

the literature have confirmed its efficacy in various types of convulsive disorder. As clonazepam is chemically related to diazepam, in October 1973, we started administering it orally to patients in place of diazepam to control the dyskinesia. Up to the present 42 patients have been given the drug in doses varying from 0.5 mg twice daily to 1 mg three times daily and without exception there has been a distinct improvement in the condition, without drowsiness and without the anxiety which was sometimes associated with the dyskinesia, as patients found they frequently could not do their household tasks owing to the trembling of their hands.

The use of clonazepam has not been reported elsewhere in the literature in this condition, but its efficacy is so marked that I consider that the attention of others using drugs which produce dyskinesia should be drawn to the possible value of this drug for its control as well as for epilepsy.—I am, etc.,

P. M. O'FLANAGAN

Winwick Hospital,
Warrington, Cheshire

- 1 O'Flanagan, P. M., *Journal of International Medical Research*, 1973, 1, 375.
- 2 Bladin, P. F., *Medical Journal of Australia*, 1973, 1, 683.
- 3 Parsonage, M., *British Journal of Hospital Medicine*, 1973, 9, 613.

Geriatric Policies

SIR,—Dr. G. R. Burston's letter (14 December, p. 652) is interesting for many reasons. (1) He implies that elderly people are sent into hospital to enable the general practitioner, the home help, and the district nurse to escape from them. (2) He appears to expect that frail old people whom he has rehabilitated will never break down again. (3) When they do break down he does not consider them to be genuine medical patients.

In my own view the geriatrician gears his unit not only to diagnose multiple pathologies and rehabilitate the helpless but also to deal with the recurrent needs of the physically inadequate. The geriatric unit, with its extensive day hospital service, intermittent admission regimens, holiday admissions, even in some cases one week in and four weeks out, should have an infinite variety of functions for dealing with infinitely varying needs. The key, however, must be for it to have as its prime function the admission of the maximum of medical and social emergencies in old age from the district.

It is the geriatric admission which is wrongly admitted to the medical unit and becomes "chronicized" owing to lack of skilled rehabilitation which can overcome the facilities of the geriatric unit to deal with it. No geriatric unit, however, efficient, can admit vast numbers of long-stay chronic cases from other hospitals. However, if the geriatric unit, as in Sunderland and elsewhere, has a high admission rate of acute geriatric problems from the district the number of geriatric patients admitted to medical wards will inevitably lessen, as will the demand for long-stay geriatric beds.

Dr. Burston mentions pairs of hands. It is impossible to over-emphasize the importance of the home help. Money spent in this area will bring a decreased demand on geriatric

services. Many of my patients are admitted unnecessarily into hospital when the home help becomes ill or even during a prolonged Christmas holiday. Similarly shortages of hostel accommodation will be reflected in an increased demand on hospital beds.

Within the hospital itself staff shortages, particularly nursing staff and rehabilitation staff in the form of occupational therapists and physiotherapists, will be reflected in a decreased through-put through the unit, and here again there must be adequate financial incentives for recruitment, particularly in physiotherapy and occupational therapy. The tremendous pressure upon consultant geriatricians cannot be overestimated. To satisfy the ever-increasing needs of this vulnerable area of the population adequately demands not only a high degree of diagnostic skill on the part of the geriatrician but also management expertise, including the ability to motivate his team of nurses and rehabilitationists and maintain their unflagging enthusiasm.

It is inevitable, however, that most geriatricians on a difficult day must feel as Dr. Burston does, particularly on a Monday morning when the admission ward appears full of a new intake of completely helpless, confused, and incontinent new admissions. It is, however, amazing how, by the following week, they appear to be sorted out and many well on the way to recovery and discharge.—I am, etc.,

W. FINE

Newsham General Hospital,
Liverpool

Distribution and Supervision of Oral Contraceptives

SIR,—A four-year association with the Family Planning Association as clinic medical officer has confirmed the initial impression that the F.P.A. is a body which (1) has accumulated over the years a very considerable expertise; (2) has run excellent training courses; and (3) has shown a responsible attitude in all matters concerning family planning in the widest sense.

The letter from Dr. M. V. Smith and others (19 October, p. 161) which advocates widening "the range of those empowered to dispense oral contraceptives to include state registered nurses, midwives, and health visitors who have had some additional training in contraceptive practice" can be regarded as in line with the above tradition, since it also recognizes that the oral contraceptive is a "relatively powerful" drug and suggests that doctors should continue to supervise the service and that in order that the user of any method of contraception should have the fullest possible confidence in that method "any woman who wishes to see a doctor when starting oral contraceptives or during their use should continue to do so."

