outpatient follow-up in the presence of new symptoms or recurrence of symptoms.

We do not have any codified data on the precise percentage of patients who have improved. However, on purely clinical experience we would confirm the importance of supervised encouragement in an increasing activity programme. The use of a walking aid allows the severe respiratory cripple to use his accessory muscles of respiration. The height of the aid is critical for optimum assistance. We would endorse the authors' views that instructed members of the family could readily encourage and supervise the maintenance of walking activity. Unfortunately, often both the advanced respiratory cripple and his family have been brainwashed by negative medical advice into believing that improvement in exercise capacity is impossible. Drs Sinclair and Ingram are to be congratulated on an excellent and positive paper.

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SIR,—May I congratulate Drs D J M Sinclair and C G Ingram on their excellent intention in investigating this very common and severely debilitating condition (23 February, p 519)? It is regrettable, however, that their inadequate scientific method makes the sceptical reader feel that they have in fact proved nothing. Firstly, there was considerable bias in their allocation of patients to treatment and control groups. There were nearly three times more smokers in the control than the treatment group and, perhaps more important, the control group lived in the country while the treatment group all lived in the city. We have no assurance that those patients who are more resistant to exercise do not live in the countryside.

Secondly, exercises do not constitute the only component of intervention. The weekly visits by a nurse and more frequent consultation with a physician bestowed on the treatment group but not the control group are quite likely to have an effect of their own, additive to the effect of exercise. Thirdly, there was an unacceptably high dropout rate from both groups: five out of 17 in the exercise group and six out of 16 in the control group. Given the already very small numbers involved, this seriously limits extrapolation from the study.

The first two of these problem areas might have been easily overcome with adequate study design. Randomisation of patients to exercise or control group, using one or other "blocking" technique to ensure an even distribution between the groups of important variables such as smoking, would have ensured greater comparability. Failure to randomise patients into the groups leaves us with no assurance that the observed differences were not artefactual. Weekly visits by the nurse could have been made to all patients, perhaps supervising diet in both groups as well as encouraging the exercise group to perform their exercises. The third limitation could have been overcome only by investigating more patients before rushing to publication.

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New Spanish laws on organ donation and postmortem examination

SIR,—I am informed by my Spanish colleague Dr A Anderiz that the Spanish Parliament has passed two new laws with reference to human organs and postmortem examinations. The first lays down that any person who dies in Spain on holiday and fulfils the necessary medical and legal requirements to be a donor of organs will have these organs removed as a matter of course unless the person was directly opposed to a transplantation while living or there is opposition from near relatives. According to the second law, postmortem examinations will be carried out as a matter of course on patients dying in Spanish hospitals unless the person had made known his opposition to them during life or there is direct opposition from his near relatives.

These new laws obviously could have implications for British tourists in Spain and could cause distress to relatives remaining in the United Kingdom.

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Blood glucose monitors

SIR,—We read with interest the report by Dr David J Webb and others (9 February, p 362) on home blood glucose monitoring. We have recently completed a study to compare blood glucose results, determined by two Hypocount monitors, with simultaneously determined plasma glucose results from our laboratory's Beckman Glucose Analyser.

Eighty-four patients from our diabetic outpatient clinic were studied, forty-seven of them by both monitors. Results obtained from the two monitors for the same patient correlated very well ($n=47$, $r=0.98$). An acceptable correlation was obtained between the results from the monitors and those obtained from the laboratory method ($n=131$, $r=0.95$). The monitor results, however, were slightly but significantly ($p<0.02$) lower than those obtained by the laboratory method (fig). This agrees with the observation of Dr Webb and his colleagues, who illustrated perhaps a more pronounced difference. These authors attributed that difference to their use of a laboratory method which measured reducing substances rather than glucose. We also observed a difference but used

a laboratory method which is specific for plasma glucose. We believe that the explanation lies in the use of whole blood with the Hypocount monitor as opposed to plasma, which is used in most of the laboratory methods for the measurement of glucose concentration. It is recognised that plasma glucose is higher than whole blood glucose; in patients attending a diabetic clinic the mean difference was reported to be 14.2%.¹ We suggest that the Hypocount manufacturers should make patients, clinicians, and clinical biochemists aware of the difference between whole blood and plasma glucose levels by an appropriate note in their manual.

