The pattern of construction is also important in determining the support provided. Indeed, this information gives so little true guidance regarding the compression provided by a garment when it is worn by an individual patient that it further emphasises the need for methods such as we described.

The particular need for this letter is to point out that since, in the light of new information, the average denier of garments (*c*) and (*d*) was different as well as their pattern of construction, readers should not infer that our paper demonstrated a difference in the support provided by tights and stockings. Indeed other work on tights and stockings made to specification (*a*) demonstrated no difference in the support provided.

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## Cost of phentermine preparations

SIR,—It has been drawn to my attention that I made an error in estimating the monthly cost of the currently available anorectic agents in the table that was published with my article on the management of obesity (14 February, p 388).

The cost of Ionamin was overstated by a factor of 3. According to the February 1976 issue of *MIMS* the cost for 30 days' treatment of Ionamin is now £1.05 and of Duromine £1.10. It follows that of the two proprietary preparations of phentermine available Ionamin is marginally the cheaper.

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## Curability of breast cancer

SIR,—In my view Mr M Baum (21 February, p 439) is right in considering that, if the current generation of clinicians is to reduce mortality from breast cancer, it must reject the obsolete concept of the nature of the disease that has led to more and more aggressive local treatment.

If the statistics (which Mr Baum is not alone in struggling to make sense of) show anything, it is that in the majority of cases breast cancer is a systemic disease when first diagnosed. It follows that the treatment required is systemic treatment aided by the removal of the visible tumour mass. At the stage of first presentation of the disease, the most suitable systemic therapy to accompany surgery would seem to be with the drug ICRF 159, which has little or no cytotoxicity but is effective in preventing metastases from establishing a blood supply.[1] However, it would be desirable to use any surgical sample obtained for in-vitro studies to identify the hormones on which the individual tumour depended,[2] so that specific antihormone drugs could be held in reserve in case further treatment should prove necessary.

An alternative primary systemic treatment could be with small doses of a combination of cytotoxic drugs, but it would seem preferable to hold these in reserve also until the efficacy or inefficacy of ICRF 159 has been established, since all cytotoxic drugs have inhibitory effects on the body's natural immune defences.

Future research lies in determining the necessary duration of systemic therapy required. In my own case two months' treatment with ICRF 159 proved insufficient after mastectomy and was followed by development of an isolated cerebral metastasis. Treatment for this was local destruction of the lesion by radiotherapy, accompanied by a radiation menopause, and two years of systemic drug treatment aimed specifically to reduce oestrogen and prolactin stimulation. Its success has belied my therapist's gloomy prediction (between three and six months to live) and has led to three years' survival with no trace of disease, no ablative operations, and no cytotoxic drug therapy.

A single successful case has no statistical value, but it is the only case I am able to present (being non-medical). I can only hope that it will encourage the current generation of clinicians in the new approach to breast cancer as a systemic disease.

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[1] Le Serve, A W, and Hellman, K, *British Medical Journal*, 1972, **1**, 597.
[2] Hobbs, J R, *et al*, *British Journal of Surgery*, 1974, **61**, 785.

## Fluoridation and the Government

SIR,—We are disappointed to learn from the interview with Dr David Owen (28 February, p 513) that "this is not the right time for a compulsory national decision to fluoridate." We are exhorted to stand up and campaign in our localities for fluoridation. Dr Owen can hardly be unaware that this has been going on for years and has resulted in painfully slow progress towards national water fluoridation. Ten years after Birmingham fluoridated its drinking water very few other major cities have followed the example, and only 6% of the population drink fluoridated water. Are Birmingham's children to remain among the few privileged in our community to enjoy the benefits of improved dental health? The Minister must realise the difficulty that is constantly encountered in arguing the case for fluoridation. Dogma (accompanied by cries of mass medication) is not easily met by logical scientific argument, however persuasively advanced.

Accepting that yet another government is avoiding its responsibility for introducing the necessary legislation for national flouridation, one other major problem remains. Even if the protagonists are able to persuade the relevant health and water authorities to fluoridate where is the necessary finance to be obtained? One way in which the present Government could demonstrate its good intentions as far as preventive dentistry is concerned is to underwrite the capital costs of water fluoridation from central funds.

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## Normotensive phaeochromocytoma with hypercalcaemia

SIR,—I should like to draw attention to the striking preoperative hypercalciuria of 19·4 mmol (776 mg/24 h) which was ignored by Drs R S Gray and J Gillon in the discussion of their very interesting case (14 February, p 378). The reported level was unexpectedly high for the serum calcium of 3·03 mmol/l (12·1 mg/100 ml).

