the general practitioner and said that I had been asked to look at the film, that I had some doubts about it, and that I thought it wise to have a further test taken at the Hospital for Tropical Diseases, whose staff I informed of the situation. They saw and treated the patient, thereby possibly saving the patient's life and the general practitioner's reputation.

The responsibility of the laboratory is surely to ensure that the reports reach the relevant clinician, and it is his or her responsibility to look at the relevant reports rather than wait until the patient next attends. If the hospital is so short of secretarial and other support staff that reports cannot be put in front of the clinicians when they are received then some responsibility must lie with them.

ANNE SEYMOUR

Ingham Infirmary,
South Shields,
Tyne and Wear NE33 3PP

SIR,—Dr Jean Golding (7 February, p 370) suggests that delay in the treatment of malignant melanoma is caused by medical staff. Several dermatology departments in the UK, including this one, have pigmented lesion clinics, where patients with suspicious lesions can be seen within a few days of presenting to their general practitioner. Both Doherty and MacKie and the Southampton Melanoma Group, however, have shown clearly that rapid referral to hospital does not necessarily improve the prognosis of patients with malignant melanoma unless combined with efforts to educate the public.[1,2] It is now clear that the main cause of delay is lack of public awareness, and for this reason the Cancer Research Campaign, in conjuction with dermatologists in several centres, is shortly to launch a major education campaign.

Unfortunately, the diagnosis of malignant melanoma is not always straightforward. A 20 year survey of patients with malignant melanoma (including ocular melanoma) by Barnes *et al* found that a correct initial diagnosis was made in only half of all cases. Though we believe that current diagnostic rates for cutaneous melanoma are considerably higher, occasionally lesions do cause diagnostic difficulty both clinically and pathologically. Contrary to the impression given by Dr Golding, both family doctors and dermatologists are generally very prompt in their management of suspicious melanocytic lesions. On diagnosing a melanoma the pathologist should advise on further management but is not in a position to insist on the type or urgency of treatment.

REGINA K CURLEY
R A MARSDEN
M G COOK

Department of Dermatology,
St George's Hospital,
London SW17 0QT

1 Doherty VR, MacKie RM. Reason for poor prognosis in British patients with cutaneous malignant melanoma. *Br Med J* 1986;**292**:987-9.
2 Southampton Melanoma Group. Effect of rapid referral on thickness of melanomas. *Br Med J* 1986;**293**:790.
3 Barnes HM, Calnan CD, Sarkany I. Malignant melanoma: a 20 year survey. *Clin Exp Dermatol* 1976;**1**:353-62.

## AIDS: a doctor's duty

SIR,—As both a doctor and a gay man I was alarmed to read Mr Peter Guy's letter (14 February, p 445). Despite my "dubious life style" and "voluntary sexual perversions" I remain seronegative for antibodies to the human immunodeficiency virus (HIV) and, I hope, a good doctor.

When acute appendicitis takes me to the nearest casualty department I will, of course, mention that I am gay and that I should be treated as a potential carrier of both HIV and hepatitis B so that the theatre staff can take appropriate precautions. If the surgeon declined to perform my laparotomy on these grounds I would hope that the hospital would take disciplinary action against him or her. If they did not I would initiate such action myself and advise anyone in a similar situation to do the same. This applies to both elective and acute surgery.

Though I am glad that a forum exists for this debate, I think antagonists to a more liberal attitude should remember that some people may find the use of emotionally charged labels distasteful.

ANONYMOUS

London

SIR,—While I sympathised with Peter Guy's concerns about the risks of surgery in patients positive for the human immunodeficiency virus (HIV) (14 February, p 445), I was concerned about his attitude towards those positive for HIV.

The two main aims of strategies for dealing with the acquired immune deficiency syndrome (AIDS) and HIV have been to decrease the rate of transmission of the virus and to deal with the prejudice and stigma that surround it. Doctors have an important role in shaping and changing public attitudes and it is hard to see how naivety and prejudice can help us to develop enlightened attitudes towards AIDS and sexuality. Without such attitudes doctors and other health care workers will be unable to care for the sick and prevent illness.

GRAHAM BICKLER

King's College Hospital,
London SE5 9RS

## Doctors' pay

SIR,—Consultants are daily asked to become cost conscious on behalf of the Department of Health and Social Security. I think, therefore, that it is time to consider the way in which doctors are paid. At the moment we are paid on a sessional basis, which covers all our work. One faculty, that of anaesthetics, however, has already rationalised its work to some extent by allocating sessions under the following headings: fixed clinical commitments, such as clinics and theatre; ward commitment; on call; administration; and teaching and training.

