donations. Twenty eight patients had received transfusions of either red cells or platelet concentrate, 18 of whom had since died. Two recipients could not be traced. The remaining eight patients were contacted and offered testing for HTLV-I antibody after counselling. Two patients declined to be tested. Of the six patients who were tested, five yielded negative results. The only recipient who was positive for HTLV-I antibody was a child who had received a transfusion of platelet concentrate during major cardiac surgery at the age of 9 days in 1985. The child was well.

This case clearly illustrates two important points that Pagliuca and colleagues made: that ethnic origin and other risk factors are not good predictors of HTLV-I infection in donors (and therefore that selective screening of donors is not effective) and that failure to screen for HTLV-I antibody on grounds of cost may be a false economy if expensive look back programmes have to be undertaken. We also believe that a strategy of screening the existing donor population once and thereafter screening only new donors is worth serious consideration.

P HARRISON
Senior registrar in haematology
F A ALA
Medical and scientific director

West Midlands Blood Transfusion Centre,
Birmingham B15 2SG

D W MILLIGAN
Consultant haematologist
S SKIDMORE
Principal virologist

Birmingham Heartlands Hospital,
Birmingham B9 5SS

1 Pagliuca A, Pawson R, Mufti GJ. HTLV-I screening in Britain. *BMJ* 1995;311:1313-4. (18 November.)

Donors and recipients of organ transplants should also be screened

EDITOR,—In their editorial A Pagliuca and colleagues argue the case for screening blood donors in Britain for human T cell leukaemia/lymphoma virus type I (HTLV-I).¹ We believe that potential donors and recipients of organ transplants are another group who should be screened for carriage of the virus. Transmission of HTLV-I by blood transfusion around the time of transplantation is well recognised and has been associated with the rapid development of diseases related to the virus.² Other authors have pointed out that donor organs themselves are a potential source of the virus.³ In addition, we recently described the development of adult T cell leukaemia/lymphoma in a West Indian carrier of HTLV-I nine months after he received a renal transplant; the disease was rapidly fatal.⁴ Other, similar cases have also been reported.⁵

Such cases suggest that carriers of HTLV-I who receive transplants and immunosuppressive treatment may be at increased risk of developing adult T cell leukaemia/lymphoma. About 1500 renal transplant operations are performed annually in Britain, and if the prevalence of carriage of HTLV-I is as high as 1 in 500¹ we estimate that two or three high risk patients undergo transplantation each year. Although the exact prevalence of carriage of the virus among the transplant population is not known, transplant recipients who have survived long term and are carriers of HTLV-I are few because of the low rates of transplantation in Japan and the Caribbean. In view of the poor prognosis associated with adult T cell leukaemia/lymphoma it seems prudent to screen patients before operation, particularly those in high risk groups.

Screening would allow the prevalence of carriage of HTLV-I among potential recipients to be assessed and would determine the true association between such carriage and the development of adult T cell leukaemia/lymphoma after transplantation. If an association was substantiated,

perhaps those patients most at risk should be excluded from transplantation except in exceptional circumstances.

PETER J JENKS
Registrar in microbiology
MARTIN J RAFTERY
Consultant in renal medicine
JUDITH BREUER
Consultant in virology

Royal Hospitals NHS Trust,
London E1 1BB

- 1 Pagliuca A, Pawson R, Mufti GJ. HTLV-I screening in Britain. *BMJ* 1995;311:1313-4. (18 November.)
- 2 Gout O, Baulac M, Gessain A, Semat F, Saal F, Peries F, *et al*. Rapid development of myelopathy after HTLV-I infection acquired by transfusion during cardiac transplantation. *N Engl J Med* 1990;322:383-8.
- 3 Perez G, Ortiz-Interian C, Bourgoignie J, Lee H, de Medina M, Allain J, *et al*. HIV-I and HTLV-I infection in renal transplant patients. *J AIDS* 1990;3:35-40.
- 4 Jenks PJ, Barrett WY, Raftery MJ, Kelsey SM, van der Valt JD, Kon SP, *et al*. Development of human T-cell lymphotropic virus type I-associated adult T-cell leukemia/lymphoma during immunosuppressive treatment following renal transplantation. *Clin Infect Dis* 1995;21:992-3.
- 5 Zanke BW, Rush DN, Jeffery JR, Israel LG. HTLV-I T-cell lymphoma in cyclosporine-treated renal transplant patients. *Transplantation* 1989;48:695-7.

