they are scanty the auramine stain undoubtedly provides the most sensitive method of finding them.

As a paediatrician it is curious that the author omits any mention of the increased incidence in children[1 9 10] or of its importance in the Third World,[11 12] where the infection carries a high mortality, or of the positive benefits of breast feeding.[11]

While he correctly draws attention to the need for hospitals looking after children and immunocompromised patients to regard the search for cryptosporidium as routine, the steady increase both in the use of immunosuppressive therapy and in the number of cases of acquired immune deficiency syndrome brings most hospitals into the fold. Examination for *Cryptosporidium* does not carry a massive cost: as a demand led service it could be said that more attention paid by clinicians to avoiding unnecessary tests would help to neutralise any financial constraints.[13] We were the first to draw attention to the fact that this simple test could avoid unnecessary invasive clinical investigations.[4] Since we began to look for cryptosporidium in this rural area three years ago its incidence here has remained at about 2%: during this period it has been a pleasure to encourage others to maintain vigilance through fallow periods when it was lying low. It has never failed to oblige our colleagues in the long run.

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Palliative care—specialty or generality?

SIR,—Dr Graham Thorpe's Personal View on the evolution of hospice medicine (9 August, p 388) raises many points. Certainly the rapid growth of hospices has improved the care of the dying in small areas but it is now widely recognised that with the United Kingdom's varied geography and demography this is not the answer to a general improvement in care.

I believe there is a serious danger in the insidious development of a new specialty of palliative medicine, which may in fact reduce the quality of care for the majority by making ordinary hospital or family doctors feel inadequate in dealing with the problems of their own patients. I saw this most clearly in the allied subspecialty of "pain relief," where anaesthetists were summoned to surgical wards to consult on the prescription of morphine to control patients' pain because the surgical staff felt that this was now a complex subject requiring specialist knowledge.

The National Society for Cancer Relief has recognised this problem, and, as Dr Thorpe has pointed out, has funded various imaginative university projects. The one in the department of medical education in the University of Dundee is aimed at producing a distance learning package for hospital and family doctors to teach the simple and straightforward principles of palliative care, which I hope will remove the mystique and reassure doctors that if they are willing they can provide the quality of care achieved in hospices for the great majority of their own patients.

The development of traditional training programmes with a "career ladder," and before long no doubt a specialist examination, surely is misconceived. Medical staffing and training for existing hospices must continue to be individualised according to the talents and training of the doctors available and interested.

The attributes required, however, remain in my experience those personal qualities of sensitivity, availability, and a willingness to provide continuity of care rather than those that can be provided by a sophisticated training scheme.

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AIDS, cotton wool spots, and cytomegalovirus retinitis

SIR,—We read with great interest the article by Professor Peter G E Kennedy and coworkers on the presence of cytomegalovirus but not human lymphotropic virus type III (HTLV-III) in retinal lesions in patients with the acquired immune deficiency syndrome (AIDS) (19 July, p 162).

From the text of their article it is evident that large amounts of cytomegalovirus RNA were found in the retina of two patients with a clinical diagnosis of cytomegalovirus retinitis for over four months. It is satisfying that there is such a good correlation between the simple technique of ophthalmoscopy and a sophisticated research procedure such as in situ hybridisation techniques with DNA probes.

In a third patient with blateral cotton wool spots they found small amounts of cytomegalovirus RNA in a few cells. This does not contradict our opinion,[1] shared by others,[2] that cotton wool spots may act as an entrance port for a cytomegalovirus infection of the eye but that they are primarily the result of microvascular damage induced by immune complex deposition. We believe, however, that the title of their paper is slightly confusing as it states that cytomegalovirus but not HTLV-III is detected in what are loosely called "retinal lesions." In fact, their data prove that cytomegalovirus is indeed responsible for clinical cytomegalovirus retinitis and that HTLV-III is absent in this and a number of other retinal manifestations in patients with AIDS. The spectrum of retinal manifestations in AIDS retinopathy[3] is, however, much broader than the retinal lesions encountered in the five patients described by these authors, and hence their study does not say anything about the possible causal role of HTLV-III in other retinal lesions.

We described a perivasculitis of the peripheral retinal vessels in children[4] and adults[1] with AIDS or the AIDS related complex and we suspected that HTLV-III might be responsible for these lesions. We performed a paracentesis in two HTLV-III seropositive patients with active perivasculitis of the retinal vessels and isolated infectious HTLV-III from aqueous humour in both patients.[5] A third patient had intense perivasculitis of the retinal vessels in one eye. Viral cultures were done on a peripheral blood sample, on spinal fluid, and on aqueous humour. HTLV-III was recovered from aqueous humour after nine days, from cerebrospinal fluid after 20 days, but from peripheral blood after one month's culture, strongly implying that the active inflammation of the peripheral retinal vessels was related to the presence of HTLV-III. We believe that these findings give an affirmative answer to the question raised by Professor Kennedy and his coworkers whether HTLV-III is present at an earlier stage of the ophthalmic disease.