We think that all the colleges ought to examine this example and consider guidelines for sessions on this basis. For example, in general surgery the standard is one night in three on call, which amounts to more than 44 hours a week. On the notional half day basis, including on call for colleagues during holidays or absence, this would amount to 13 sessions a week. We should, therefore, consider the proportion of sessional pay to be allocated to these sessions. We would suggest that primary clinicians with junior staff without higher specialist qualifications at the start of their contract should be paid the equivalent of A units of medical time (UMT) or 30% of the standard salary. This would mean, in a district general hospital, that four sessions would have to be allocated for on call commitment. In centres with senior registrars we think that this commitment should be covered by the equivalent of B UMTs or one and a half sessions. B UMTs would also be appropriate for people with on call commitment but no primary clinical responsibility. If one session were allowed for administration this would leave only four or five sessions, depending on the total sessional basis, for the rest of the fixed clinical work, teaching, and training.

We should also like to point out that when a consultant or junior doctor is working for much of his on call time it is unreasonable to expect him to do daytime duties the next day, and we would argue that no doctor should be allowed to work or be on call for more than 12 consecutive hours.

R POLLARD

North Tyneside General Hospital,
Tyne and Wear NE29 8NH

## Respiratory health workers visiting patients with chronic respiratory disability

SIR,—To limit the role of respiratory health workers to education and support, as Dr A Cockcroft and coworkers seem to have done (24 January, p 225), does not provide for the needs of patients with chronic lung disease. Respiratory health workers should surely also be responsible for the supervision and encouragement of patients using oxygen concentrators; the teaching of postural drainage and other methods to aid expectoration, with help when necessary; the education of patients in the correct use of inhalers and reserve courses of steroids and antibiotics; and tuberculosis contact tracing and supervision of antituberculosis treatment when necessary.

The study by Dr Cockcroft and others threatens to show that respiratory health workers would not be cost effective, apparently without having used them in the circumstances where they are most needed. Any future study should include principally patients with the problems mentioned above.

SARAH J PEARCE

Dryburn Hospital,
Durham DH1 5TW

H W CLAGUE

General Hospital,
Bishop Auckland,
Durham DL14 7BB

W T BERRILL

West Cumberland Hospital,
Cumbria CA28 8JG

## Thyroid disease in pregnancy

SIR,—Dr P E Belchetz (31 January, p 264) did not mention the additional problem of abnormalities in thyroid function in association with hyperemesis gravidarum. We have recently encountered this problem with two cases of severe hyperemesis gravidarum, which were treated successfully by intravenous nutrition. The patients were clinically euthyroid, though both had raised serum thyroxine concentrations (176 and 198 mmol/l) with raised thyroxine binding globulin concentrations, and the first patient also had a raised free thyroxine concentration of 33 pmol/l (normal range 9-25 pmol/l). Both patients had normal triiodothyronine concentrations and normal responses to 200 μg thyrotrophin releasing hormone. After eight days of intravenous nutrition both patients had recovered, and repeat thyroid function tests yielded normal results.

Hyperthyroidism may present for the first time in patients with hyperemesis gravidarum, and the thyroid disease continues after the pregnancy.[1] Stabilisation of the hyperthyroidism may be more difficult than in non-pregnant patients. Other authors, however, have reported transient hyperthyroidism with hyperemesis gravidarum, as assessed by raised free thyroxine concentrations and abnormal results of thyrotrophin releasing hormone tests.[2,3] The abnormalities in thyroid function settle on treatment of the hyperemesis

gravidarum alone and without the use of antithyroid drugs.

R H R PARK
R I RUSSELL

Royal Infirmary, Glasgow G31 2ER

1 Valentine BH, Jones C, Tyack AJ. Hyperemesis gravidarum due to thyrotoxicosis. *Postgrad Med J* 1980;56:546-7.
2 Jeffcoate WJ, Bain C. Recurrent pregnancy-induced thyrotoxicosis presenting as hyperemesis gravidarum. *Br J Obstet Gynaecol* 1985;92:413-5.
3 Bouillon R, Naesens M, Van Assche FA, *et al*. Thyroid function in patients with hyperemesis gravidarum. *Am J Obstet Gynecol* 1982;143:922-6.