Computerised prescribing of chemotherapy reduces errors

EDITOR,—S M Cotter advocates computerised prescribing as a useful addition to a clinical pharmacy service.¹ In 1993 we introduced a computerised prescribing system for cytotoxic chemotherapy in order to improve patients' care, rationalise prescribing, and increase the quality, clarity, and safety of prescriptions. Other advantages include improved compliance with protocols, ease of access to clinical data, a decrease in prescribing time, a reduction in errors of transcription, and help with audit.²⁻⁴

At any time up to 50 research and standard chemotherapy protocols are available in our unit. Chemotherapy regimens are often complex, yet compliance is essential for patients' safety and to maintain good clinical practice. Most prescribing for chemotherapy is done by senior house officers undertaking the medical oncology attachment on a general medicine rotation. They do not normally have previous experience in oncology and are not expected to know all the intricacies of chemotherapy regimens. Pressures to reduce junior doctors' hours have led our unit to adopt as many procedures as possible to rationalise working practice.

Our system was developed with Filemaker Pro software on the unit's computer network by a multidisciplinary team including the pharmacist, business manager, doctors, and nursing staff. Computerised prescribing of chemotherapy requires identification of the patient with his or her minimum dataset; selection of the regimen to be given, including the particular cycle within the treatment programme; the patient's height and weight; and the date that chemotherapy has to be given. The surface area as calculated from the formula of Du Bois and Du Bois is used to calculate the dose for most of the regimens,⁵ and the dose can be reduced below 100% when this is clinically indicated. Notes are provided on the administration of the chemotherapy regimen, its emetogenicity, and the formula for calculating the dose if the surface area is not used. A prescription and pharmacy worksheet are printed and include details of the complete regimen. There is rigid control of access, an audit trail for logging in and off, security levels for overriding warnings, and password protection of prescribing.

We found that a pharmacist made 14 interventions during a 12 week period before computerisation and none during a 12 week period afterwards. In a random sample we found two errors in five

handwritten charts and none in computerised charts. As the system promotes safe and effective prescribing, time is ultimately freed for other clinical work.

NICOLA S STONER
Clinical oncology pharmacist
CAROL J TANFIELD
Business manager
DENIS C TALBOT
Consultant

ICRF Medical Oncology Unit,
Radcliffe Hospital,
Oxford OX3 7LJ

- 1 Cotter SM. Avoiding drug errors. *BMJ* 1995;311:1367. (18 November.)
- 2 Schroeder CG, Pierpaoli PG. Direct order entry by physicians in a computerised hospital information system. *Am J Hosp Pharm* 1986;43:355-9.
- 3 Dillner L. Illegible writing kills patients. *BMJ* 1992;305:604.
- 4 Jenkins D, Cairns C, Barber N. The quality of written inpatient prescriptions. *International Journal of Pharmacy Practice* 1993;2:176-9.
- 5 Du Bois D, Du Bois EF. Clinical calorimetry 10th paper—a formula to estimate the approximate surface area if height and weight be known. *Arch Intern Med* 1916;17: 863-71.

Infertility may lead couples to adopt children

EDITOR,—As an involuntarily childless couple, we wish to respond to Jill Emery's personal view of infertility.¹ While we acknowledge the pain and disappointment of not being able to have a child of our own, our experience of infertility has had—perhaps surprisingly to some people—a very positive influence on our lives. It has certainly strengthened our marriage, made us appreciate our family and friends for their unstinting support, and reminded us that we have otherwise perfect health. Most important of all, through our childlessness we have come to consider adoption seriously; it is a chance for us to give a loving and secure home to a child who might otherwise never know such a thing.

The process of adoption is not easy and, rightly, entails rigorous assessment procedures. We are, however, driven by the knowledge that what we are trying to do is right—right for a child, for us, and for society.

KAREN M BARCLAY
Senior registrar in public health medicine
PHILIP M BARCLAY
Registrar in anaesthetics

5 Saltire Gardens,
Salford M7 4BG

1 Emery J. Silent suffering. *BMJ* 1995;311:1647. (16 December.)

Patients who reattend after head injury

Criteria for performing skull radiography on first attendance need to be better defined

EDITOR,—We share the frustration that Gordon Murray expresses in his commentary on Miranda Voss and colleagues' study.¹ Their paper presents the clinical features of 606 patients who reattended for the consequences of head injury but fails to give a detailed account of the 30 important patients who underwent neurosurgery when they reattended. In the light of this, some of the authors' conclusions may be misleading.

Firstly, the authors state that patients who reattend are a high risk group in themselves. It could be argued that their level of risk depends on the diagnostic work up performed at their first attendance. The authors state that 16 of the 30 patients who had neurosurgery had a vault fracture on first x ray examination (in addition to loss of consciousness or amnesia). We do not know much