detailed instruction to patients about increasing their steroids if necessary—should be introduced everywhere.

E POSNER

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- ¹ Collection of Withering Correspondence, Royal Society of Medicine, London.
² Quoted from Ellul-Micaleff, R, *Diseases of the Chest*, 1976, 70, 112.
³ Quoted from Earle, B V, *Thorax*, 1953, 8, 195.
⁴ Osler, W, *Principles and Practice of Medicine*, 6th edn, p 612. London, Appleton, 1906.

Myocardial infarction and control of diabetic metabolism

SIR,—The most interesting article by Dr A D N Gelson and his colleagues (26 June, p 1555) re-emphasises that known diabetics fare badly after myocardial infarction but, as in the recent Birmingham paper,¹ there is no record of postinfarction blood glucose concentrations. Other recent papers²⁻⁴ have confirmed the increased incidence of cardiac death in diabetics and suggest that this is not always the result of classical ischaemic heart disease.

We believe in a need for active treatment to reduce the blood glucose level of diabetics in the days immediately after cardiac infarction, whether the diabetes was previously treated with insulin or by diet alone or even when hyperglycaemia was not previously suspected but became gross after infarction (for example, sustained above 9 mmol/l (160 mg/100 ml)). Indeed it may be especially important to consider insulin treatment in such patients or those previously on diet alone, for it is relatively easier to increase the dose of insulin in those already on it.

Our opinion is based partly on personal observation but mainly on indirect argument from a small randomised trial of insulin treatment of non-diabetic "high-risk" patients for seven days after infarction (with small additional glucose and potassium supplements). We confined the study to patients with various clinical indicators of trouble (low blood pressure, left ventricular failure, various prognostically serious cardiac dysrhythmias, and/or initial blood glucose above 6.5 mmol/l (120 mg/100 ml)) because previously we have found intolerance ($K_G < 1.1$) to intravenous glucose on the seventh postinfarction day to be strongly correlated with a stormy clinical course.⁵

Fifty patients consented to take part in the trial out of 61 who qualified for entry, and happily only two of these died in hospital, one insulin-treated and one control (though the mortality for all 61 was not unusual at 12% (seven deaths)).

Some advantages of the addition of insulin (30 U daily in divided doses) to the usual coronary-care and ward regimens were a reduction in both clinically assessed left ventricular failure, which was present on the fourth day in five out of 23 patients on insulin and 13 out of 26 controls ($P < 0.05$ on χ^2 test), and in dysrhythmias either of supra-ventricular origin or due to a conduction defect (but not of ventricular dysrhythmias), which were present in five out of 24 patients on insulin and 13 out of 26 controls ($P < 0.05$). There was also a lowering in the insulin group of the plasma concentrations of both creatine phosphokinase ($P < 0.05$ at 23 hours) and of lactic dehydrogenase isoenzyme I ($P < 0.05$ from one to seven days after entry, though the values at four and 12 hours were the same in the two groups).

The Norris clinical index⁶ of prognosis did not differ significantly between the two groups, though the insulin-treated had a less advantageous, higher mean value. This was partly because they were

older (mean age ($\pm$ SD): insulin-treated 62 ± 7 years, controls 55 ± 5 years; t test, $P < 0.005$), but was still true even if age was excluded from calculation of the index.

The insulin-treated group showed lower, more "normal" values of blood acetoacetate and 3-hydroxybutyrate and of the glucose:insulin ratio. It was also much rarer to find low plasma insulin concentrations in these patients (for example, at 12 hours five out of 20 controls had insulin levels below 10 mU/l, while this was found in none of 23 on insulin).

Apart from any possible significance of the exact regimen followed, we believe this study had an advantage over previous trials⁷⁻⁸ in its ability to detect any favourable effect of insulin after cardiac infarction in that it did not include large numbers of patients in whom there was no reason to expect a deficiency of insulin, either absolute or relative to the high levels frequently found after infarction.

We gratefully acknowledge all the work by medical, nursing, and technical staff of the Radcliffe Infirmary (and especially of the coronary care unit) in the care of the patients whom the medical consultants kindly permitted us to study. We thank also Drs Siddiqui and Craig of Searle Diagnostic Ltd for help in the measurement of the serum enzyme concentrations.

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P S SAHNI

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- ¹ Soler, N G, *et al*, *Lancet*, 1974, 1, 475.
² Garcia, M J, *et al*, *Diabetes*, 1974, 23, 105.
³ Kannel, W B, *et al*, *American Journal of Cardiology*, 1974, 34, 29.
⁴ Hamby, R I, *et al*, *Journal of the American Medical Association*, 1974, 229, 1749.
⁵ Sahni, P S, and Hockaday, T D R, *Clinical Science and Molecular Medicine*, 1975, 49, 20.
⁶ Norris, R M, *et al*, *Lancet*, 1969, 1, 274.
⁷ MRC Working Party, *Lancet*, 1968, 2, 1355.
⁸ Pentecost, B L, *et al*, *Lancet*, 1968, 1, 946.

