Doctors

SIR,—The truth of Dr. B. Senewiratne's two articles on medical emigration from developing countries (15 March, p. 618, and 22 March, p. 669) seemed so self-evident that I did not think of writing to endorse them until I read the dissenting letters from Drs. N. R. E. Fendall and A. J. R. Waterston (26 April, p. 190). Both dealt with the two important and interlinked questions of (1) tailoring the medical course in developing countries to the specific problems of those countries and (2) the use of paramedical workers to do routine tasks usually done in industrialized countries by doctors, so as to free the doctor in developing countries for vital educative and administrative work.

Over the past few years these two questions, or rather convening conferences on them and writing papers about them, have been one of the most remarkable growthpoints in tropical medicine. There have been little in the way of tangible results because certain facts are always ignored. I would like to outline some of them, but for considerations of space I must be brief and dogmatic.

(1) Paralleling the decline in the morale, discipline, and output of our Health Service has been a similar falling-off in developing countries. This matter is never discussed.

As in our own Health Service, it is so much more acceptable to all parties to suggest 'reorganization."

- (2) It is accepted by the "reformers" that doctors are reluctant to go to rural areas. To replace the doctor they invent an Ideal-the paramedical worker who is only too delighted to do so. Unfortunately he does not exist. Having been a district medical officer myself I can attest that paramedical workers spend just as much of their time as doctors agitating to be posted back to the capital or sent on another course. Replacing sullen doctors by sullen paramedical workers achieves nothing.
- (3) Anybody who has seen, or experienced himself, the extraordinary habits an isolated doctor can get into must appreciate how much more easily this can happen with a lesser-trained worker.
- (4) "Adjusting" the medical course means lowering the standard (see George Orwell's Animal Farm and 1984). This could be argued about for hours. I do not believe the "reformers" consciously desire to lower the standards, but that is where their highminded endeavours lead. For example, a professor of clinical sciences in a developing country recently told me he did not want his registrars taking even such a relatively trivial examination as the M.R.C.P.(U.K.) because it was "not relevant to the medicine they had to practise." All it tests, after all, is a basic competence in physical signs and a general knowledge of internal medicine.

 The structure the "reformers" are search-

ing for, as I understand it, is a pyramid with the doctor at the apex and his paramedical workers ranged below him, each doing his job to the best of his ability, reporting upwards the problems he cannot solve, and receiving in return a continuous flow of advice, encouragement, and education from those above him on the pyramid who know more than he does. I am happy to tell the "reformers" that their search is at an end. This very system was developed over a century by the Colonial Medical Service. There must be some survivors of the service still alive, though they would be well into their late thirties or even older by now. Could not some of them be invited to the next conference—or the next half-dozen -lest the secret die with them?-I am, etc.,

M. P. WHITE

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Reversible Infertility in Male **Coeliac Patients**

SIR,-It was interesting to read of the two additional cases of reversible subfertility in male patients with coeliac disease after treatment with a gluten-free diet (10 May, p. 316), though the improvement in the seminal fluid analyses reported was hardly impressive. However, it was surprising that the authors had not checked previous publications on this subject.

In the B.M.J. as long ago as 1962^1 the case was reported of a youth of 18½ in 1952 with coeliac disease and infantilism, whose normal adult development was stimulated with androgens while on an ordinary diet until 1953. When fully virilized in 1954 he had azoospermia, and a previous testicular biopsy had shown only tubules containing Sertoli cells, with few spermatogonia and

spermatocytes. After three years with a gluten-free diet seminal analysis in 1958 showed a sperm count of 45×10^6 /ml with 90% active progressive motility and normal morphology, and a second testicular biopsy, apart from slight capsular thickening, was essentially normal. He married in 1960 and his wife gave birth to a normal male child.—I am, etc.,

GEORGE FOSS

Bristo

1 Foss, G. L., British Medical Journal, 1962, 2, 368.

Relative Cost of Drugs

SIR,—As the cost of the N.H.S. soars attention is, rightly, being paid to reduction in expenditure wherever possible. The Department of Health and Social Security's contribution to cost-consciousness in prescribing is the circulation of bar graphs showing, with immediate visual impact, the relative costs of different medicaments in a therapeutic group. While the small print makes disclaimers the result of this visual approach is to suggest that the drugs mentioned are of equal dose and benefit. The absurdity of these comparisons has reached its apogee in the recent handout "Drugs used in Rheumatic Diseases." The cost of 100 tablets of each of six preparations—soluble aspirin B.P., Brufen, Indocid, Fenopron, Orudis, and Naprosyn-was compared. The only logical comparison is of the usual recommended starting dose of each preparation, the dose of aspirin being the minimal anti-inflammatory dose (12 tablets). Such a comparison yields both a difference in order of cost and a narrowing of the gap between different preparations (table I).

