the profession or anyone else. At least let all be clear that no victors will emerge from the present dispute and the losers now are the patients. All the previous disputes have been settled so, but I do not recall any of them in which doctors have deliberately delayed the treatment of patients. Surely those who represent the profession and those who represent the Government should be using every effort to end this situation and not exchanging taunts in public. This is not a time for anyone to stand on points of principle which they would be hard put to justify to the general public. The best public comment of the past three months appeared in a letter to the *Guardian* on 4 March from "G.P.'s Wife" from Sussex. I have been stimulated to write this letter by her comment, with which I wholly agree, on the harm now being done to the standing of our profession.—I am, etc.,

GEORGE GODBER

Cambridge

¹ *British Medical Journal*, 1942, 1, 744.

² *A National Health Service*, Cmd. 6502. London, H.M.S.O., 1944.

³ *A Review of the Medical Services in Great Britain*. Social Assey, 1962.

⁴ *A Hospital Plan for England and Wales*, Cmd. 1604. London, H.M.S.O., 1962.

⁵ *British Medical Journal Supplement*, 1955, 1, 220.

Long Survival from Acute Leukaemia in Childhood

SIR,—Everyone would agree with the point made by Drs. Patricia Morris Jones and F. N. Bamford (1 March, p. 510) that we should all be concerned with the quality of life in surviving children who have undergone intensive therapy for malignant disease. However, we regret their misleading implication that the possible long-term central nervous system sequelae in children surviving after treatment for acute lymphoblastic leukaemia (A.L.L.) might be comparable to the gross long-term mental and physical disabilities they have noted in a series of survivors from intracranial neoplasms. Children with C.N.S. tumours sustain damage due to the tumour itself, often of a gross and irreversible nature and possibly compounded by the effects of neurosurgery in many cases, followed up by high-dose radiotherapy approaching the limits of brain tolerance. Children receiving C.N.S. prophylaxis for A.L.L. in remission have no prior overt neurological abnormality, and in such cases we can more confidently attribute any C.N.S. sequelae to the effects of treatment.

Surely those specialist clinicians particularly involved in the treatment of leukaemic children are already well aware of the potential risk of treatment sequelae, and of their responsibility to conduct appropriate prospective studies? Attention has already been drawn to a previously unrecognized postirradiation syndrome in these children. Nearly half of a group of children in the M.R.C. trial employing C.N.S. prophylaxis developed pronounced symptoms of somnolence, lethargy, and anorexia 5-6 weeks after completing irradiation,¹ but it must be emphasized that this was of short duration and left no sequelae. We too have found electroencephalographic changes in about half of 30 children having sequential E.E.G.s during and following C.N.S. irradiation. But few of these children have

had a persistent E.E.G. abnormality in short-term follow-up. Some information on the long-term effects of C.N.S. prophylaxis is already available. Verzosa *et al.*² studied 100 children surviving 2-10 years after such treatment and reported no abnormal effects on intelligence, cytology, or growth characteristics with the exception that those children who had had spinal irradiation did show some stunting of growth.

Inappropriate or undue concern for the future quality of life in children with malignant disease should not be allowed to discourage us from applying the treatments currently available that are known to offer our patients the best chance of survival.—We are, etc.,

JOHN FREEMAN
J. S. MALPAS

Department of Medical Oncology and Radiotherapy,
St. Bartholomew's Hospital,
London E.C.1

¹ Freeman, J. E., Johnston, P. G. B., and Voke, J. M., *British Medical Journal*, 1973, 4, 523.

² Verzosa, M., *et al.*, *Proceedings of the American Association for Cancer Research*, 1974, 15, 98.

SIR,—Drs. Patricia H. Morris Jones and F. N. Bamford (1 March, p. 510) raise some pertinent points. Those oncologists who have been involved in treating children with malignant disease have always had in the forefront of their minds the long-term effects of their therapy. But it is not with faint heart that long survival and even cure have been achieved in the treatment of nephroblastoma, acute lymphoblastic leukaemia, or sarcomas. Concerted and somewhat "over-aggressive" therapy was needed. When children stopped dying from the disease then it was apparent that a cure was possible. Then carefully controlled diminution in the various successful regimens employed could be considered. A good example is the now widely acknowledged fact that prophylactic craniospinal irradiation in acute lymphoblastic leukaemia could be successfully replaced with cranial irradiation and intrathecal methotrexate, thus sparing vertebral bone marrow reserves and possibly preserving growth.

The authors are making an important point of the Florence Nightingale principle of "do your patient no harm" but perhaps more relevant to their argument is the need for greater expertise in the field of paediatric oncology and a somewhat better-informed and more balanced exposure in the mass media so that the distraught parent will have confidence in those people who treat, or refrain from treating, the fatal disease in their child.—I am, etc.,

C. L. GAUCI

Chester Beatty Research Institute,
Sutton, Surrey

Treatment of Myeloma

SIR,—The recent review of myelomatosis by Dr. J. S. Malpas (30 November, p. 520) focuses attention on the therapeutic dilemma currently facing physicians. The natural history of this disease and the relatively modest response that has been reported to date with most of the therapeutic regimens now in use is, no doubt, the basis for the continued use of less aggressive treatment schedules and a willingness to settle for good palliative therapy. On the other hand these same observations should, perhaps,

stimulate an evaluation of alternative approaches to management in which eradication of the malignant clone receives greater attention.

Thus though the advantages of combination cytotoxic chemotherapy schedules over the use of single drugs have not yet been clearly defined, at least three observations raise questions about the continued use of programmes available at present. Firstly, while median survival has been improved, most patients still die with residual disease and significantly impaired haematological reserve. Secondly, it seems probable that the use of cycle-non-specific drugs such as phenylalanine mustard contributes significantly to the situation by progressive depletion of the progenitor cells in the bone marrow. Thirdly, it is now clear that cytotoxic chemotherapy is capable of reducing tumour mass and that this is associated with the recruitment of an increasing number of malignant cells into cycle. This latter situation may be identified by a rise in the labelling index and tumours with this kinetic pattern should, logically, be much more vulnerable to cycle-specific agents.

In recognition of these arguments we are prospectively evaluating a programme in which two distinct therapeutic phases may be recognized. Initially a combination of vincristine, procarbazine, melphalan, and prednisone is employed since our experience with 71 cases studied in the past 24 months has demonstrated this to be highly effective in gaining rapid control over bone pain, tumour mass, and reversible renal complications. It is particularly noteworthy that these four drugs used simultaneously in a one-week course with a five-week rest period have a high degree of patient acceptability. This induction combination is repeated two or three times, and when the labelling index has risen significantly cycle-specific drugs are employed in an attempt to eradicate the disease without irreversibly damaging the haemopoietic reserve.

Quite clearly such an approach implies the availability of intensive haematological support, relatively large numbers of patients, and sophisticated laboratory facilities. We would be interested to hear of other investigators pursuing similar lines of clinical study.—We are, etc.,

PETER JACOBS
DANNY DUBOVSKY

Leukaemia Service,
Groote Schuur Hospital and Department of
Haematology,
University of Cape Town,
Cape Town

Pseudopatients

SIR,—The careful distinction that was made in your leading article (28 December, p. 729) between pseudopatients and simulated patients is appreciated. Simulated patients are carefully trained by health professionals to simulate accurately an actual patient with high fidelity for purposes of teaching and evaluation. They should not be confused with pseudopatients, who are untrained patient imposters who gain entrance into a health care system for purpose of evaluation. Your article became confused about health care evaluation in relation to simulated patients and what was described as my naive suggestion that they should be used to evaluate health care delivery. Several aspects concerning the correct use of simulated