Treatment of Burns

SIR,—I note that in his article on "The Burnt Patient" (17 August, p. 460) Mr. R. Sanders advocates the repeated dressing of burn wounds; in the emergency procedure he suggests only washing, cooling, and clean dry dressings.

Might I suggest that there is still a place for the old-fashioned remedy of pouring on unrefined or "crude" cod liver oil? This is a naturally sterile preparation and therefore is easy to store and use, but it has the added advantages that a coagulum is produced over the burnt area which is soothing to the burn and which prevents the gross seepage of protein-containing fluid from the burn, thus reducing the common hypoproteinaemic problem in extensive burns but at the same time not forming a completely impermeable eschar as seen with picric acid, silver nitrate, etc. The cod liver oil can be poured on repeatedly without removing the previous application and thus distress is avoided and time saved. The only objection to the method is the smell, which is rather pronounced with the crude form, which it is essential to use.—I am, etc.,

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Post-partum Rubella Vaccination, Anti-D Immunoglobulin, and Blood Transfusion

SIR,—We were interested to read the letters from Messrs. B. Alderman and D. W. Charters (29 June, p. 724) and from Drs. W. M. Edgar and M. H. Hambling (27 July, p. 255) on puerperal rubella vaccination and anti-D immunoglobulin.

Since January 1972 post-partum rubella vaccination has been carried out in Göteborg. In the first year a comparison was made between three commercially available rubella vaccines, Cendevax, Meruvax, and Almevax, considering side effects and seroconversion rates.¹ Pregnant women have been screened for the presence of haemagglutination-inhibiting (H.I.) antibodies at their first visit to antenatal clinics and those with an H.I. titre ≤ 10 have been offered vaccination, usually within four days after the delivery. Blood samples have been taken immediately before and six to eight weeks after vaccination. To evaluate the influence of anti-D immunoglobulin and blood transfusion on the serological response to rubella vaccination the obstetric reports from 655 rubella-vaccinated women, have been examined; 408 received Almevax, 118 Cendevax, and 129 Meruvax. Eight had received blood transfusions and 58 anti-D immunoglobulin.

The seroconversion rates were 97% for the controls—that is, the 589 women who had not received transfusion or anti-D prophylaxis—and 100% for the anti-D group. In the group who had received blood transfusions seroconversions occurred only in four out of eight (50%). The difference is statistically significant ($P < 0.001$). The geometric mean titres after vaccination in women showing seroconversion varied from 34 to 38, but no statistically significant differences between the groups were found. One of the women, who had received three units of blood at the delivery, was H.I.-negative in the screening test and had an

H.I. titre of 20 after blood transfusion but before vaccination. She was again H.I.-negative eight weeks after the vaccination. This indicates a possible passive transfer of H.I. antibodies interfering with the serological response to the vaccination. It should be mentioned that the three sera were tested simultaneously and that the H.I. test was repeated three times.

Injection of 20 ml of specific immunoglobulin has been found to reduce the seroconversion rate when given 24 hours after Cendevax vaccination,² Budai *et al.*³ showed that 7.5 ml of γ -globulin reduced the seroconversion rate when it was given two days before vaccination, while 2.5 ml did not. The amount of rubella antibodies in the last dose is probably within the same range as the amount of antibodies in the anti-D immunoglobulin used for prophylaxis.

As shown by the present report anti-D immunoglobulin did not influence the serological response to rubella vaccination. On the other hand blood transfusion reduced the seroconversion rate. It is reasonable to assume that if many units of blood are given a large dose of rubella antibodies can be transferred. We suggest that rubella susceptible women who have received blood at delivery should be vaccinated, but consider it important that the result of the vaccination be checked after six to eight weeks.—We are, etc.,

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- 1 Grillner, L., *et al.*, *Scandinavian Journal of Infectious Diseases*, 1973, 5, 237.
- 2 Luthardt, Th., *et al.*, *Deutsche medizinische Wochenschrift*, 1974, 99, 1243.
- 3 Budai, J., Tóth, M., and Melis, L., *Proceedings of the 13th Symposium of the European Association on Poliomyelitis and other Virus Diseases, Helsinki, 1971*, p. 210.

The G.P. and the Psychotherapist

SIR,—In the reorganization of the National Health Service it is proposed that most of the needs of the district shall be met within its own area. It implies a greater degree of co-operation than heretofore between skilled personnel, whether they be general practitioner, social worker, hospital consultant, or nurse, so bringing about greater possibilities not only for the patient but for creating an environment conducive to social well-being and positive health.

In view of these trends and the fact that the psychiatrist specializing in psychotherapy has limited needs for the technical amenities of a hospital, should he not be functioning nearer to the community that he serves? I would suggest that the psychotherapist should spend part of his time in a team consisting of a social worker, a psychiatrically trained nurse, and himself, visiting any G.P. in the district who requests his service. The G.P. would gather up patients with whom he needed help from the team, who could use the practice premises outside surgery hours. Hopefully the greater personal contact would make for more effective support and help for the G.P. coping with a psychiatric population variously estimated at between 10% and 40% of his practice.