TABLE I—Comparison of Costs of Different Medicines in a Therapeutic Group in Relation to their Dose

| Preparation | Cost/100 Tablets | Starting Dose/ Day | Davs/ 100 Tablets | Cost/ Day (p) |
|--|---------------------|--------------------------|-------------------------|---------------------|
| Soluble aspirin B.P. Brufen Indocid Fenopron Orudis Naprosyn | 0·24 | 12 | 81 | 2·9 |
| | 2·06 | 6 | 164 | 12·4 |
| | 2·54 | 3 | 331 | 7·6 |
| | 3·09 | 3 | 331 | 9·3 |
| | 5·31 | 3 | 331 | 15·9 |
| | 7·70 | 2 | 50 | 15·4 |

TABLE II—Preference of 200 Patients and 72 General Practitioners for Dose Frequency of Drugs

| | Mean | Mean Preference Scores (| | | | |
|---------------------|---------------|--------------------------|-----------------|------------------------|--|--|
| | Once Daily | Twice Daily | Thrice Daily | Four Times Daily | | |
| Patients Doctors | 73 74 | 67 70 | 56 49 | 38 31 | | |

Publicity of this kind is counter-productive for two reasons. Firstly, those with a knowledge of the comparative doses of these immediately dismiss drugs will pamphlet, and by association all others from the same source, as misleading nonsense. More tragically, this approach militates against preparations which require reduced tablet intake and less frequent dosage. In a survey which we have recently completed patients and general practitioners were asked to score the various features of antirheumatic therapy. Both groups showed a significant preference for reduced dosage frequency (table II). Departmental denigration of these desirable features might prejudice further attempts to ease the burden of medication in patients with longstanding disease. At best this shows a lack of appreciation of the problems; at worst a heartless contempt for the patients' needs.

Finally, a pharmaceutical company claiming a cost benefit for its product by comparing the price of eight days' treatment with 50 days' of a competitor would be considered unethical. Why should the D.H.S.S. adhere to any lesser ethical standard?—We are, etc.,

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V. WRIGHT

University of Leeds

Late Recurrence of Thrombotic Thrombocytopenic Purpura

SIR,—In their report on "Late Recurrence of Thrombotic Thrombocytopenic Purpura after Splenectomy" Dr. D. J. Howard and his colleagues (10 May, p. 317) use the term "unique" in referring to their case and also state that "late recurrence of T.T.P. has not been described."

A case was seen by me in 1956, and subsequently published, of several relapses and recurrences over a period of 18 years before the final fatal episode. Histological proof of the existence of the characteristic lesion was found in a breast biopsy performed three years before death. This publication included a résumé of cases reported in the literature to date in which late recurrences had been described. One of them? was of a patient whose condition recurred two years after splenectomy, as in the case described by Dr. Howard and his colleagues.

This all makes me to reflect a little sadly and shake my not too grey locks and wonder how recent is recent, how old is old. Eheu! fugaces, Posthume, Posthume.—I am, etc.,

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Cahalane, S. F., and Horn, R. C., American Journal of Medicine, 1958, 27, 333.
 Meachan G. C., Orbison, J. L., and Heinle, R. W., Blood, 1951. 6, 706.

Teaching of General Anaesthesia in Dental Schools

SIR,—Your leading article "Deaths in the Dental Chair" (8 February, p. 293), in common with subsequent correspondence, fails to recognize a contentious point. There is much which suggests that the dentists concerned believed that they were using "intravenous sedation" and not general anaesthesia. If this is so, then dentists are at complete cross purposes with anaesthetists and others who discuss these fatalities. It is instructive to look at the situation from this view.

In your report of the inquest on one patient who collapsed under methohexitone anaesthesia (10 August 1974, p. 419) the dentist, describing his technique, mentions giving a dose of methohexitone and then waiting "for an eyelash reflex" before proceeding to operate. The evident intention is to ensure that the patient is merely sedated and not unconscious; the reason for failure of realization of this good intention is to be

found chiefly in the dentists' education. Accounts given of this suggest that in anaesthesia and sedation their education has sometimes been superficial and empirical in the extreme and has often been based on an anachronistic undergraduate training in general anaesthetics. Dentists do not need "more anaesthetic training" as undergraduates nor "more postgraduate courses in sedation."

The whole of the dentist's education in general anaesthesia and sedation needs radical revision. By default of anaesthetists, the teaching of sedation is so largely in the hands of dentists and so cut off from the discipline of general anaesthesia that it becomes progressively more empirical and therefore potentially dangerous. Dental school practice of general anaesthesia needs complete rethinking if teaching of dentists is to be sound. The application of modern anaesthetic practice in the dental school is feasible; it has been achieved in the dental school of the University of Melbourne and an account of this will be published shortly1 along with a review of the practical realities of the use of sedation by dentists.

Little will be achieved by mere condemnation of current practice by people who do not understand the problem.—I am, etc.,

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Bell, J. M., Clinical Dental Anaesthesia. Oxford, Blackwell Scientific. In press.

G.M.C. and Indian Doctors

SIR,—May I, as an Indian doctor who came here before the N.H.S. came into being, be permitted through your columns to express an immigrant's view on the recent move by the General Medical Council to halt the reciprocal recognition of medical degrees between the U.K. and India (31 May, p. 512)?

There has recently been a marked increase in the number of articles and letters in medical journals casting aspersions on and in some cases suggesting the inferiority of overseas doctors. The Merrison Report¹ has done much to lend support and credibility to these ideas. On reflection it would seem to me that the authors of the report could have had only limited personal knowledge of overseas medical graduates and that their findings were based largely on second-hand information.

Not so long ago overseas doctors were tolerated and even welcomed here just so long as they remained willing to fill the unpopular areas of the N.H.S. It was when they aspired to higher status in hospital services and general practice that the resentment and bitterness began to creep in.

The interests of the Government and the public on the one hand and those of the British doctors on the other would seem to be contradictory. Because of the emigration of British doctors, creating a shortage of manpower previously filled by Irish graduates who now find medicine here less attractive, the Government gave a qualified approval to overseas graduates in order to fulfil their statutory obligation to run a comprehensive N.H.S. In the view of British doctors and their organizations this has frustrated their