requirements beyond the capabilities of most milk banks.

For milk banks which depend on drip milk, an alternative approach to improve the quality of donated milk would be to collect expressed breast milk instead and to use the creamatocrit method for quality control.[3] The Nottingham study confirms in day-to-day practice previous research showing that expressed milk has a higher fat concentration than drip milk.[4,5] One major disadvantage of stocking a milk bank with expressed milk might be that the volume of milk collected would be insufficient, since the amount of milk which can usually be expressed seems to be less than can be collected by the "drip" method. (On this aspect we would welcome comments from colleagues who already organise milk banks which depend mainly on expressed milk.) Of course, if mothers can collect both expressed and drip milk, as indeed did one Nottingham mother, then perhaps both qualitative and quantitative requirements would be satisfied.

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Value of repeated blood pressure measurements in children

SIR,—We thank Dr M Uhari (17 January, p 226) for the interest that he has shown in the Brompton Study. We are aware that tracking correlations decrease with the time intervals between measurements and have already discussed this in our paper to which he refers.[1]

We accept that one year is a relatively short period but in table III of our paper we also quoted significant correlation coefficients in blood pressure measurements made up to three years apart. Others[2] have found a correlation coefficient of about 0·5 in repeated blood pressure measurements made eight years apart in a group of children initially aged 5-9 years. However, only further follow-up data will indicate how much these correlation coefficients do decrease between childhood and adult life, and to elucidate this is a major purpose of our continuing studies, in which we plan to follow the same group of children into adult life.

Other studies do indicate that serial correlations in repeated blood pressure measurements—made, for example, four years' apart—are stronger in older subjects. But they do not increase above 0·6-0·7, values which are obtained at about 20 years[2]; thus the detection of hypertension at the age of 20, which Dr Uhari suggests, is less than perfect, and the age at which individuals should be screened for hypertension depends on the precision of the prediction that is required.

Dr Uhari advocates the approach of studying blood pressure in children from "many points of view." Certainly other factors must be taken into account, but this in no way militates against a study specifically designed to look at tracking.

Because of the variability of blood pressure in children it may be more helpful to seek a "marker" in childhood which will identify adults who will develop hypertension irrespective of their childhood blood pressure. Such markers might be single or multifactorial, ranging from, for example, family history to salt intake to measurement of ionic flux across red blood cells. Some markers may be present at any age after conception (for example, genetic, intrauterine environment) but the demonstration that tracking occurs with increasing strength from one year suggests that this is an age at which we could begin looking for other markers in the individual.

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Treatment of hypertension in black South Africans

SIR,—The comments by Dr J De Giovanni and Dr A David Goldberg (17 January, p 225) on my paper about treating hypertension in black South Africans (8 November, p 1241) merit discussion and I wish to thank them for their stimulating letters.

Dr De Giovanni states: "More black hypertensives seem to have low renin. This does not necessarily imply a different form of hypertension and the concept that this low-renin hypertensive group will benefit from diuretics rather than beta-blockers has been disproved time and again." I feel that a low plasma renin level among black hypertensives cannot explain the lack of response to atenolol in my black hypertensive patients as there was no significant correlation between falls in either standing, lying, or mean blood pressures in any of the treatment groups and the plasma renin activity. Moreover, as I stated previously (17 January, p 225), the reason why beta-blocking agents do not act in black South Africans will be understood only when we know how beta-blocking agents produce a hypotensive effect.

In reply to Dr De Giovanni's query, the age of the patients in my group was 39·54±8·93 years (mean±SEM) with a range of 26-60 years. Several steps were taken to ensure therapeutic compliance: for example, only patients who had attended the hypertension clinic for at least six months and were judged suitable for this study were chosen. Dr De Giovanni suggests that the fact that patients in my study had a lower pulse rate does not prove that they took their medication daily between visits—they may have done so for only one or two days before the visit, thus not getting optimal benefit in blood pressure reduction but achieving a sufficient lowering in heart rate. If his theory was correct it would be difficult to explain in a double-blind, placebo-controlled crossover design why a statistically significant decrease in blood pressure occurred in my patients on atenolol combined with chlorthalidone and not with atenolol as the sole treatment.

Dr Goldberg states that the conclusion should read that neither atenolol 100 mg daily alone nor chlorthalidone 25 mg alone should have been the baseline treatment of hypertension in my study. However, unlike atenolol, chlorthalidone did produce a decrease in blood pressure compared with placebo, although this was not statistically significant. Thus the results were not quite comparable. The dosage of atenolol 100 mg daily was not small, as inferred by Dr Goldberg. Zacharias *et al*[1] confirmed from their study that, for the majority of hypertensive patients at least, doses of atenolol in excess of 100 mg daily confer no additional benefit in terms of antihypertensive action.

