ogists that such ad hoc screening exercises and special smear tests should be dealt with by their cytoscreeners working overtime at a fixed rate per smear either in their own district laboratory or in another adjacent NHS one. This would avoid the disturbing move by certain district managers of referring smears to private laboratories, which often provide a cut price service but of unknown quality. This is not intended to decry high quality private laboratories that exist, but if managers favour these laboratories for whatever reason it would also be destroying our seedcorn, as it is only in health service laboratories that cytotechnicians are trained and quality control exercises practised.

Meanwhile, it is imperative that each district should employ enough screeners, who should then find no difficulty in absorbing such opportunistic test smears.

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Stress hyperglycaemia in non-diabetic patients with myocardial infarction

SIR,—We have recently looked at a similar problem to that examined by Dr G A Oswald and colleagues (11 October, p 917) and have tried to evaluate the prognostic use of blood glucose values as an indicator of outcome after myocardial infarction in a group of elderly patients.¹

Ninety seven patients were studied with a mean age of 72.7 years. We found that of the 62 who had a definite enzymatic and electrocardiographic diagnosis of a myocardial infarction, 22 (36%) died within 48 hours of admission to the coronary care unit. The mean blood glucose concentration in the non-infarct group was 6.4 (SD 1.6) mmol/l (115 (28) mg/100 ml), which was significantly different from the means in both the infarct survivors (7.8 (2.0) mmol/l (141 (36) mg/100 ml); $p < 0.01$) and the patients who died after the infarct (11.33 (2.9) mmol/l (204 (52) mg/100 ml); $p < 0.001$). Thirty four per cent of the patients with an admission blood glucose value greater than 8 mmol/l (144 mg/100 ml) died whereas only 9% of those with a value below this did so.

Although obtained in a selected group of elderly patients admitted to a coronary care unit, these results are nevertheless similar to those reported by Dr Oswald and others. They are also in keeping with previous studies which showed the association between the blood glucose value on admission and subsequent outcome after a myocardial infarction.^{2,3} With the current shortage of high dependency beds in most hospitals it will be interesting to see whether the admission blood glucose value becomes an important screening test in deciding which patients are likely to benefit from admission to a coronary care unit.

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- 1 Banerjee AK. Blood sugar and prognosis of myocardial infarction in the elderly. *Br J Clin Pract* (in press).
- 2 Modan B, Schar S, Shari M. Acute myocardial infarction: prognostic value of white blood cell count and blood glucose level. *JAMA* 1975;233:266.
- 3 Burden AC, Kupfer R, Davies MK, Pohl JEF. Blood sugar and prognosis of myocardial infarction. *Lancet* 1978;i:820-1.

SIR,—Dr G A Oswald and colleagues suggest that cortisol, adrenaline, and noradrenaline are the main determinants of hyperglycaemia (11 October, p 917). They also observed a correlation between

adrenaline and infarct size as defined by rise in serum aspartate transaminase activity. They found no relation between noradrenaline or cortisol concentrations and infarct size.

We studied 31 non-diabetic patients immediately after an acute myocardial infarction by measuring daily fasting blood glucose, cardiac enzymes, and early morning serum cortisol for up to five days. In all patients haemoglobin A₁ concentrations were in the non-diabetic range. The peak rises in blood glucose and serum cortisol values correlated closely ($r = 0.73$, $p < 0.001$). Patients who ultimately died or had a complicated course (cardiac arrest, shock, left ventricular failure, or significant arrhythmia) had significantly higher blood glucose and serum cortisol concentrations ($p < 0.05$, $p < 0.001$, respectively, Wilcoxon rank test) than patients with an uncomplicated course. This is not surprising as stress induced hyperglycaemia is a marker of poor prognosis and high mortality after acute myocardial infarction.¹ We found no relation between infarct size, as measured by peak lactic hydrogenase and aspartate transaminase activity in serum, and cortisol or blood glucose concentration. This suggests that the raised glucose and cortisol concentrations observed are more related to complications after acute myocardial infarction than to the degree of damage to the myocardium. Indeed Dr Oswald and colleagues also describe a subset of 10 patients who had blood glucose concentrations > 11 mmol/l but relatively low levels of enzyme release. Eight of these patients had a complicated course, supporting our observations.