Marking instrument for use in cryopreservation

SIR,—Effective labelling of patient samples should be a cardinal rule in all branches of medicine. In no area is this need greater than in the field of seminal preservation and banking when artificial insemination is being contemplated. A foolproof method of identification of freeze-storage samples is essential as immersion in substances such as liquid nitrogen may remove all but indelibly imprinted information. Therefore in the veterinary field, where freeze-storage of semen is carried out on an immense scale, effective methods to avoid mistakes are in existence, codes being printed on by machine before storage. In most units in Great Britain concerned with human sperm storage, however, the work load does not justify the expense of purchasing such machinery, yet responsibility for correct permanent labelling remains as great.

This problem has been overcome cheaply and efficiently at the Chelsea Hospital for Women by using a fine electric stylus to mark a selected code on the side of the plastic storage ampoule. The miniature stylus (Adamin Electric stylus; Light Soldering Developments Ltd, Croydon, Surrey) acts as a low-temperature soldering iron and by writing on a transfer tape (available in many colours) enables the code of choice to be etched on the ampoule. The method may also be applied to paillettes, although the surface area available is less and care has to be taken to ensure that the writing is beyond the sealed end, as the

heated tip can lead to weakness or perforation of the straw.

In our experience, despite immersion in liquid nitrogen for periods of over six months, no erasure of marking has been noted. The stylus is therefore recommended to all in the cryopreservation field as a cheap, efficient, effective, and adaptable method for marking specimens permanently.

We are grateful to the Royal College of Obstetricians and Gynaecologists for their grant to help in work associated with the use of the apparatus.

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Early discharge after myocardial infarction

SIR,—The tentative tip-toeing towards a more liberal policy in treating patients after myocardial infarction is demonstrated further by Dr A D N Gelson and others (26 June, p 1555), who now feel brave enough to discharge most of such patients by the eighth hospital day.

I note, however, that their policy is still to instruct all patients to remain at home for one month. "A month after discharge they are encouraged to start taking short walks. Six weeks after discharge they are reviewed in the outpatient clinic."

How does this ultraconservative policy after discharge relate to their liberal policy during the hospital period? There seem to be no proved reasons for restricting patients after myocardial infarction to remain in their homes for one month. This undoubtedly delays rehabilitation, induces anxiety and depression, and delays return to work, noted as reasons for the early discharge. Why should these patients not be allowed out of their homes as soon as they feel like going out?

JOHN FRY

Beckenham, Kent

Legal procedures in cases of non-accidental injury to children

SIR,—I read with interest the article by Dr L J H Arthur and others on non-accidental injury (NAI) to children. Under the heading "Legal procedures," however, an impression is given which I feel should be corrected. Many members of the medical profession are often critical that social services departments do not take enough children before the juvenile court to secure a care order in NAI cases. This may be fair criticism in some instances, but the following points must be kept in mind.

Firstly, when a child has injuries which in medical opinion have been caused by non-accidental means, coupled perhaps with an admission on the part of the parent or an inadequate explanation, a case can often be proved. However, the majority of NAI cases are not so clear cut and fall within what is often referred to as the "grey area."

Secondly, both section 1 (2) (a) of the

Children and Young Persons Act 1969 ("his proper development is being avoidably prevented or neglected or his health is being avoidably impaired or neglected or he is being ill treated") and section 1 (2) (f) ("he is in need of care or control which he is unlikely to receive unless the court makes an order") have to be proved. While it is relatively easy with medical evidence to prove the first part of this, it is not always the situation with the second part.

Finally, it must be remembered that courts do vary considerably, and the same case taken before different courts could be dealt with in very different ways, with sometimes a detrimental effect on the child and its family.

COLIN WEAVER
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Oral contraceptives and hypertension

SIR,—The association between the combined oestrogen-progestogen oral contraceptive pill and hypertension is now widely known. However, it seems that the incidence is higher than the 5% found in the study by the Royal College of General Practitioners.¹

I recorded the findings in 100 consecutive women coming for repeat prescriptions of the combined pill and found that 28 of them had a raised blood pressure (systolic ≥ 140 mm Hg, diastolic ≥ 90 mm Hg, or both). Three of these already had a similar blood pressure reading before starting the pill and are continuing on the pill. The remaining 25 were taken off the combined pill; 19 of them were changed to Micronor (containing 0.35 mg norethisterone only) and six decided to use other methods of contraception. Of the 19 patients on Micronor, eight showed an appreciable fall in blood pressure after three months, five showed a slight fall, and six showed no change. Of the six using other methods, four showed an appreciable fall and two a slight fall in blood pressure.

ANDREW MILLAR

Benson,
Oxford

¹ Royal College of General Practitioners, *Oral Contraceptives and Health*. London, Pitman Medical, 1974.

Detection of scanty blood parasites

SIR,—Air travel has resulted in blood parasites from tropical regions appearing in geographical areas where they are not usually found. This situation may give rise to diagnostic difficulties which are often compounded by the scarcity of the parasite in the blood film. Use of the standard blood smear with Romanowsky staining will confirm the clinical diagnosis in many instances, but we have found this approach, even when combined with thick preparations, to be considerably less efficient than examination of the buffy coat for both trypanosomes and malaria parasites. Two recent examples illustrate the point and emphasise an additional benefit from the latter approach—namely, the ability to recognise morphology since red cells are intact.