## Why doctors must grapple with health economics

SIR,—Economists are nothing if not energetic, and articulate salesmen and health economists such as John Appleby (7 February, p 326) are no exception. Which other non-medical group has enjoyed such generous hospitality in the columns of leading medical journals over the past decade? Compared with major problems with profoundly adverse consequences for public health, from involuntary unemployment to Third World debt, that is a remarkable performance. Before doctors accept uncritically the injunction to "grapple with health economics" they should consider whether what is undubitably good for health economists is good for public health. If the thesis being advanced is that doctors should be aware of the main financial implications of diagnostic, treatment, and care decisions there can surely be no objection. Mr Appleby and his colleagues, however, are arguing for much more than intelligent accounting or book keeping; they are attempting to sell their particular collection of assumptions and techniques.

With a few honourable exceptions, health economics is typically a misnomer for what would better be described as the microeconomics of treatment and care services. It not only has little or nothing to do with either health or macroeconomics but, by focusing on limited aspects of decisions within the health sector—such as renal transplants versus dialysis—in practice it often diverts attention from the wider context and from damaging policies that have a profound effect on public health. Apart from the examples that have been mentioned other neglected topics include the health implications of tax cuts, of the arms race, and of commercial and industrial attitudes to finite resources and pollution, attitudes that predate even the first glimmerings of awareness of ecosystems.

When health economists show more interest in economists who have taken a serious interest in public health and ecological issues, such as Schumacher or, more recently, Ekins,[1] they will gain credibility.

PETER DRAPER

London SE10 8UJ

1 Ekins P. *The living economy: a new economics in the making*. London, New York: Routledge and Kegan Paul, 1986.

SIR,—John Appleby (7 February, p 326) displays an extremely narrow view of medical practice: "More doctors are becoming formal managers, and their medical ethics will conflict with their new status." Says who? The sharp end of medicine—general practice—for most of us consists of days spent balancing the opportunity costs while advising a series of patients, each of whom has a unique set of social and financial values and circumstances. Add to this an infinite combination of presenting signs, symptoms, diseases, and prognoses and compound them with a selection of possible treatments. Each episode of quantifiable and unquantifiable input parameters is considered, discussed, and acted on in 5-15 minutes at repeated intervals throughout the day. The measured outputs of a hospital clinical trial are interesting and useful but contribute comparatively little to our decisions on how to treat a patient during the consultation. The ethical conflict between what is right for the patient as an isolated case and what on balance is right for the patient in view of her personal health and social and financial circumstances is inevitably predominant in the selection of treatment, compared with the ethics of macroeconomics to which John Appleby refers.

LINDA BENSON

St Mary Abbots Hospital,
Kensington W8 5LQ

# Points

## Percutaneous transluminal valvuloplasty

Drs D F ETTLES and J L GIBBS (Non-invasive Unit, Killingbeck Hospital, Leeds LS14 6UQ) write: We wish to comment on the peroperative use of Doppler ultrasound by Dr Graham Jackson and colleagues (10 January, p 83). In our experience the recording of intracardiac or ascending aortic flow velocities may be difficult when a catheter is in place across the aortic valve because of acoustic interference. Although Doppler ultrasound is both sensitive and specific in detecting aortic regurgitation,[1] its accuracy in the quantitative measurement of regurgitation remains controversial. Indeed, if this were not the case then prevalvuloplasty aortography to exclude major aortic incompetence, as performed in each of the patients studied, would be unnecessary. In particular, even in the absence of a catheter across the aortic valve there is no evidence to suggest that Doppler echocardiography can detect slight changes in the severity of aortic regurgitation.

1 Saal AK, Gross BW, Franklin DW, Pearlman AS. Noninvasive detection of aortic insufficiency in patients with mitral stenosis by pulsed Doppler echocardiography. *J Am Coll Cardiol* 1985;5:176-81.

## Autologous blood transfusion

Mr ALBERIC G T W FIENNES (Department of Surgery, St George's Hospital Medical School, London SW17 0RE) writes: Dr L A Kay (17 January, p 137) might have been less enthusiastic in extolling the benefits of a reduced packed cell volume. There is evidence to show that haemodilution may in some circumstances increase the thrombosis rate.[1] Your own pages recently contained a careful study showing that, in normal subjects, delivery of oxygen to the tissues does not, as is so often affirmed, rise as the haemoglobin concentration falls towards 100 g/l, although myocardial work certainly does.[2]

1 Janvrin SB, Davies G, Greenhalgh RM. Ultra low dose intravenous heparin. *Lancet* 1980;i:1302-3.
2 Daniel MK, Bennett B, Dawson AA, Rawles JM. Haemoglobin concentration and linear cardiac output, peripheral resistance, and oxygen transport. *Br Med J* 1986;292:923-6.