The puzzle of hypercalciuria disappearing after the removal of a phaeochromocytoma was discussed elsewhere[1] but remained unresolved. Of particular relevance in this context is the work of Morey and Kenny.[2] They observed a woman who had a phaeochromocytoma and an abnormally high level of calcium excretion which returned to normal after the removal of the tumour. In experiments in rats they showed that both adrenaline and noradrenaline caused hypercalciuria. This effect was blocked by phenoxygenzamine and could be observed even in parathyroidectomised rats, suggesting a direct effect of catecholamines presumably on tubular reabsorption of calcium according to the concept of Talmage and Kraintz.[3] The hypercalciuric effect of adrenaline in man has been known for a long time.[4] The mechanism is not clear. A direct effect of catecholamines on the bones in phaeochromocytoma has also been postulated.[5]

Although hypercalcaemia in phaeochromocytoma is rare, except in Sipple's syndrome, where hypercalcaemia is a frequent finding,[6] hypercalciuria is probably common and its correlation with the circulating catecholamine levels deserves more attention.

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[1] Case Records of the Massachusetts General Hospital, *New England Journal of Medicine*, 1975, **293**, 1085.
[2] Morey, E R, and Kenny, A D, *Endocrinology*, 1964, **75**, 78.
[3] Talmage, R V, and Kraintz, F W, *Proceedings of the Society for Experimental Biology and Medicine*, 1954, **87**, 263.
[4] Inoue, T, *Japanese Journal of Medical Science and Biology*, 1924, **2**, 14.
[5] Finlayson, J F, and Casey, J H, *Annals of Internal Medicine*, 1975, **82**, 810.
[6] Case Records of the Massachusetts General Hospital, *New England Journal of Medicine*, 1973, **289**, 472.

## Vaginal candidosis

SIR,—Your recent leading article (14 February, p 357) effectively summarises the current problems arising from the steady increase in the incidence of vaginal candidosis. However, we would like to draw your attention to an important factor which was omitted from your review—namely, the behaviour of patients on continuous unsupervised treatment.

As doctors, we too readily assume that all our patients will carry out their treatment instructions implicitly. That they do no such thing, in Scotland at least, clearly emerges from a study of the behaviour of patients on unsupervised treatment. Over the past 10 years we have noted that 4% of the patients do not even start their treatment, while almost half have ceased to follow their advised treatment course within the first 14 days. Thus disappointing therapeutic results may be a measure of human rather than drug fallibility. There seems little to choose between the antifungal preparations currently available, but in our experience the shorter the course of treatment, the better the short-term results. It seems that even feckless patients will complete or nearly complete an abbreviated course of treatment.

We believe that this is the underlying reason why clotrimazole, one pessary (100 mg) inserted nightly for six nights has given better

results in our area than nystatin used in the standard fashion over a 14-day period (93% success rate with chlotrimazole, 84% success rate with nystatin).[1] Carrying this principle even further, we have recently shortened the course of clotrimazole to three days only (two pessaries nightly for three nights). This time our success rate was 89%. Throughout these investigations our trial criteria were identical and diagnoses and assessment were based on cultural as well as clinical grounds.

Although such short-term results are clinically acceptable, relapse and/or reinfection remain a constant problem so there is no room for complacency. Much more has to be done before we can regard the problem of candidosis as solved and under control.

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[1] Masterson, G, *et al*, *Current Medical Research and Opinion*, 1975, **3**, 83.

## Geriatrics in the cottage hospital

SIR,—Apropos Dr Andrew Crowther's Personal View (28 February, p 519), would it not be better to ask what an enthusiastic GP working in a cottage hospital has to offer his long-stay geriatric patients than to state as he does that a local hospital whose beds have been allowed to become filled with such patients "has little to offer the enthusiastic GP"?

Medicine is a service, not a hobby, and what we have to offer was well put by Paré many years ago when he said "guérir parfois . . . soulager toujours." I speak with feeling because my father has, for the past few months, been such a patient in such a hospital and we owe a great deal to our caring GP.

The great value of local hospitals is that they offer nursing care in their own community to patients who do not need the technology of the district general hospital, but do need their physical well-being looked after by professionals if they are to die in comfort and dignity.

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## Supervision of repeat prescribing

SIR,—As the astonished general practitioners concerned with the care of the patients who were the basis of the "attempted audit" by Mrs S M Shaw and Mr L J Opit (28 February, p 505) we would like to present some additional information.

The authors show that a small proportion of elderly patients on regular medication had evidence of diminished intellectual function, social isolation, and long intervals since the last consultation with their practitioner. However, the critical element in the authors' argument hinges primarily on the "three [patients who] might be suffering from drug toxicity." The partners, in the presence of one of the authors, conducted a clinical audit of these actual cases.

The first of these was the patient whose biochemical profile "showed changes consistent with phenylbutazone poisoning." It transpired that this patient was not receiving repeat prescriptions from the practice at all but was most probably receiving them from another practitioner privately This raised many interesting subsidiary issues, including ethical problems, but provided no basis for the conclusions which the authors indirectly have drawn from this case.