One week after returning from the tropics a young man developed fever and rigors. A blood film showed the presence of numerous trophozoites of *Plasmodium falciparum*. He was treated with conventional antimalarial therapy and made an

uneventful recovery. He subsequently developed a low-grade fever. At that time physical examination was unremarkable and repeated studies of thick and thin blood films failed to demonstrate any parasites. Examination of the buffy coat, however, showed the presence of very scanty ring forms and an occasional gametocyte. Further therapy resulted in complete remission of his symptoms.

The second patient was suspected of having malaria and a blood film showed scanty trophozoites of *Plasmodium ovale* after a long search. However, these were immediately and easily demonstrable on buffy-coat examination despite there being far fewer erythrocytes present. The explanation of this phenomenon is not clear, but it is presumably related to differences in density between normal red cells and those containing malaria parasites.

These two cases illustrate the ease with which scanty blood parasites may be demonstrated by using a simple and readily available laboratory technique. Furthermore, the plasmodia may be characterised more easily than in thick films or in those prepared using the cytocentrifuge,¹ in both of which techniques the red cells are lysed before staining. Since treatment varies to some extent depending on the species of parasite present, accurate identification may have advantage for patient management.

We would be interested to hear whether this experience is shared by other workers.

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PETER JACOBS

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University of Cape Town and Groote Schuur Hospital,
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¹ Goldsmith, J. M., and Rogers, S., *Central African Journal of Medicine*, 1975, 21, 160. July 1975.

Venereal disease nursing supervisors

SIR,—I would like to emphasise the present serious plight of venereal disease nursing supervisors, most of whom hold the fellowship of the Institute of Technical Venereology and are registered medical auxiliaries.

VD nursing supervisors have from the beginning of the National Health Service traditionally been paid intermediately between the grades of staff nurse and charge nurse. Since the Halsbury Report was implemented the VDNS has now been absorbed for salary purposes into the grade of staff nurse, but still retains the title VDNS. He therefore appears to have been downgraded both in his valued role as a senior member of the venereal and sexually transmitted disease health care team and also penalised financially. In actual fact he receives less than a staff nurse, since a VDNS is still not entitled to the £93 pa VD nursing allowance.

These effects are having a disastrous effect on the morale of existing staff and can only further aggravate the difficulties already existing in recruitment for this essential service.

DAVID R BOURKETTE-BOURKE
Secretary-General,
Institute of Technical Venereology

Tilbury, Essex

Reassurance from British Columbia

SIR,—I wish to inform any doctors contemplating a move to British Columbia that the medical college's rule on immigrant doctors

having to spend five years in northern British Columbia (4 October 1975, p 46) has been suspended. This was the result of a decision by the Human Rights Commission which maintained that the rule was discriminatory to foreign doctors.

D L SWEENEY

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Restriction of right to prescribe

SIR,—We write again because of the urgency of the matter, in relation to the pernicious Medical Practitioners (Restriction of Right to Prescribe) Bill (12 June, p 1471).

It would be expedient for all medical practitioners to acquire and examine this document which, if enacted, would give "big brother" even more power. There would be for the doctor a denial of freedom with responsibility and an infringement of the patient's right to confidentiality.

There is already too much power in the hands of the State and the lust for more power is insatiable. It would be tragic if our apathy resulted in our being State automatons.

J H SCOTSON
B CAPLAN

Timperley,
Cheshire

Council and the divisions

SIR,—At the last meeting of the Dudley Division grave disquiet was expressed at the present state of health of the BMA divisions.

Democratic, properly organised, thoroughly representative of the profession as a whole and all of its crafts, the division can discuss the problems of the profession thoroughly with all shades of opinion expressed and reflected. Yet the Council and the Representative Body consistently fail to use it. The method of pin-pointing issues for discussion by the divisions and thence formally incorporating their opinions into Council policy for action would lead to a thorough knowledge of the problem and the need for action, rather than the present call for action when concurrently attempting to explain the issue under discussion. The need to discuss the problems of professional interest as a whole, craft interests, and the facets of ethical relationships with patients and the administration are too obvious to detail at this point.

Each time a ballot or a referendum is called for by the profession then the BMA undermines its very existence by concurring. The ballot as a mechanism is misleading as to statements of fact, expressions of opinion, and the form of action called for. Each time such a ballot is published, the divisional death knell is rung. Up goes the cry for breathless head-counting, when in fact what we have been waiting for is courageous leadership based on solidly expressed opinion coming up from the divisions. We need more than to recount the old ground of the Annual Report of Council and then have an Annual Representative Meeting as a vote of confidence in their past policies.

It is high time that the Council detailed the programme of discussion and report back, month by month, for the divisions and slowly rebuilt the foundation for the 55% of the profession who consistently pay their dues