Our findings, and those of the authors, suggest that activation of the adrenocortical system may in part be responsible for the rise in blood glucose concentration observed after acute myocardial infarction. We believe that stress induced hyperglycaemia in non-diabetics is secondary mainly to the complications experienced rather than to the acute myocardial infarction itself.

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- 1 Lakhdar A, Stromberg P, McAlpine SG. Prognostic importance of hyperglycaemia induced by stress after acute myocardial infarction. *Br Med J* 1984;288:288.

The limited list: clobazam for phantom limb pain

SIR,—I would like to draw attention to a case of intractable phantom limb pain which has responded dramatically to clobazam. My reason for doing so is that my patient has had to pay privately for clobazam as the Department of Health and Social Security does not recognise phantom limb pain as an indication for NHS prescription of this drug.

The patient, a 76 year old ex-army officer, receives 100% disability pension because of injuries sustained in action during the second world war, including a below knee amputation on the right side. Although he had experienced some phantom limb pain over the years, even in October 1980 he could play four sets of tennis a day in spite of the amputation. After a fall in 1980, however, he became increasingly incapacitated by severe pain, described as "a nerve storm" in the stump of his leg. The pain would shoot up into his trunk and into the left side of his body, the attacks being short and recurring every two to three minutes day and night. There was also a continuous background ache. A variety of analgesics and benzodiazepines

proved ineffective in controlling his pain and he was referred to Queen Mary's Hospital, Roehampton, and later to the pain clinic at Pembury Hospital, Tunbridge Wells. Transcutaneous stimulation brought some relief for a few weeks, as did clonazepam, but thereafter proved totally ineffective. In July 1983 he was started on clobazam 10 mg three times a day and was completely relieved of his pains. This response has now been sustained for three years.

When this drug was withdrawn from the NHS list the patient's wife wrote to her MP, who referred the matter to the DHSS. The senior medical officer concerned wrote to say that the drug could not be permitted as there were equally effective drugs available. Clearly this has proved to be quite untrue in this patient's case and I wonder whether other doctors have had a similar experience with clobazam and if so whether the advisory committee on NHS drugs should be asked to restore clobazam to the NHS list.

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Doctors as nutrition educators?

SIR,—I managed to answer all the questions that Ms Margaret B Clark and her colleagues posed (11 October, p 928), but as the author of *E for Additives* and the *Supermarket Shopping Guide* it concerns me that she and her colleagues ask doctors about the dangers of E300, which is more commonly known as L-ascorbic acid.

Only a relatively small number of people have allergic responses to food additives, although a number of additives which are otherwise safe do enable certain manufacturers to hide, for example, very high levels of saturated fats, and these are therefore undesirable from a nutritional rather than a toxicological point of view. My work indicates that there is need for concern only over roughly one in five of the E additives. So it is much more important that the medical profession becomes acquainted with the minority rather than the safe, helpful, and even beneficial majority of additives.

Where a house does need to be put in order is in the declaration of additives in medicines, which commonly contain not only extremely high levels of sucrose but often also many additives which are responsible for a wide range of side effects. A brand of children's vitamins contains no fewer than five different azo dyes, some of which are banned in the United States, and, to ensure palatability, the vitamins are mixed with ground sugar.

If the pharmaceutical houses were required to disclose all the ingredients in their products there would be a rapid process, as there was in the food industry, of natural selection, which would benefit a significant number of patients.

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Ultrasound screening for hip abnormalities

SIR,—That four of Mr Clarke's patients with resolved instability required subsequent splinting for hip displacement (18 October, p 1026) in no way disagrees with our findings (20 September, p 719); in fact, he has agreed with one of our major conclusions, that hip abnormalities may be clinically silent. Naturally we do not discharge