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Hazards of bronchoscopy

SIR,—Dr Ian W B Grant's leading article (2 August, p 286) rightly draws attention to the potential hazards of fibreoptic bronchoscopy. We wish to add the following comments from our own experience of around 5000 examinations over eight years.

The incidence of moderate haemorrhage may be considerably reduced by the application of adrenaline to the area to be biopsied. It is also advisable to take special care in taking biopsy specimens when one or other main bronchus is occluded and when asphyxiation due to occlusion of the remaining major bronchus is possible. If these few patients are excluded it is possible to control quite substantial haemorrhage by continued aspiration to keep at least one lung well ventilated. The calibre of the aspiration channel is not in our experience a limiting factor; the obscuration of vision is a nuisance but with practice the tip of the bronchoscope can usually be kept clear, and if this is not possible the instrument may be removed and reinserted rapidly. Nevertheless, we would agree that the risks of haemorrhage must be greater if the facility or skill necessary for rigid bronchoscopy, and occasionally thoracotomy, are not available for occasional use.

With regard to transbronchial biopsy for diffuse lung diseases, we regard facilities for fluoroscopy as desirable rather than mandatory. If a biopsy is taken some way short of the limit of travel of the forceps tip, a technique easily acquired with a little practice, pneumothorax cannot occur.

With regard to fibreoptic bronchoscopy in

elderly patients, in over 400 such patients we made a definitive diagnosis of bronchial carcinoma in over 40%. Contrary to Dr Grant's suggestion, we find such information valuable in the clinical management of the patient. Some "elderly" patients may be suitable for specific treatment with surgery, chemotherapy, or radiotherapy, and a precise histological diagnosis is essential to precede this. Even in patients in whom frailty or other medical conditions preclude active intervention management of the patient and informing relatives is made easier by knowing the diagnosis. In our experience elderly patients tolerate the procedure well with few side effects. The overall management of a patient is always facilitated by certainty of diagnosis and it is essential not to miss the important minority of patients in whom the endoscopic or histological findings produce an unexpected diagnosis influencing treatment and prognosis accordingly.

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SIR,—Dr Ian W B Grant suggests that severe bleeding encountered at bronchoscopy is best treated by removing the fibreoptic bronchoscope and replacing it with a rigid bronchoscope and sucking the blood away until bleeding stops. While we agree that this is satisfactory for relatively minor bleeds, it is quite wrong for a severe bleed because constant suction promotes continued bleeding, which can be fatal.

The only effective way to stop severe bleeding in these circumstances is to pack the bronchial tree on the affected side, and this can be done in various ways. Bronchial blockers used to be one way but are no longer easily obtainable. Packing with gauze, which can be soaked in thrombin, is another way, but the easiest method is to insert an ordinary round dental swab, which will pass down the bronchoscope and jam in the affected area. This has always proved successful in our hands and can be removed when the bleeding stops but can, if necessary, be left in for some days and removed later.

We have used these packs over many years with satisfactory results for this rare but frightening complication, and we would agree very strongly with Dr Grant that bronchial biopsy should be done only where there is the facility for use of a rigid bronchoscope.

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Management of infection in the neutropenic patient

SIR,—The review by Drs Robert E Marcus and John M Goldman (16 August, p 408) draws attention to the possible emergence in the gut of Gram negative organisms resistant to co-trimoxazole as a result of prophylactic administration of the drug. More serious is the possible selection and maintenance in the bowel of strains resistant to co-trimoxazole that are also resistant to those antibiotics conventionally used for the initial treatment of neutropenic patients during febrile episodes. Two recent cases in this hospital may serve to illustrate this point.

Case 1—A 21 year old man diagnosed 10 months previously as having acute lymphoblastic leukaemia developed a fever on 13 July 1986 while in hospital for cytotoxic therapy; he was neutropenic with a white cell count of $0{\cdot}1\times10^9$/l. Treatment with gentamicin and piperacillin, our standard combination of antibiotics for use in febrile neutropenic patients, was started, but the clinical response was poor. Blood cultures yielded *Escherichia coli* sensitive to gentamicin, netilmicin, and cefotaxime but resistant to co-trimoxazole, piperacillin, and azlocillin. Treatment was changed to netilmicin and cefotaxime and the patient's fever resolved. The patient had been receiving co-trimoxazole prophylaxis 960 mg twice daily virtually since diagnosis of his leukaemia.