It is important, however, if these ideas should be implemented, that the expertise should not be too diluted and that the standard of care should not be allowed to fall. One can imagine that experienced F.P.A. nurses might require only small additional training, since many have become accustomed to a degree of delegation and are also already familiar with other forms of contraception which might be more appropriate in a particular case. For other non-doctor health

personnel an adequate theoretical and practical training is essential and should include practical sessions, with an experienced doctor and preferably in a family planning clinic, for an adequate period of time—for example, weekly for three months.

Women in this country are entitled to the continued availability of at least the present standard of care. It must be remembered that the pill is a hormone preparation and therefore still remains potentially dangerous if used wrongly or in inappropriate cases.—I am, etc.,

W. K. J. WALLS

Department of Anatomy,
School of Medicine,
Leeds

Community Hospitals

SIR,—That nursing staff would be difficult to recruit into local hospitals if they were used predominantly for elderly people is repeatedly put forward as a powerful argument against their use along the lines suggested by the Department of Health and Social Security.

The evidence is to the contrary. Throughout the country there are scores of peripheral geriatric hospitals, full of elderly people, staffed by local nurses, and supervised by general practitioners. These hospitals have all had their difficulties and they sometimes represent the worst type of accommodation, but they have seldom closed because of failure of nurse recruitment.—I am, etc.,

W. B. WRIGHT

Royal Devon and Exeter Hospital,
Exeter

Screening Procedures for Breast Cancer

SIR,—Perhaps I have missed the vital figures somewhere, but I remain unconvinced that a screening procedure for breast cancer would make necessary the use of one-third of our surgeons working full time (leading article, 7 December, p. 549).

I may be wrong but I would like to suggest that this is one of those situations where doctors are apparently failing to see that it does not need a fully-trained surgeon at every stage to screen and rule out large numbers of well patients. I believe that many women delay taking medical advice about possible cancer at an early stage for a number of reasons which are basically psychological and that a new system should be devised to make routine checks much simpler and less anxiety-making. Properly designed, such a system could save many lives at far less cost to the nation than present methods. These often result in treatment being sought too late so that highly trained surgeons and expensive hospital treatment have to be used, often unfortunately to no avail.—I am, etc.,

GILVRAV ADAMSON

London S.W.1

Drugs for Addicts

SIR,—I am most concerned about drugs for registered addicts. It may not be generally known, but when a drug addict is registered

at a clinic or hospital, arrangements are made so that a chemist in the patient's area may supply him with the requisite drugs. Unfortunately, if the chemist is not open on a Sunday the addict receives a double supply on the Saturday and of course if the chemist is closed for Easter Monday or Christmas Day and Boxing Day following a weekend, then the drug addict is given a supply of drugs to carry him over this period.

This system may work well in many cases. As a police surgeon, I meet the cases where the system falls down and very real problems exist. These occur when, because the addict is so dependent on his drugs or for some other reason, he uses up his supply quickly, or when he sells them, and then is without drugs for the next day or so.

Another problem is that if a doctor wishes to confirm that a certain person is a drug addict, then facilities are available to obtain this information from the central register in London. This register is not manned outside normal working hours. Moreover, the information when obtainable is basically the fact that the patient is a drug addict; the name of the drug and the dose in use is not known, though the clinic that the patient is attending can usually be obtained. However, even if the clinic is known the records cannot be obtained outside normal hours.

My object in writing this letter is to stimulate some thought and, I hope, some appropriate action on these problems.—I am, etc.,

A. J. LAIDLAW

Worcester

Impaired Colour Vision in Diagnosis of Digitalis Intoxication

SIR,—I was interested in the letter from Dr. Vesa Manninen (14 December, p. 653) with regard to dyschromatopsia in early cases of digitalis intoxication. I have found similar early symptoms in suspected intoxication with digoxin, but I would suggest that the Ishihara plates are not really suitable since the early signs are usually on the blue/yellow axis, for which there are no plates in the Ishihara series. A more suitable test is the Farnsworth Munsell 100-hue test, which tests the whole range of colour hue and is, in addition, much more sensitive than the Ishihara test, which is primarily of value in the detection of the gross defects present in inherited colour blindness. Alternatively, and even better, is the use of the Pickford-Nicholson anomaloscope, but this requires a good deal of experience in a specialist clinic.—I am, etc.,

W. O. G. TAYLOR

Ophthalmic Unit, Heathfield Hospital, Ayr

Choice of Contraceptives

SIR,—Having just read the letter from Professor D. B. Jelliffe and E. F. Patrice Jelliffe (14 December, p. 658) I would like to make the following point before breast feeding is advocated instead of contraception.

About 12 years ago I practised in Manitoba and part of my work included 10 colonies of Hutterites. Every married woman in the colonies quite categorically stated that a woman could not become pregnant while

breast feeding. Yet I often saw a 2-year-old, 1-year-old, and 3-month-old child all feeding from the same mother. Certainly such feeding was unrestricted, on demand, and permissive. I have seen a 2-year-old run in from the garden, stand and feed beside its mother, and run out to play again.