We also noted that above a plasma glucose level of about 14 mmol/l (250 mg/100 ml) the accuracy of the Hypocount monitors began to deteriorate, and when plasma glucose levels reached 20 mmol/l (360 mg/100 ml) the monitor results were substantially lower. The scatter diagram in the report by Dr Webb and his colleagues also illustrates this, although in their case only a few results were monitored above 14 mmol/l. We believe that this may be due to the fact that the sensitivity of the Dextrostix test strip is exceeded at high glucose levels. The manufacturers state that the strip is designed to measure blood glucose from 0 to 14 mmol/l (0-250 mg/100 ml). The range on the Hypocount monitor, 0-24 mmol/l (0-430 mg/100 ml), is thus not accurate at the higher end. Users should be aware that significant under-reading of high glucose levels is to be expected with the Hypocount monitor. We believe, however, that the results are still useful clinically.

In conclusion, we share the view of Webb and his associates of the overall acceptability of the Hypocount monitor and believe that if the manufacturers noted in their instruction manual the difference between plasma and whole blood glucose measurements, and also the accuracy limits at high glucose levels, the usefulness of the Hypocount monitor would be further defined.

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¹ Morrison B, Fleck A. *Clin Chim Acta* 1973;45:293-7.

Setting up a drip

SIR,—While we found the article by Drs Barbara Bannister and C W H Havard (16 February, p 463) on setting up a drip useful, there are some practical points on the insertion and maintenance of small cannulas on which we would like to comment.

Firstly, as this is a painful procedure, it is kind to inject 0.25 ml of lignocaine intradermally 1-2 cm from the projected site of venepuncture. For distressed children over 1 year of age, sedation and analgesia with oral trimeprazine 2-3 mg/kg two hours before the procedure followed by intramuscular morphine sulphate 0.1 mg/kg one hour later may be invaluable.

We find that gentle tapping with the finger tips over the proposed venepuncture site will help the veins to stand out, while the use of a sterile metal stylet or a 19-gauge needle to puncture the skin will lessen the risk of "barbing" of the cannula as it is advanced. Skin puncture also provides a more sensitive feel for the actual moment of insertion of the cannula.

We also believe that the description of the venepuncture technique is misleading in that it states that blood will enter the flashback chamber after the "plastic shoulder of the cannula" has entered the vein. In fact, as soon

Correlation between results from Hypocount monitors and those from the Beckman Glucose Analyser. The straight line represents the theoretical regression line where $r=1$.

Conversion: SI to traditional units:—Glucose: 1 mmol/l $\approx$ 18 mg/100 ml.

as the needle level has entered the vein blood will enter the chamber. Withdrawal of the needle at this stage will leave the cannula lying outside the vein with little chance of its being further manipulated into the lumen. This may be avoided by simply sliding the cannula over the needle after flashback (modified Seldinger technique).

Because local infection may be associated with a bacteraemia in up to 8% of cases,¹ culture of the cannula tip may provide the precise information needed for optimum therapy, particularly in immunodepressed patients or in those with damaged or prosthetic heart valves. As there is a strong correlation between skin flora and organisms recovered from cannula tips,² proper daily care of the intravenous sites with the application of povidone iodine, which is both bactericidal and fungicidal, will reduce the risk of cannula-related sepsis.

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¹ Peter G, Lloyd-Still JD, Lovejoy FH, *J Paediatr* 1972;**80**:78-82.

² Banks DC, Yates DB, Cawdrey HM, *et al. Lancet* 1970;**i**:443-5.

Pain and arthritis in the African

SIR,—In your leading article (23 February, p 504) "Pain and arthritis in the African" there is no mention of yaws. In the old days before we had modern drugs and "different features" were "seen in different tribes," as you say "in rural areas . . . large distances from hospitals and often from doctors," many of these cases seemed to be recurrences of yaws after 30-40 years or more and seemed to respond to the best we could offer in anti-yaws treatment. It may be worthwhile to look at the serology, etc.

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Infections in the newborn

SIR,—Discussing staphylococcal infections in the newborn Dr H B Valman (15 March, p 773) uses the word "pemphigus" for a rare bullous eruption which is rapidly fatal and very infectious if adequate antibiotics are not given. Pemphigus neonatorum is an inaccurate, misleading, and obsolete name which most authorities have long since dropped. Bullous impetigo is the correct terminology and fortunately large outbreaks are now rare.

Candida species are, of course, fungi and napkin area eruptions can both be caused or complicated by candidiasis. However, it should be noted that the photograph on p 774 showing groin sparing is of irritant (frictional, chafing) napkin dermatitis, a type that is far less frequently complicated by candidiasis than is infantile seborrheic dermatitis.

