The term "single tumour" is rather confusing, and "dominant" or "definitive lump" might have been a more precise description. The group emphasised the fact of clinical error in that 26% (22/84) palpation suggested cancer. One would like to have read more on the false cytologically suspicious readings (13/84). The proportion of cases having surgical intervention for cystic disease, 36% (16/44), is significantly higher than in many series.^{6,7} Perhaps repeat aspirations were not regularly practised in this group.

The value of direct provisional reporting to the surgeon at the time of first attendance cannot be denied for many though not all women. Reassurance about the absence of malignant cells is perhaps the greatest boon. Whether the gain is enough to justify deviation of resources I rather doubt. Dr Duguid and her team are to be congratulated on a significant achievement.

There is one important error in the references. The name of Dr Paul Lopes Cardozo is misspelt and his mammoth atlas was published in 1979.

A JOHN WEBB

Bristol Royal Infirmary,
Bristol BS2 8HW

¹ Webb, A J, *British Journal of Surgery*, 1970, **57**, 259.
² Webb, A J, *Annals of the Royal College of Surgeons of England*, 1975, **56**, 181.

³ Franzén, S, and Zajicek, J, *Acta Radiologica*, 1968, **7**, 241.

⁴ Zajdela, A, *Journal de radiologie d'électrologie et de médecine nucléaire*, 1967, **48**, 482.

⁵ Cornillot, M, et al, *Lille Médical*, 1971, **16**, 1027.

⁶ Rosemond, G P, Maier, W P, and Brobyn, T J, *Surgery, Gynecology and Obstetrics*, 1969, **128**, 351.

⁷ Tong, D, *British Journal of Surgery*, 1969, **56**, 885.

Fetal malnutrition—the price of upright posture?

SIR,—Dr André Briend (4 August, p 317) interestingly examines the "faltering of growth" in the last few weeks of human fetal life and wonders whether it may be evidence of fetal malnutrition as a consequence of our upright posture.

Since his article was "for debate," I would like to ask whether anyone else shares my own scepticism about the alleged "faltering" in normal fetuses? As Dr Briend says, "This picture has been derived from cross-sectional studies based on the weights of normal live-born infants of varying gestational age" (my italics). But it is axiomatic that cross-sectional studies can tell us little about individual growth curves. What evidence have we, for example, that the apparently "faltering" birth weight of any individual near term in his figure arrived at this point by the trajectory he shows? It might have taken a lower road to the same place. The high road of the normal cross-sectional curve could in this case be accounted for by some influence of fetal weight on time of parturition, though I do not think I believe it.

Dr Briend's answer is that the faltering is "confirmed by longitudinal measurements of the fetal biparietal diameter using ultrasonic cephalometry." But here he is surely wrong. Diameter, like circumference, is a linear measurement, and a curve of its growth is not to be compared with one of weight, which is a volume dimension. Curves of biparietal diameter do not indicate head growth, if by the latter is meant growth in weight or volume. This can be proved two ways: firstly, by a simple mathematical conversion of the biparietal diameter to skull volume, when a plot of head growth completely loses its faltering tendency¹; secondly, by a plot of brain weight,

which is inevitably cross-sectional but which, far from faltering, is actually accelerating at this time.²

At all events, longitudinal curves of biparietal diameter cannot be recruited in support of late gestational faltering, as they very frequently are, especially by ultrasonographers. If only we could convincingly compute fetal body weight from suitable ultrasound measurements we might be nearer to solving my dilemma. I think "faltering" of fetal weight probably does occur towards term. Or does it?

JOHN DOBBING

University Department of Child Health,
Medical School,
Manchester M13 9PT

¹ Dobbing, J, and Sands, J, *Early Human Development*, 1978, **2**, 81.

² Dobbing, J, and Sands, J, *Archives of Disease in Childhood*, 1973, **48**, 757.

SIR,—I was most interested to read Dr André Briend's paper on fetal growth and its relationship to physical demands on the mother in the weeks before birth (4 August, p 317). His hypothesis corresponded with my own impression of my pregnancy, now at 38 weeks. (An ultrasound scan at 12 weeks' gestation confirmed accuracy of dates.)