Dr Goldberg feels that my small study on atenolol should not be extended to an enormous black population treated with beta-blockers. My suggestion that beta-blockers should not be the baseline drug in the treatment of hypertension is based on the following evidence: (1) Humphrey and Delvin[2] found no significant difference between propranolol and an inert placebo in 18 hypertensive Jamaicans. Their study[2] and mine are the only published double-blind placebo-controlled studies of beta-blockers in black hypertensive patients. (2) Data in Southern Africa, presented by Seftel and Schultz and by Leary to the first congress of the Southern African Hypertension Society in October 1980, have confirmed the ineffectiveness of beta-blockers in black hypertensive patients.

It is significant that in the recent article on drug treatment in the series "ABC of Blood Pressure Reduction" (11 October, p 982) thiazide diuretics and *not* beta-blockers are mentioned as the baseline treatment of black hypertensive patients. Thus in the absence of good evidence (based on double-blind placebo-controlled studies) to the contrary I cannot withdraw my statements, as has been suggested by Dr Goldberg.

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Highly purified porcine factor VIII in haemophilia A with inhibitors to factor VIII

SIR,—Dr Elizabeth E Mayne and others recently reported (24 January, p 318) that highly purified porcine factor VIIIC (Hyate:C) was of value in the treatment of haemophiliacs who have developed antibodies to factor VIII and made reference to two major drawbacks associated with previous porcine factor VIII treatments—namely, allergic reactions and thrombocytopenia.[1] It may be of interest at this point to compare a "previous" preparation with the one used by Dr Mayne (table).

The protein content of the "high purity product" is approximately 1/60th that of an equivalent dose of the previous product; to some degree this must be responsible for lowering the risk of allergic reactions—the less porcine protein the better. The lack of thrombocytopenic activity of the high-purity

Comparison of "previous" and high-purity porcine factor VIII products

Analysis	"Previous" porcine factor VIII	High-purity porcine factor VIIIC
Batch No	063	PE 104
Factor VIIIC (units/ml)	12	43
Porcine protein (mg/ml)	25·0	1·4
Specific activity (factor VIIIC/mg protein)	0·48	30·71
Platelet aggregating factor (PAF) units/ml	19·0	0·3
Factor VIIIC:PAF ratio	1:1·58	1:0·007
Factor VIIIR Ag	27·3	0·75
Factor VIIIC:VIIIR Ag ratio	1:1·09	1:0·074
Solution time (min)	>20	<3

product is more simply explained since the platelet aggregating factor content of the new product is now greatly reduced, obviously below that which produces a clinical response at this dose level.

Dr Mayne reported that porcine factor VIII antibodies failed to develop. This is not a new phenomenon; even the previous product produced a specific antibody in only 14% of patients treated.[2] However, in almost all previous treatments the patient became "refractory"—that is, factor VIII recovery levels gradually tailed off after about five days' therapy. In over 20 courses of treatment with the high-purity product so far reported to this office there have been no refractory cases; one patient in fact was infused 59 times over a period of 28 days.

The "modest rise" in human factor VIII antibodies noted by Dr Mayne has occurred in other cases when the treatments have been combined with human factor VIII, factor IX, or prothrombin complex preparations. When used alone the high-purity porcine factor VIIIC has to date not stimulated a true anamnestic response of either human or porcine antibody titres, nor has it produced an antibody where none was present initially.

Despite these favourable observations this new preparation is "foreign" protein, and both allergic and antibody responses are to be anticipated. A small test dose is advised before treatment and slow infusion of the material is strongly recommended. Antibody monitoring throughout therapy is mandatory.

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The oesophageal obturator airway

SIR,—May I clarify some of the points raised by Dr A E Cameron (24 January, p 316)? Firstly, he cautions people against using the device in cases of facial trauma, where he describes the use of the airway as impracticable. Not only is it impracticable but it is in fact dangerous to use the airway in any case of nasopharyngeal bleeding, whether from facial trauma or from fracture of the base of the skull. As a contraindication this should be added to the instructions which accompany the airway.

The next point raised concerns active vomiting and passive regurgitation. At the time of resuscitation the stomach may be distended with air or fluid. This causes problems which can become acute when the airway is removed at the receiving hospital. For this reason a modification of the oesophageal obturator airway was designed—called the oesophageal (gastric tube) airway—which enables gastric suction to be carried out with the tube in situ. The modified apparatus has two openings on the mask, to one of which the oesophageal tube is connected; the other is clearly marked "ventilate here." When the tube and mask are in position the operator blows into the ventilation opening and checks to see whether the chest rises. This rapidly detects improper insertion.