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The Jane Eyre syndrome

SIR,—In your 1979 Christmas Quiz (22-29 December, p 1651) we were asked, "What is the Jane Eyre syndrome?" The answer was

"Patients who have relatives of whom they are ashamed—for example, those with dementia or incontinence."

This is so much at variance with my interpretation of Jane Eyre's character that I have asked almost every member of the profession whom I have met this year if he or she has ever heard of this syndrome. So far I have had negative replies and I would be very grateful if anyone can tell me where it is described.

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* * Presumably "Jane Eyre syndrome" refers to Mr Rochester, who concealed the existence of his demented first wife Bertha, and not to Jane Eyre herself. The compiler of the quiz regrets that he cannot find the reference and we wonder whether any of our readers can help Mr Gallagher.—ED, *BMJ*.

Alive and well

SIR,—Professor Geoffrey Rose and his colleagues in their paper "Heart disease prevention project" (15 March, p 747) have been kind enough to pay me what they evidently think is a posthumous tribute in their acknowledgments.

While thanking them, may I assure them that Tyrer is alive and well and living in South Wales?

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Higher medical training

SIR,—I wonder if I may use your columns to bring one of two matters to the attention of those who either are in training in medicine and its allied specialties or wish to consider such a career, and of postgraduate deans and employing authorities.

The first item concerns the publication on 21 March of the Joint Committee on Higher Medical Training's *Training Handbook and Third Report*. This outlines the construction and working arrangements of the joint committee and the guidelines for training in medicine and paediatrics and their specialties as well as community and occupational medicine. The cost of the report is £1, and copies may be obtained from the secretary of the JCHMT, Royal College of Physicians, 11 St Andrew's Place, London NW1 4LE.

The joint committee is aware that some posts approved either for the full period of five years or with qualified approval for shorter periods are now becoming due for reappraisal, so the new report does not contain a list of approved posts, as this would be misleading. We are at present considering the adoption of simplified methods of review, and revisitation where appropriate. At present it is not possible for the JCHMT to notify each individual hospital or authority when the time for review falls due, although in future it is hoped that this can be done. Postgraduate deans hold lists of currently approved posts, and I should be most grateful if they or the local employing authorities would draw the attention of the JCHMT (at the above address) to any posts where, owing to the lapse of time or change of circumstances in the post itself, reapproval is required. I

particularly wish to stress that no approval will be withdrawn without a review, and that incumbents will in no way be penalised if approval of the post should lapse or be withdrawn during their tenure.

The visitation and approval scheme put into operation by the JCHMT since 1974 has involved an enormous amount of work and has established new standards of training for senior registrars. I am sure that all those concerned will be as anxious as I am that these standards be maintained by periodic reviews, and I ask for their co-operation in carrying this out. The help received from employing authorities and postgraduate deans in the preliminary reviews is gratefully acknowledged, and I am confident that I can rely on its continuation in the future.

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Regional consultant contracts and the organisation of specialties

SIR,—The Government's proposal in the consultative document *Patients First* that district health authorities should hold consultant contracts may at first sight seem logical, as other hospital medical staff will have their contracts with DHAs. But if consultants' contracts are removed from the regional health authorities there could be serious disturbances to the existing pattern of services as they affect the patient. This is because it is highly probable that districts would subsequently be threatened with the loss of part of their consultant cover, as local political pressures for improvement of this or that district specialty service began to make themselves felt. By placing consultant appointments on an essentially parochial basis I would envisage inevitable restrictions on clinical freedom.

There are several practical arguments against making such a sweeping change. Relatively few hospitals have a full team of consultants covering all specialties, with none of the consultants working at any other hospital. On the contrary, most hospitals share their consultants with at least one other hospital, which may be in another district or area. Most consultants attend two or more hospitals regularly, and in many cases consultants have duties in more than one district or sometimes in more than one area. Even those who do not may occasionally be requested to provide cover for annual leave or sick leave in another district or area.

The developments which have taken place since the inception of the NHS, including in particular the growth of specialties and subspecialties, require many of our hospital facilities to be more broadly organised than would be possible for a district health authority. The number of consultants in the United Kingdom is insufficient for each district health authority to be made independent of neighbouring districts in the provision of clinical services. This point applies with particular force in relation to specialties and subspecialties such as pathology, diagnostic radioisotope scanning, computed tomography, ultrasound, radiotherapy, cardiology, nephrology, and, indeed, all regional and supra-regional services.

So far as can be forecast, district health