For financial reasons it was essential for me to continue working as long as possible. I continued to do so until 34 weeks, when progressive fatigue forced me to cease working. At this stage I was admitted to hospital for two weeks' rest. Since then my environment has been such that I am relieved of all physical and day-to-day demands, and am able to indulge my natural inclination to rest.

My postural pattern over 24 hours tends to be 12 hours in bed, mainly in a lateral position because this is the most comfortable and a large proportion of the other 12 hours in sitting, with minimal periods in the upright position. Sitting is less comfortable than lying; standing and walking are limited by the discomfort of pelvic pressure.

At 33 weeks the ultrasound biparietal diameter measurements were compatible with a 31-week (± 10 days) fetus and the head was engaged in the pelvis. From 31 to 36 weeks (on dates) my fundal height was two weeks lower than expected. Clinically it was felt that this was probably due the head being engaged. Several medical and lay people commented on my small-for-dates appearance.

At 36 weeks the ultrasound biparietal diameter measurements were compatible with a 36-week (± 10 days) fetus with the head still well engaged in the pelvis. Currently, at 38 weeks, the head remains in that position, while my fundus is now at the xiphisternum. My impression in recent weeks has been of significant growth of my baby, which I can only attribute to the removal of environmental pressures, which has freed me to rest as my body dictates.

JILL V TIMBS

Bexley, Kent DA5 2BD

Breast or bottle

SIR,—How truly Dr Paula H Bolton-Maggs has summed up the experience of breast-feeding (11 August, p 371). Like her I have just breast-fed my first child and as a result am much keener to promote breast-feeding, and much more able to do so.

Without experiencing it, I would never have believed how much encouragement is needed during the first week or so. What with sore nipples, frequent feeds, general weepiness, and a perineum on which sitting was agony, I would have given up, had I not been determined to succeed, and had I not been supported. My midwife, though helpful, seemed to think that at 32 I was really past being able to feed; my GP was encouraging; but my mother, a breast-feeding veteran herself, kept me going. A little practical experience, I am sure, is worth a great deal of theorising.

Nor must we overlook the support given by the husband. Mine (non-medical) is enthusiastically promoting the breast, on the grounds that it is less smelly, cheaper, and more convenient—no paraphernalia of bottles, jugs, and hot water flasks to cart around. His advice to any mother is—buy a poncho; under this the baby can be fed in such diverse places as a wood yard and a mountain top.

I believe public opinion is swinging a little. It will go further when someone in *Crossroads* or *Coronation Street* has a baby and feeds it on the screen, although I appreciate this will be difficult to arrange! With some diffidence, I fed in the "Ladies" of John Lewis's expecting some shocked looks; but a stream of passing women stopped to admire, comment what a lovely sight it was, and point it out to their children—a very commendable attitude. As a friend's 6-year-old said after watching a feed, "I thought it would be rude but it's lovely." Perhaps above all it is the loveliness we should emphasise to future mothers.

ANNE CHASE

Marston Moreteyne, Beds

Care of children in general practice

SIR,—A paediatrician may perhaps comment on "Care of children in general practice" (21 July, p 190), particularly as the *BMJ* purveys Dr Stuart Carne's concepts to future GPs. He says that the view of the 1950s that maternity care should be the foundation for general practice is now only true to a degree and that "today what matters most to the GP is not the actual delivery but the health of the child"—who accounts for 25% of consultations. He also refers to some communication problems.

Brevity is a virtue, but the precise meaning of these phrases is not clear. Dr Carne apparently feels that GPs need not be much concerned with pregnancy and perinatal events but does not say quite how he will ensure the health of the child. Instead he refers to the management of *children's diseases*, and, though this is in commendable statistical perspective, an emphasis on health care would have been more timely. "Looming on the horizon is a new aspect of preventive paediatrics: the possibility of being able to influence the morbidity and mortality patterns in later life."

After this exciting statement Dr Carne contents himself with the stock aspiration of children's doctors that modification of infant diet may prevent that scourge of modern society premature vascular disease. Certainly respiratory problems predominate acutely in general practice but chronic psychosocial and psychosomatic problems are more important and common. For the latter some parents will not seek help, many do not think it "available" at their surgery, some attend accident and emergency departments. Are their needs recognised? How many doctors (in or outside

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