The G.P. has little time to spend with

each patient and those with psychological and psychosocial problems are time-consuming. The visiting psychotherapist would be able to keep the G.P. informed about the latest therapeutic methods and the best use of current psychopharmacological drugs. In his turn he would learn a great deal from the G.P., particularly about environmental problems, social norms, and the difficulties arising in the subcultures which make up that particular district. The idea of a psychiatrist visiting the G.P.'s practice has been not only recommended¹ but tried successfully on a limited scale,² but not as a team. A nurse, social worker, and psychotherapist should be a useful combination to advise in that twilight area of problems commonly met by the G.P. Such a team might well meet the needs of Dr. M. (22 June, p. 659) and other correspondents who have recently discussed their needs of the social services in the *B.M.J.*

The amount of psychological suffering is immense; it has always been with us. However, the man in the street now expects health and happiness, notions engendered by the N.H.S., the media of communication, and advertising. Most psychotherapy is administered either overtly or covertly by persons under one banner or another who are neither medically qualified nor in an allied profession. Much help is offered, some of it excellent, and it has arisen because of the vast need. Surely it is important, therefore, to consider all possible ways of distributing what little professional help there is. Such a scheme is not intended to replace the hospital services but to complement them.

I would be interested in the views of G.P.s and other concerned parties.—I am, etc.,

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- 1 Royal College of General Practitioners, *Reports from General Practice No. 7*, 1967.
- 2 Brook, A., *Journal of the College of General Practitioners*, 1967, 13, 127.

Hazard of Propranolol in Treatment of Acute Porphyria

SIR,—Attention has recently been drawn to the use of propranolol for the symptomatic treatment of the autonomic overactivity of hepatic porphyria in acute relapse.^{1,5} While no controlled studies have been reported, this β -adrenergic blocker has appeared to be of benefit in certain instances in decreasing the sympathetic nervous system hyperactivity frequently occurring during acute porphyric attacks. Propranolol in large doses has also been reported to decrease the urinary excretion of D-aminolaevulinic acid (ALA), porphobilinogen, and total porphyrins and to decrease the activity of hepatic ALA synthetase in female rats given the porphyrinogenic compound allyliso-propylacetamide.⁶ We wish briefly to describe an adverse experience with propranolol in the treatment of intermittent porphyria in relapse.

The patient was a desperately ill 33-year-old woman with an acute attack of intermittent porphyria who had a previous history of recurrent urinary tract infection and significant hypertension but without cardiomegaly or congestive heart failure. Some aspects of her case have previously been described.⁷

Because of severe hypertension, tachycardia, and sweating, unresponsive to oral reserpine, guan-

thidine, and mecamlamine, the patient was given 10 mg of propranolol twice, six hours apart. She had no apparent response to the first dose; however, within two hours of the second dose her pulse rate fell from 120 to 60/min and her blood pressure from 240/120 to 90/50 mm Hg, and she became unresponsive. An intravenous infusion of isoprenaline was required for several hours to restore and maintain pulse rate and blood pressure at normal levels. Within a day thereafter, without additional medication, the patient's tachycardia and hypertension returned. She had no symptomatic or objective response of visceral or peripheral neuropathy to propranolol. Several days later the patient developed bleeding due to "stress" ulceration of the gastric mucosa. While receiving fluid and blood replacement she developed acute congestive heart failure and pulmonary oedema at a time when her blood pressure was low and clinically it was felt her intravascular volume depletion had not been corrected entirely.

We interpret these events as indicating that our patient was compensating haemodynamically for elevated blood pressure (before and during her acute attack) by β -adrenergic stimulation of cardiac function. This increase in β -adrenergic activities may have resulted from physiological reflex mechanisms and/or from an influence of acute intermittent porphyria on the sympathetic nervous system. In any event the positive chronotropic and inotropic effects of endogenous catecholamines appeared essential to cardiovascular homeostasis, which was adversely and severely affected even by a small amount of propranolol.

While propranolol is of benefit in some patients in porphyric relapse, it is not without risk in patients with incipient cardiac failure. It may also be of risk in the pronounced hypovolaemic states which have been observed in patients with acute intermittent porphyria⁶ in the absence of apparent excessive volume loss. Beta-adrenergic stimulation in some episodes of porphyria may provide haemodynamic compensation rather than being simply a manifestation of acute relapse.—We are, etc.,

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1 Beattie, A. D., et al., *British Medical Journal*, 1973, 3, 257.

2 Atsmon, A., Blum, I., and Fischl, J., *South African Medical Journal*, 1972, 46, 311.

3 Atsmon, A., and Blum, I., *Lancet*, 1970, 1, 196.

4 Schley, G., et al., *Klinische Wochenschrift*, 1970, 48, 36.

5 Bock, K. D., et al., *Deutsche medizinische Wochenschrift*, 1968, 93, 2119.

6 Blum, I., Schoenfeld, N., and Atsmon, A., *Biochimica et Biophysica Acta*, 1973, 320, 242.

7 Bonkowski, H. L., et al., *Proceedings of the National Academy of Sciences, U.S.A.*, 1971, 68, 2725.

8 Bloomer, J. R., et al., *New England Journal of Medicine*, 1971, 284, 17.

Idiosyncrasy to Phenothiazines in Phenylbutazone-associated Aplastic Anaemia

SIR,—The interesting paper by Dr. J. L. Cunningham and his colleagues (3 August, p. 313) suggested that poor paraoxidation of phenylbutazone may be a factor in the aplastic anaemia associated with phenylbutazone therapy. We have observed an idiosyncrasy to phenothiazines in a patient with phenylbutazone-associated aplastic anaemia.

