

or her partner together may enable the doctor to ask about the influence of the disease on their partnership and thus allow them to discuss emotionally loaded topics together.

Local support groups can also be invaluable. Many patients and their partners find that the leaflets, meetings, and other facilities of the Multiple Sclerosis Society and Action for Research into Multiple Sclerosis provide support that neither health nor social service professionals can give.

Offering to help patients with multiple sclerosis and their families in these ways is a vital aspect of management and will remain so until traditional therapeutic endeavours become effective.

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## Study of factors in atherogenesis

EDITOR, — We are the authors of a paper, published last year, on the interactions of serum copper, selenium, and low density lipoprotein cholesterol concentrations in carotid atherogenesis.<sup>1</sup> In the methods section we gave details of the assessment of atherosclerosis and stated (fourth and fifth sentences of this subsection): "The intima media thickness was measured from video recordings of the entire scanning procedures by the scanning physician (RS). The reader was blinded with regard to the subjects' identify and whether she was reading a baseline or a two year follow up recording." This part of the description of the method was inaccurate.

Technically speaking, the entire scanning procedures were not video recorded: roughly half of the whole scanning time was recorded. The recordings included, however, the imaging of the entire length of the common carotid arteries. Secondly, when the intima media thickness was measured the identities of subjects were not literally hidden from the observer as this was not possible. The baseline and follow up videotapes were, however, read in a random order. The reader was blinded to all risk factor values and, when she was reading the follow up tapes, to the baseline measurements of intima media thickness. We used the term blinded as the observer made about 8400 measurements over 13 months and could not possibly have remembered the previous readings for any single person. Also, the computerised videotape reading equipment gave the distance reading only after both the lumen-intima interface and the media-adventitia interface had been defined by cursors driven by software. We do not believe that these minor inaccuracies in any way undermine the validity of either our findings or our conclusions.

To verify this, the same observer repeated the baseline and two year follow up measurements of intima media thickness from the original video recordings, which had been stored for three to five years, in a random order and blinded, as far as possible, with regard to the identities of the subjects. The mean of the absolute differences between the original and repeat measurements was 0.07 mm (0.08 mm for the increase in two years). The intraclass correlation coefficient for agreement between all original and all repeat measurements

Mean increase in maximal carotid intima media thickness after two years (mm) (adjusted for age and cigarette pack years) according to serum copper and low density lipoprotein cholesterol concentration, from original and repeat measurements

	Low LDLC (<4.0 mmol/l)		High LDLC (≥4.0 mmol/l)	
	Original	Repeat	Original	Repeat
Low copper (<17.6 μmol/l)	0.08 (n=52)	0.11 (n=52)	0.05 (n=25)	0.09 (n=25)
High copper (≥17.6 μmol/l)	0.06 (n=22)	0.06 (n=22)	0.25 (n=27)	0.29 (n=27)

LDLC=Low density lipoprotein cholesterol.

was 0.91 (0.69 for the two year increase). The measurement variability was independent of both serum copper and low density lipoprotein cholesterol concentrations. We also repeated the main analysis of our paper (table III in that paper), using the repeat measurements of intima media thickness (table). All of the crude means and adjusted means (adjustment for age and cigarette pack years) were identical to within 0.1 mm of the original means (greatest difference 0.04 mm). The interaction between serum copper and low density lipoprotein cholesterol concentrations was, if anything, stronger (net difference 0.25 mm instead of 0.22 mm) than with the original measurements.

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## Medical abortion

EDITOR, — In discussing the situation where a woman changes her mind after receiving mifepristone and as a result the fetus is born but with an abnormality, Michael Heard and John Guillebaud recommend that the "initial consent includes a woman's agreement that she must take full responsibility for any outcome."<sup>1</sup> The effect would be that the child would be deprived of any right of action in respect of any abnormality resulting either from use of the drug or from failure to continue using it.

Such a recommendation does not accord with the law. A "wrongful life" action by a malformed fetus claiming that it should have been aborted has yet to succeed in the British courts<sup>2</sup> but has been recognised in the United States as giving a right to damages for pain and suffering.<sup>3</sup> Nor is it clear that such a right of action is barred by the Congenital Disabilities (Civil Liability) Act 1976. If a child does have such a right then it cannot be excluded by the mother signing a consent form. Similarly, an action by a child against the manufacturers of a drug alleging that its use caused the child injury while in utero could be brought under this act and any consent form signed by the mother would be subject to the requirement of reasonableness in the Unfair Contract Terms Act. And what about an action by a child resulting from negligently per-

formed in vitro fertilisation treatment? Why should a consent by the parents bar such an action? More debate is needed on this.

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- 1 Heard M, Guillebaud J. Medical abortion. *BMJ* 1992;304:914. (4 April.)
- 2 McKay v Essex Area Health Authority (1982) Q B 1166.
- 3 Curlender v Bio-Science Laboratories (1980) 165 Cal 477.

## PPP and physiotherapy for senior citizens

EDITOR, — I recently received a letter from Private Patients Plan (PPP) announcing that those people who may receive tax relief on their premiums — that is, old age pensioners — may receive physiotherapy benefit only if the physiotherapy is ordered by a consultant and not if it is recommended by their general practitioner. My letter is not to debate the merits or otherwise of the announcement but to draw attention to the source from which it originated. I would expect such a decision to have been arrived at by the medical advisers to PPP. In fact, it has been imposed on PPP by the Inland Revenue, and, seemingly, PPP has accepted it without demur.

In its letter to me PPP says that until now it paid for physiotherapy provided it was satisfied that the physiotherapy had been ordered by a doctor. The letter then goes on to say, "The Inland Revenue have now advised us that they are not prepared to allow that situation [as outlined above] to continue in respect of subscribers claiming tax relief."

Subscribers claiming tax relief may be just the people who need this benefit most. I have written protesting strongly to PPP for having permitted the Inland Revenue to rule in what is surely a clinical matter. I hope that all medically qualified senior citizens will do the same, for I see no reason why our financial position should permit the Inland Revenue to control or dictate our clinical treatment. If this matter passes without protest who knows what the next infringement of clinical freedom may be?

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## Patterns of hospital medical staffing

EDITOR, — *Achieving a Balance* aimed at providing trainees entering a chosen discipline with a reasonable chance of eventually becoming consultants, and regions have been wrestling with quotas for registrar and senior registrar posts set by the Joint Planning Advisory Committee to bring higher professional training into balance.<sup>1</sup> In the West Midlands region this has now largely been achieved, and most disciplines are on target to achieve their 1995 registrar quotas. The implementation of the heads of agreement on junior doctors' hours, however, has the potential to swamp the principles of *Achieving a Balance*.

The heads of agreement principles can be achieved in only two ways. One is to recruit junior staff, particularly at the senior house officer level, as necessary to provide for appropriate rotas or shifts across the board in all disciplines. The present number of such trainees is not sufficient for this to be possible except in large hospitals, and even then such legal rotas or shift systems will be achieved only by enforcing cross cover between related and sometimes barely related specialties. Given the current number of graduates in the United Kingdom, it would be possible to staff an increased number of senior house officer posts only by recruiting from overseas, and from the Euro-