I have not had the benefit of a personal communication from Rosa nor have I any knowledge of "curvilinear" compromises, but I would suggest that "linear" technology has a great deal more to offer than "curved" biotraditional contraception.—I am, etc.,

D. L. PRICE

Kingsclere, Newbury, Berks

Distamine

SIR,—Some confusion has been caused by the presence on the pharmacists' shelves of three formulations of Distamine (D-penicillamine). The original capsule of penicillamine hydrochloride may be withdrawn in 1975. Its equivalent replacement is a tablet containing 125 mg of penicillamine free base, and this together with the standard 250-mg tablet of base is available now. Will prescribers please note that if a prescription for "Tab. Distamine" or "Tab. penicillamine" is made out without stating the strength required the smaller tablet must be dispensed.—I am, etc.,

W. H. LYLE

Medical Director, Distal Products Ltd.

Liverpool

Treatment of Genital Herpes

SIR,—Dr. S. M. Laird and Mr. R. B. Roy (27 July, p. 255) reported the beneficial effect of co-trimoxazole in genital herpes, and Dr. Paula H. Gosling (17 August, p. 473), in support of similar findings, stated that trimethoprim inhibits the growth of the virus in tissue culture, though she did not give the data.

Co-trimoxazole depends for its antibacterial action on inhibition of bacterial purine synthesis, the sulphonamide component inhibiting dihydrofolate synthetase and trimethoprim dihydrofolate reductase, the bacterial dihydrofolate reductase being at least 10 000 times more depressed than the mammalian enzyme.¹ Suppression of herpes simplex growth would not be expected since these enzymes are not induced by herpes virus infections² and are probably not necessary for virus replication, the virus utilizing the pre-existing cellular pool of purines in the synthesis of its D.N.A.

We have studied the effect of trimethoprim on the growth of herpes simplex types

TABLE I—Plaque Assay of Herpes Simplex Virus Types 1 and 2

Drugs Added*	Virus	
	Type 1	Type 2
None	37	82
TMP 1 µg/ml .. .	42	94
TMP 10 µg/ml .. .	46	110
TMP 100 µg/ml .. .	36	106
P and S	41	74
TMP 1 µg/ml + P and S .. .	43	100
TMP 10 µg/ml + P and S .. .	35	82
TMP 100 µg/ml + P and S .. .	39	72

*TMP = Trimethoprim. P and S = Penicillin and streptomycin (100 U/ml and 100 µg/ml respectively).

1 and 2 in B.H.K.21 cells using plaque assays (see table I) and one step growth curves (tables II and III) as indices of virus growth. The growth curves were carried out in the absence of penicillin and streptomycin and both dividing and resting cells were studied, the growth in resting cells being more closely analogous to infection in the intact host. Levels of trimethoprim up to 100 µg/ml, alone or in combination with sulphamethoxazole, produced no more than 50% reduction in virus growth, a value insignificant in comparison with other antiviral agents. This level of trimethoprim is some 30 to 50 times that achieved in serum after a 240-mg oral dose,³ reduces mammalian dihydrofolate reductase activity by 50%¹ and is toxic to B.H.K. cells (personal observations). Patients receiving trimethoprim in a daily dose of 1 g have been shown to have significant bone marrow depression.⁴

TABLE II—Virus Growth at 18 Hours after Infection in Absence of and in Presence of Trimethoprim

Virus	Plaque-forming Units per Cell		
	No Tri-methoprim	30 µg/ml Tri-methoprim	100 µg/ml Tri-methoprim
Type 1 ..	10		10.1
Type 2 ..	15	13.3	12.6

TABLE III—Virus Growth at 18 Hours after Infection in Absence of and in Presence of Co-trimoxazole

Virus	Plaque-forming Units per Cell		
	No Co-trimoxazole	Co-trimoxazole (= 30 µg/ml TMP*)	Co-trimoxazole (= 100 µg/ml TMP)
Type 1 in dividing cells	{ 40 54 38	27	23 28 28
Type 2 in resting cells	141		67

*TMP = Trimethoprim.

Our studies failed to show significant inhibition of the growth of herpes simplex in tissue culture. The reported effect of co-trimoxazole in the clinical situation is unexplained.—We are, etc.,

DAVID H. WATSON
DAVID HAIGH

Department of Microbiology, School of Medicine, Leeds

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Screening for Gynaecological Abnormalities

SIR,—In her interesting survey of gynaecological abnormalities found at a cytology screening clinic Miss Diana Edwards (26 October, p. 218) makes the important point that abdominal and pelvic examinations should always be carried out at such clinics. However, I would contest her statement that this assessment should be done only by doctors with gynaecological experience. This is an ideal arrangement in countries with a high doctor-patient ratio but not in the under-doctored areas of the world where "well-women" screening services are at present inadequate or totally absent.