A 27-year-old man developed aplastic anaemia as a result of 2½ years of phenylbutazone therapy for ankylosing spondylitis. He was admitted for bone marrow transplantation and, prior to this, received a buffy-coat transfusion followed by high-dose intravenous cyclophosphamide. The vomiting and nausea caused by the cyclophosphamide was treated with three 25-mg intramuscular doses of chlorpromazine over a two-day period and four 12.5-mg doses of prochlorperazine over the ensuing two-day period. This resulted in a dyskinesia manifested by oculogyric movements. Further phenothiazines were withheld and the dyskinesia passed off spontaneously in three hours.

Dyskinesias are a well-recognized side effect of the phenothiazines. They are not dose-related and can occur in the first few days of treatment, suggesting an individual predisposition.¹ It is of interest that the phenothiazines, while being metabolized in many different ways, undergo aromatic

oxidation² as one of their major pathways in a similar manner to phenylbutazone.³ We therefore wonder whether the two drug idiosyncrasies of this patient may indicate a defect in a common oxidation pathway, and would welcome reports of any similar interactions.—We are, etc.,

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1 Ayd, F. J., *Journal of the American Medical Association*, 1961, 175, 1054.

2 Fishman, V., and Goldenberg, H., *Journal of Pharmacology and Experimental Therapeutics*, 1965, 150, 122.

3 Burns, J. J., et al., *Journal of Pharmacology and Experimental Therapeutics*, 1955, 113, 481.

Doctors' Pay

SIR,—We would like to voice our support for Dr. J. F. Nunn (31 August, p. 579).

The plight of young consultants is being overlooked by many of the older members of the profession who negotiate on our behalf. Many newly appointed consultants are in very difficult financial circumstances. They spend 8-10 years in junior hospital grades, frequently subsidizing their income by working for a deputizing service or undertaking general practice locums during their holidays. On appointment as a consultant they find themselves with an income barely sufficient to raise a mortgage and the prospect of 10 years until they reach the top of the consultant salary scale. To raise the maximum mortgage many start with full-time contracts, thus losing allowances for telephones and motor car depreciation, etc.

Is it surprising that many continue to scan the back pages of the *B.M.J.* to find employment in countries where the population is more appreciative of their talents? —We are, etc.,

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SIR,—Dr. S. Mehta and his colleagues (14 September, p. 690) are to be commended for directing attention to the question of consultant relativities, though these are not entirely new.

Clinicians are in clinical charge of patients after a relatively long and rigorously selective training. This includes a grounding in the complexities of dealing with the great British public wider than that of the more ancillary and subcontractual specialties and appropriate to those whose lot it is to stop most of the medical bucks going.

Lengths of apprenticeship in different specialties vary, which in turn affects total life earnings. If applicable, domiciliary fees and the differing incidence of merit awards compensate somewhat for longer pre-consultant training. Perhaps such things as work in operating theatres, anaesthetic or operative, and an incessant heavy load of emergency work deserve more recognition than at present. All graduates appear to

start with equal opportunities of seeking a consultancy in any specialty, without compulsion to enter a particular one. Applied consultant egalitarianism might prevent the future manning in full of the more exacting specialties.—I am, etc.,

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Trade Union Tactics

SIR,—Dr. P. H. Woodcock has expressed so aptly what most of us must feel about the present state of remuneration of the profession (21 September, p. 744).

We are told by the Secretary of State for Social Services that our recent small awards must stand for 12 months (17 August, p. 479), notwithstanding the recognition by the Review Body that it still leaves us behind in the financial stakes. If only other Ministers would dare say the same thing to those militant unions who are finding reasons why they should be exempted—unions whose members are among the higher paid workers.

Likewise, most of us will agree with what Dr. P. E. Baldry has said on the same subject (21 September, p. 744), but I would take issue with his suggestion that we should employ the services of an experienced specialist in trade unionism to help us protect our interests. We have our own able and experienced negotiators, the essential difference being that theirs have "teeth"—namely, the threat of industrial action—which they do not hesitate to use to achieve their aims without any hint of compromise. Are we prepared to give ours the same "teeth"? —I am, etc.,

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Dynamism and Inflation

SIR,—The latest issue of *B.M.A. News* (August/September 1974) contains the statement that "the new dynamising formula introduced for general practitioners in 1972 protects them against inflation over their careers in the build up of their pensions" (p. 37). This is not true.

The Review Body's Fourth Report reveals an anomaly which "results from the decision to use the increase in general practitioners' earnings as the 'dynamising factor' in the