Two patients "were thought by the nurses carrying out the surveillance to be showing signs of digitalis toxicity." One of these patients (incidentally the father-in-law of one of the partners, who sees him almost daily) had been known for many years to have had an athletic basal pulse of 57/min. His pulse was now reduced to around 42/min, but this was attributed mainly to the therapeutic effect of beta-blockers which he was also receiving and not to digoxin. The second patient, some of the details of whose case have only come to light recently, was an elderly man with congestive cardiac failure well controlled on 0·0625 mg of digoxin daily. His pulse rate of 52/min had also been a feature for many years. One of the investigators decided that this was one of the cases of digoxin toxicity and the dose was reduced to alternate days. Within a few days the patient was finding difficulty in climbing stairs and in walking any distance. When he also developed ankle swelling the patient's daughter, an ex-nursing sister, realised what was going wrong and put him back on his original dose of digoxin, with rapid improvement.

We give these clinical details for we find it surprising that the authors forbore to mention that, on critical clinical review, there was no evidence of adverse effects attributable to the practitioners' prescribing. However, if they had perhaps there would have been no basis for a paper. On the contrary, that this has become turned into the serious accusation that these patients "might be suffering from drug toxicity" due to inadequate management by the practitioners is in our view laughable.

Mrs Shaw and Mr Opit also suggest that long-term drug treatment might have contributed to the reduced intellectual function which was found in a proportion of patients on regular medication. We would suggest that their own figures support the opposite view. The proportion of patients with reduced intellectual function among those on medication, 7/51, was similar to the equivalent proportion for those not on medication, 7/47. For what it is worth, medication was not associated with any increase in the proportion with impaired intellectual function. Incidentally, this is the first time we have seen any of the data relating to intellectual deficiency and we hope that the authors will not mind our pointing out that the totals in tables II and III for patients with different categories of intellectual function do not agree.

The authors' suggestion that one in seven (14 in 98) of a representative sample of elderly people over the age of 70 are demented would be hilarious if it were not so deadly serious. Common sense demands at least suspicion of the criteria used for defining dementia if not of the scoring system itself or the way it was used in this study. Of course many elderly patients live alone and can become muddled and confused by complex and novel problems. On the other hand, once a ritual such as routine medication is established, most can meticulously follow it. Unchangingness of therapy is itself a virtue.

In the circumstances we find the authors' patronising comments, "Some concern is aroused by this deficiency in supervising patients" and "The doctors in the study practice have been aware of these problems and are creating a filing system to ensure regular reappraisal of those patients on long-term drug treatment," particularly obnoxious and irritating for yet other reasons. The automated system which the authors used was planned over three years ago to develop, among other things, surveillance systems for doing just this. We have always been prepared to be "examined under the microscope," but our fee for this privilege is "feed-back" to enable us to improve our clinical management of patients. This has been sadly lacking. It was because of procrastinations and delays in this area that the partners set up a variety of manual surveillance systems. If the original programme had been implemented there would have been no basis for this so-called "audit." We find it galling that there are resources in money and staff for the type of study reported here when the creative opportunities of the automated system are not being realised.

The manual system (which will be described in detail elsewhere), is essentially a monitoring and surveillance system which allows *selective* recall, at the practitioner's discretion every six or 12 months, of patients receiving repeat prescriptions. The automated system incidentally does not include all consultations with patients and excludes the casual but important contacts with patients when they return for repeat prescriptions. We believe that the flexibility in the manual system is compatible with effective care and we have found no reason to change it since reading this paper.

The present repeat prescription monitoring system in use in the practice was the direct result of a previously reported audit of repeat prescribing by the partners carried out in 1970.[1] We believe that all forms of audit, self-assessment, and critical reappraisal of clinical and operational performance where they are relevant must be an essential part of modern general practice. We also believe that service general practitioners need the help of their academic colleagues in developing this rationally. We are not convinced that the overzealous and misguided approach demonstrated in this paper will achieve these ends.

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[1] Crombie, D L, *Journal of the Royal College of General Practitioners*, 1975, **25**, 337.

## Renal lesions in a case of septicaemia

SIR,—The letter from Wing Commander T J Betteridge and Squadron Leader D J Rainford (28 February, p 522) provokes comment.

Firstly, let us give credit where it is due. Powell[1] described the whole spectrum of renal lesions in staphylococcal septicaemia, including focal and diffuse proliferative nephritis, and he drew attention to the disseminated intravascular coagulation of that syndrome.

Secondly, let us be clear that nephritis is a diagnosis based on clinical observation, urine microscopy, tests of functional value such as blood cultures, estimations of cryoglobulins, complement components, fibrinogen degeneration products, and even radiofibrinogen study —and lastly biopsy. Since the patient had vasculitis she was very likely to have a serious nephritis, and lesions as in fig 6 might have been found in her kidneys.