Case 2—A 41 year old man diagnosed three weeks previously as having acute myeloid leukaemia and receiving treatment with cytotoxic drugs which had rendered him neutropenic (white cell count $0{\cdot}3\times10^9$/l) became febrile on 15 July 1986 in the same ward as case 1. Gentamicin and piperacillin were prescribed but the patient remained feverish. *Escherichia coli* of a different serotype from that isolated from the first patient was grown from blood culture; it had the same antibiogram as the first isolate. Cefotaxime was substituted for piperacillin and the patient's temperature settled within 48 hours. The patient had been receiving co-trimoxazole prophylaxis 960 mg twice daily since diagnosis of his leukaemia.

No focus of *Escherichia coli* infection was identified in either patient and it seems reasonable to assume that the gut was the source of the organisms; two to three days after antibiotic treatment was changed to an aminoglycoside and cefotaxime, however, stool samples did not yield the infecting strains. Faecal samples were not sent before treatment was started. Prolonged administration of co-trimoxazole would give a selective advantage to these multiply resistant organisms and allow their persistence in the gut.

Regular culture of neutropenic patients' faeces, as recommended by the authors, would provide a measure of the efficacy of co-trimoxazole prophylaxis against endogenous Gram negative organisms, while the monitoring of antibiotic sensitivity patterns of faecal isolates would provide a basis for selecting appropriate antimicrobial agents for use during febrile episodes.

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SIR,—Drs Robert E Marcus and John M Goldman (16 August, p 406) addressed several important points about the use of antimicrobial therapy, but the main problem of empirical treatment of neutropenic pyrexia was left unanswered. Many papers have been published on the successfulness of the latest antibiotic, either alone or in combination, in combating infective episodes occurring during neutropenia. Most papers rely on clinical outcome as an indicator of efficacy, and statistical observations are made of "cure" and "response rate." Although many pyrexial episodes will respond rapidly and completely to broad spectrum antibiotics, not all incidents are swiftly resolved, and since patients often have more than one course of antibiotics during cytotoxic chemotherapeutic regimens the probability is high that any individual will require consideration of further therapeutic options during treatment of a pyrexial episode.

It is here that further empirical therapy may be added or substituted. The juggling of antibiotics against the patient's clinical condition and temperature chart is often a fruitless exercise as temperatures may be suppressed by treatment, and clinical indicators are often misleading in this situation. What is required is some objective measure of progress.

We have found measurement of serum C reactive protein helpful. Many papers on the clinical usefulness of this acute phase protein have been published in the past seven years. Concentrations rise swiftly in the presence of a bacterial infection and fall with resolution. Other causes of pyrexia (blood products, drugs, viral infections, disease activity) are not associated with increases in serum C reactive protein concentration. Occasional high values are found in patients with lymphomas and deep seated fungal infections. The use of C reactive protein measurements in neutropenic pyrexia and a technical means of obtaining "same day" results have recently been reviewed.[1] Although the place of C reactive protein measurement has yet to be proved in a large randomised trial, it remains a useful addition to the clinical data available to the physician when faced with a "stubborn pyrexia" in a neutropenic patient. In this difficult situation it appears to offer a means of measuring therapeutic efficacy against an objective indicator.

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1 Gozzard DI, Liu Yin J, Delamore IW. The clinical usefulness of C-reactive protein measurements. *Br J Haematol* 1986;**63**: 411-4.

Informed consent

SIR,—The discussion in your correspondence columns after Jonathan Glover's leading article (19 July, p 157) arose from editorial comments made by Dr R Nicholson in the March and April issues of the *Bulletin of the Institute of Medical Ethics*. How much better it would have been if the comments of Jonathan Glover and of Messrs R R Hall and P H Smith, chairmen of, respectively, the MRC working parties on urological and prostatic cancer (19 August p 389), had also reached all the readers of the *Bulletin*. Unfortunately it has no correspondence column.

Stephen Lock has already drawn attention to the need for a correspondence column when controversial matters are being pronounced upon.[1] This view was expressed when commenting on an article in the *Drug and Therapeutics Bulletin* and surely has even more force with respect to publications devoted to ethical matters.

Ethical rules and values are not written on tablets of stone. They have been modified over the centuries as a result of changes in understanding and perception of human values and needs and will no doubt be modified further with the passage of time. Exceptions to general rules are better debated than presented as if there was no alternative view. There is a tendency towards ex cathedra editorial pronouncements in the *IME Bulletin*, and the institution of a correspondence column would help to provide a more healthy balance.

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1 Lock S. Getting the balance right. *Br Med J* 1986;**292**:428.

SIR,—Dr R Dahan and his colleagues (9 August, p 363) told half their patients a small lie—namely, that a placebo tablet would help them sleep. Not surprisingly, these patients slept relatively well.

The other half were told a big and complicated lie about a fictitious drug trial. The doctors who told them knew that they were lying. Not surprisingly, an exceptionally large proportion of patients (46·4%) felt sufficiently uncomfortable to refuse, even though the proposed trial was very short and