## Osteoporosis: cause and management

Dr G S RAI (Whittington Hospital, London N19 5NF) writes: One of the interesting hypotheses not mentioned by Dr R Smith (7 February, p 329) is the role of vitamin K, which is known to play an important part in calcification.[1] One of the forms of vitamin K is essential for microsomal enzyme carboxylase, which converts glutamic acid to γ-carboxyglutamic acid. The protein, osteocalcin, which contains γ-carboxyglutamic acid, has calcium binding sites.[2] In patients with vitamin K deficiency the glutamic acid is not carboxylated and the non-carboxylated sites react weakly with calcium ions.[2] In addition, vitamin K has been shown to reduce calcium excretion in patients with osteoporosis,[3] and serum concentrations of vitamin K have been found to be low in patients with osteoporosis and fractured femur.[4,5]

1 Hauschka PV, Lian JB, Gallop PM. Vitamin K and mineralisation. *Trends in Biochemical Science* 1978;3:75-8.
2 Stenflo J. Vitamin K and the biosynthesis of prothrombin. *J Biol Chem* 1972;247:8167-75.
3 Tomita A. Post menopausal osteoporosis. $^{47}$Ca study with vitamin K. *Clin Endocrinol (Oxf)* 1971;19:731-6.
4 Hart JP, Shearer MJ, Klenerman L, *et al*. Electrochemical detection of depressed circulating levels of vitamin K in osteoporosis. *J Clin Endocrinol Metab* 1985;60:1268-9.
5 Hart JP, Catterall A, Dodds RA, *et al*. Circulating vitamin K levels in fractured neck of femur. *Lancet* 1984;ii:283.

Dr M C BATESON (General Hospital, Bishop Auckland, County Durham DL14 6AD) writes: It is disappointing to read in 1987 the fallacy that oestrogen treatment causes gall stones (7 February, p 329). It does not, and if readers missed your editorial[1] I can only refer them to a jolly good recent book on the subject.[2]

1 Bateson MC. Progress in gallstone disease. *Br Med J* 1984;289:1163-4.
2 Bateson MC. *Gallstone disease and its management*. Lancaster: MTP Press, 1986.

## Big babies

Dr IAN KENNEDY (Ramotswa, Botswana) writes: It was disappointing that Mr Peter Bromwich did not mention the value of symphysis-fundus height graphs in pointing to the possibility of large babies at delivery (29 November, p 1387). Most work on symphysis-fundus graphs has concentrated on growth retardation, but Westin has shown that large for dates babies can also be detected by the graph.[1] In the UK Boddy, in his booklet *A Schematic Approach to Prenatal Care*, illustrates the graph of a diabetic mother with a value above the 90th centile and whose baby was also above the 90th centile for weight at delivery (Edinburgh University). In his scheme mothers with symphysis-fundus curves above the 90th centile are referred for specialist opinion and ultrasonography. In their review of methods of evaluating fetal growth retardation Villar and Belizan suggest that the symphysis-fundus measurement is one of the more useful.[2] It is thus logical to extend its use to include the diagnosis of large for dates babies. For many years we have used the symphysis-fundus height as a useful additional aid in trials of labour. When a small mother has what seems to be a large baby from the graph we proceed to caesarean section more readily than when the symphysis-fundus suggests a normal sized or small baby. With a caesarean section rate of less than 5% and a perinatal mortality nudging 20/1000 we are satisfied that the symphysis-fundus graph is a valuable clinical tool and should be more widely used.

1 Westin B. *Perinatal medicine*. New York: Praeger, 1984:77.
2 Villar J, Belizan JM. The evaluation of the methods used in the diagnosis of intrauterine growth retardation. *Obstet Gynecol Surv* 1986;41:187-99.

## Optimising antiemsis in cancer chemotherapy

Dr P MARCUS (Cheshire WA4 4JA) writes: Professor John Dundee and colleagues write that electroacupuncture applied to point P6 is an effective antiemetic but that the technique is time consuming (17 January, p 179). The use of an indwelling press needle might be equally effective but more practical. This device is made of stainless steel wire coiled into a circle a few millimetres in diameter with a 2 mm downward pointing spike. The needle is pushed into the skin like a tiny drawing pin, covered with adhesive tape, and, usually, left in situ for one to two weeks. Blocks of presterilised press needles ready mounted on tape are available from suppliers of acupuncture equipment. Insertion of these needles into the same points (bilaterally) during surgery or cytotoxic treatment might reduce subsequent sickness, and the effect should be maintained as long as the needles are left in position. As the spike that enters the skin is so short the risk of injury to the median nerve running beneath this point is avoided. Such injury might result in