A pilot study on the use of the airway is being carried out by the research committee of the British Association of Immediate Care Schemes (BASICS). A number of medical practitioners who are called to accidents and emergencies of all kinds have been supplied with oesophageal gastric tube airways. Concurrently Group Captain A J Merrifield has been carrying out studies on the adequacy of ventilation with this device. His paper will appear shortly in *Anaesthesia*.

We feel that the oesophageal airway has a very important part to play in immediate care, especially in cases of cardiac arrest. Endotracheal intubation is sometimes impossible under adverse conditions, whereas this type of ventilation is easy and may prove to be life saving.

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A 20-year prospective study of cirrhosis

SIR,—The paper "A 20-year prospective study of cirrhosis" by Dr J B Saunders and others (24 January, p 263) suggests that alcoholic cirrhosis was being diagnosed more frequently in 1976 than in 1959. Presumably this is a function of an actual increase in incidence as well as a greater awareness of the likelihood of alcohol consumption being under-reported and concealed. Eliciting a drinking history which reflects actual alcohol consumption is a complex task and involves indirect measures, including reports from home and work, as well as evaluating social and legal incidents related to the excessive use of alcohol. This task is time consuming and may be best undertaken by a specific alcohol-counselling team associated with alcohol treatment resources.

The implication that the only factor improving the survival rate in alcoholic cirrhosis is abstinence merits special attention in the management of these cases. Effective additional counselling in all diagnosed cases, linked to specific alcohol education and open access to specific help in living without alcohol, may increase the proportion of diagnosed cases achieving abstinence.

It is suggested that these concepts provide a further clear indication for increased liaison between psychiatry and clinical medicine. Shared management may be life saving.

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Spectacle problems

SIR,—I have been following this correspondence and was particularly interested in the letter from Dr M Shirley (24 January, p 322).

I fully agree that the opticians now being turned out have a very adequate three-year training followed by a year's supervised work. They are well qualified to provide and fit spectacles. Their experience with regard to disease of the eye is, however, more theoretical than practical, and with few exceptions the ability of a senior house officer in an ophthalmic unit, after three months in the job, would far exceed that of most opticians.

The optician is required under his terms of service in the Health Service to report to the family doctor any pathology which he finds or suspects. This is a long way from making a diagnosis, and I think it is a reflection on the sorry state of the Health Service that more of this work is not done by ophthalmic medical practitioners. In the United Kingdom we are falling far behind other advanced Western nations in the numbers of qualified ophthalmologists practising. In most Western countries on average there is one ophthalmic consultant to some 25 000 to 30 000 of the population, whereas here we have one consultant ophthalmologist to every 120 000. The 400 consultants in ophthalmology could fill up their time completely in dealing with the problem of glaucoma or with the needs of diabetics. It is hardly surprising that in almost all areas there are substantial waiting times for an outpatient appointment. The answer must be for general practitioners and the public to press upon the administering authorities the need to provide an adequate hospital ophthalmic service in terms of numbers of staff and adequate facilities. Ophthalmologists themselves are already pressing for this.

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Spectacle frame prices

SIR,—I am amused to read (7 February, p 489) that Lord Cullen did not believe that "everyone in the profession" would agree with Mr P D Trevor-Roper's view that no possible damage could be done to presbyopes—presumably—by the "sale of reading glasses by unqualified persons without an eye examination." I imagine that he meant that he did not himself hold that view—so much for expert advice.

Although I suppose that it is axiomatic that not all doctors (or indeed any group of professionals) would agree about anything, I suspect that almost all eye surgeons would support Mr Trevor Roper's view. The argument turns on the phrase "without an eye examination." Although it is clearly prudent for someone with visual difficulties to seek expert advice, it seems to me to be an unjustifiable interference with a person's liberty to insist that he do so before buying for himself such a simple and universally useful appliance as a pair of reading glasses. By the same token, no one should be permitted to buy any drug without first seeking expert advice. It is clear that actual harm could result from the use of, say, aspirin, in such a case; while this possibility does not arise where glasses are concerned.

I note that Lord Cullen sees no objection to the provision of hand magnifiers for reading, presumably by unqualified persons, since such appliances are already available on the NHS if prescribed. I fail to see the logic in this distinction—a hand-held lens differs from reading glasses only in being far less convenient to use (except for purposes where appreciable magnification is necessary, and when the considerable expense of telescopic glasses might not be justified). Even the BMA offers a lens for those wishing to read its journal without insisting on a prescription.

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