hospitals) have the training or aspire to this difficult, time-consuming style of practice? I applaud Dr Carne's recognition of a baby as a barometer—the vomiting, crying, or feeding problems as sign of family malaise. I applaud Dr Carne's awareness of the impact of family illness on the child, but how can this analysis have any therapeutic meaning if he sees his presence in maternity and perinatal care as comparatively insignificant?

Surely the exciting yet taxing time of pregnancy, labour, and early infancy is when parents are at once both most vulnerable but also susceptible to intervention. Is this not the best time for a happy doctor-family relationship to be forged and when effective help is most needed? In the wider field of child care, rather than just in relation to deprivation and non-accidental injury, a paediatrician is often aware that psychosomatic and psychosocial problems arise because of the vulnerability of the parents and the circumstances of a child's early life. This is therefore a peculiarly inappropriate time for Dr Carne to be less involved.

A high hospital delivery rate (which the consumer may eventually reject) does not preclude a close GP involvement with pregnancy and infancy to educate and reassure, to recognise "at-risk" situations in the widest sense. Though writing a personal paper, I am sure that Dr Carne is not writing only about his own practice, nor, I imagine, does he restrict general practice to that work done by GPs. All will agree for the need of greater education on the care of children; but it is surprising and disappointing that, faced with this enormous task of preventive paediatrics, Dr Carne has not mentioned a team approach. Even a simple mention of it, and particularly of the role of the midwife and health visitor, might have made Dr Carne's contribution seem a more serious one.

It is probable that the kind of interdisciplinary and interprofessional rivalries exhibited in his paper constitute one of the most serious impediments to comprehensive family and child care, whether this be conducted at the hospital or in the community.

MARTIN ADDY

General Hospital,
Burton-on-Trent,
Staffs DE14 3QH

Effects of manufacturing oral contraceptives on blood clotting

SIR,—Dr L Poller and colleagues (30 June, p 1761) say that their study provides evidence that industrial exposure to hormone preparations used in oral contraceptives results in accelerated clotting tests.

Their case mainly depends on one heavily exposed man compared with seven less heavily exposed men, and on two heavily and seven less heavily exposed women. (Findings in these women were also compared with baseline values in 28 women going on to treatment for menopausal symptoms). The small numbers speak for themselves. The single heavily exposed man may have had relatively accelerated tests. Without replication in others, however, this finding cannot be attributed to industrial exposure. The man in question was diabetic. If this were the explanation for his clotting profile, the lack of changes in the tests after protective measures would not be surprising, and would if anything argue against a causal association between exposure and accelerated clotting. Similar

considerations apply to the heavily exposed women, both of whom had intermittent vaginal bleeding. The findings in both sexes might also have been due to differences between the groups in age, smoking habit, obesity, and other features. There was little consistency between the male and female groups in the tests in which results differed according to extent of exposure.

From the statistical point of view, it is inappropriate to use unpaired *t* tests for comparisons of results based on repeated measurements on individuals in one group and on single measurements on individuals in the other.

We doubt whether this study makes any contribution to the question of the effects of exposure to hormone preparations.

T W MEADE
SIMON G THOMPSON

MRC/DHSS Epidemiology and
Medical Care Unit,
Northwick Park Hospital,
Harrow, Middx HA1 3UJ

Emboli from prosthetic heart valve during postmenopausal oestrogen therapy

SIR,—The paper by Drs David Pitcher and Paul Curry (28 July, p 244) reporting emboli from a prosthetic heart valve during postmenopausal oestrogen therapy highlights an anxiety in the minds of many general practitioners who are under pressure from their patients, exhorted by the media, to prescribe for them hormone replacement therapy.

This has worried me over the past three years since I encountered a case in general practice in which a 47-year-old woman was prescribed conjugated equine oestrogens for menopausal symptoms, including hot flushes, sweats, and depression. Two weeks after starting oestrogen therapy this lady, who gave no previous history of thromboembolic disease or hypertension, developed a right hemiparesis. This fortunately subsided fairly rapidly and she was left with minimal disability.

As the number of women treated with oestrogens in hormone replacement therapy increases it would be interesting to know what the true risks are. It seems somewhat paradoxical that on the one hand we are exhorted to discontinue oestrogen-containing oral contraception in women aged 35 and over and at the same time to start prescribing oestrogenic compounds in those of 45 and over. Further studies to assess the true incidence of thromboembolic complications of hormone replacement therapy would seem to be indicated.

A Y EWING

Orton Malborne Health Centre,
Peterborough PE2 0PH

SIR,—It is admittedly easy to criticise from an armchair, but the report by Drs David Pitcher and Paul Curry (28 July, p 244) on emboli from a prosthetic mitral valve during postmenopausal oestrogen therapy bristles with doubtful assumptions and concludes with the serious implication that oestrogen treatment in some postmenopausal women increased the risk of thromboembolism.

The patient had several episodes of imbalance lasting a few seconds and two episodes of transient monocular visual loss in the left

eye, the duration of which is not stated. It is claimed dogmatically that these events were due to emboli from the mitral valve. Through all this time (five weeks) she must have had several fairly large emboli all of the same size which blocked the same vessel supplying the mid brain, and which all disintegrated at the same time. In the same period she had two much smaller, but again similar-sized, clots which also blocked the same vessel—the left ventral retinal artery (or possibly the left ophthalmic)—and these also disappeared rapidly. In this time the only other embolic episode was the appearance of an arterial embolus in the left retina. What it looked like and how long it remained we are not told. All the other end-arteries were apparently spared—other kinds of cerebral events were recorded and there was no evidence of skin or kidney emboli.

The comparable condition in which we know small emboli arise from the heart valves is bacterial endocarditis. In this condition the emboli strike randomly; two similar events do not occur in the same organ, and if an end-artery is occluded the occlusion is permanent. In the eye Roth's spots are seen and sometimes a central retinal artery occlusion.

I appreciate that platelet emboli are said to disintegrate rapidly, but there is no reason why these should have been responsible in this patient.

F RACKOW

St Helier Hospital,
Carshalton, Surrey SM5 1AA

General anaesthesia in sickle-cell disease

SIR,—I read with great interest the report on anaesthesia in sickle-cell disease by Professor John Homi and others (16 June, p 1599). The authors may be interested to know that we documented one of the first cases of sickling following halothane anaesthesia in a 9-year-old girl of Nigerian descent with homozygous sickle-cell disease.¹

Although general anaesthesia may be initially tolerated well by patients with sickle-cell disease, they do have a high incidence of postanaesthetic complications. Preoperative assessment of haemoglobin concentration in patients with sickle-cell disease is essential, and if it is very low should be corrected by transfusion.

Our recommendations relating to anaesthesia in sickle-cell anaemia still hold true today—that is: (a) elective procedures should be avoided if possible; and (b) the choice of anaesthetic should take into account the tendency for red-cell sickling with anoxia and the hypotensive effect of certain anaesthetics.

PETER LEWIN

Hospital for Sick Children,
Toronto, Ontario,
Canada M5G 1X8

¹ Lewin, P, and Goodwell, R A, *British Medical Journal*, 1962, 2, 1373.

Unfit for holiday?

SIR,—Dr A J E Pollock's letter (28 July, p 273) makes a very valid general point, but I feel that his last illustration was an unfortunate choice.

As a clinical student I have strongly gained the impression, from my attachments to our geriatric hospital, Chesterton, and to the