One explanation of these anomalies is that talc may be acting as a particulate adjuvant, promoting cell-mediated hypersensitivity reactions to polysaccharide antigens of starch in susceptible individuals. For these reasons we would support efforts to eliminate talc, which although not directly pathogenic in low concentration, may facilitate cell-mediated reaction to other agents on the surface of surgical gloves.

J D DAVIES

University Department of Pathology

H J ESPINER

W K ELTRINGHAM

Department of Surgery,
Bristol Royal Infirmary,
Bristol BS2 8HW

J B F GRANT

Department of Surgery,
Hallamshire Hospital,
Sheffield S10 2JF¹ Neely J, Davies JD. *Br Med J* 1971;iii:625-9.² Cade D, Ellis H. *Eur Surg Res* 1976;8:471-9.³ Grant JBF, Davies JD, Jones JV. *Br J Exp Path* 1975;56:396-401.⁴ Grant JBF, Davies JD, Jones JV. *Br J Surg* 1976;63:867-9.⁵ Davies JD, Neely J. *J Path* 1972;107:265-78.⁶ Grant JBF, Davies JD, Jones JV, Espiner HJ, Eltringham WK. *Br J Surg* 1976;63:864-6.

Are reflectance meters necessary for home blood glucose monitoring?

SIR,—Drs J H Baumer and D C L Savage (8 November, p 1286) report serious inaccuracies in blood glucose estimation using the Boehringer reagent strip. This is at variance with the findings of Lawson *et al.*¹ who in a study of 150 independent blood sugar estimations using this reagent strip found that 109 of the observations were in the same range as the laboratory results and that none of those which fell outside this range did so by more than one colour standard on the strip. On reanalysing our reported results² on the same basis as Lawson we were able to confirm his claims.

Therapeutic decisions affecting diabetic control are aided by serial trends in blood sugar levels at the same time of day from day to day. The reliability of these trends is more important than the accuracy of a single observation. The evidence from our work² and that of Lawson *et al.*¹ Walford *et al.*³ and Earis *et al.*⁴ all support the view that the Boehringer strip is sufficiently reliable for this purpose.

The home blood sampling method described by Drs Baumer and Savage is a revival of the principle first described by Keen and Knight in 1962.⁵ Its major drawback is still that the patient is unable to act on the results until they are made available some time later.

S D FERGUSON

I A HUGHES

Department of Child Health,
Welsh National School of Medicine,
Cardiff CF4 4XN¹ Lawson PM, Kesson CM, Ireland JT. *Lancet* 1979; i:742.² Ferguson SD, Prosser R. *Br Med J* 1980;281:912.³ Walford S, Clark P, Paisey R, Hartog M, Allison SP. *Lancet* 1980;i:653-4.⁴ Earis JE, Greenway MW, Macauley MB. *Lancet* 1980;i:823-4.⁵ Keen H, Knight R. *Lancet* 1962;i:1037-42.

Changeover to U100 insulin

SIR,—It is hoped to introduce U100 insulin into the UK in the near future but the main setback to this apparently is the attitude of the DHSS, which estimates that such a conversion

would cost £1-1½m. The U20, U40, and U80 insulins and the present standard diabetic syringe would then be discontinued.

In an attempt to discover the most convenient size of diabetic syringes for the new insulin, a note was made of the range of insulin doses injected by patients at any one time. These details were taken from all the patients attending five consecutive diabetic clinics held at Leeds General Infirmary. A total of 508 patients attended these clinics, of whom 241 (47.4%) were on insulin therapy and 42 (17.4%) were injecting twice daily. The table shows the range of insulin doses injected. It can be seen that 77.4% of patients injected 50U or less at any one time (that is, 0.5 ml of U100) and there was one patient who injected over 100U (that is, over 1 ml).

Insulin doses injected by 241 patients attending diabetic clinic

Units insulin	Total No of injections	% total
0-19	16	5.7
20-49	203	71.7
50-99	63	22.3
100+	1	0.4

When U100 insulin is introduced a number of diabetic syringes would therefore be required to cover the range of insulin volumes injected—for example, 0.5 ml, 1.0 ml, and 1.5 ml syringes—as it seems unlikely that one syringe would be able to deliver, for instance, 12 units (0.12 ml) and 120 units (1.2 ml) accurately and be easily read by the patient.

A date for the introduction of U100 has been postponed owing to the indecision of the DHSS in funding the new insulin and syringes. Hopefully these syringes will be disposable and available on the NHS prescription. Although there are clear savings for the NHS in introducing a single insulin strength—that is, in packaging, pharmacist's fees etc—the different syringes will no doubt give rise to occasional error, as does the present usage of three insulin concentrations.

H TINDALL

J K WALES

Department of Medicine,
General Infirmary,
Leeds LS1 3EX

Generalised allergy to porcine and bovine monocomponent insulins

SIR,—Although Dr J P Simmonds and others (2 August, p 355) were able to find only one prior case of systemic allergy to monocomponent insulin,¹ there is at least one other reported case.² We would like to present a similar case.

A 74-year-old woman with diabetes had been treated with oral hypoglycaemic agents for seven years. In March 1978 she was briefly treated with insulin while hospitalised elsewhere for a haemorrhoidectomy. She presented at our hospital in July 1980 with uncontrolled diabetes while on chlorpropamide 750 mg daily. Six days after starting daily injections of insulin (isophane beef-pork, Lilly) she developed generalised urticaria and pruritus. She was taking no other medications at this time. Since she refused admission to the hospital, she was given lente monocomponent pork insulin (Lente Pork Iletin II, Lilly). By eight hours after injection she had again developed generalised urticaria and pruritus, which was more severe than previously. She was subsequently admitted to the hospital, where, despite hydration, intravenous bicarbonate, and chlorpropamide she developed severe diabetic ketoacidosis (arterial pH 7.06). Therefore she was desensitised to soluble mono-

component pork insulin (Regular Pork Iletin II, Lilly) over a six-hour period.³ During the desensitisation she had local reactions of erythema to the 1:500-1:100 dilutions within five minutes of injection, but these disappeared with further desensitisation. The ketoacidosis was then treated with intramuscular injections of soluble monocomponent pork insulin. Subsequently, lente monocomponent pork insulin was also added after skin testing showed no reactions. Her diabetes is now controlled on a combination of lente and soluble monocomponent pork insulin with no reactions.

Although allergic reactions to monocomponent insulin are rare, they can be of extreme importance. This is illustrated by our patient, who required insulin for severe ketoacidosis. As in one of the other reported cases,¹ we successfully desensitised her using monocomponent insulin. It is interesting that each of these four patients had received less pure insulin previously. In a recent review⁴ it is noted that no cases of insulin allergy (local or systemic) have been seen in patients who received only monocomponent pork insulin. The widespread use of purified insulins and the introduction of human insulin may eventually eliminate this clinical problem.

J M GOLDMAN
H C BRYNILDSENDepartment of Medicine,
Coney Island Hospital,
New York 11235,
USA¹ Leslie D. *Br Med J* 1977;iii:736-7.² Goldman BA, Lewis AE, Rose LI. *JAMA* 1976;236: 1148-9.³ Galloway JA, Bressler R. *Med Clin N Am* 1978;62: 663-80.⁴ Galloway JA. *Diab Care* 1980;3:615-22.

Impotence in diabetic and non-diabetic hospital outpatients

SIR,—Dr D K McCulloch and others (1 November, p 1216) regard our control group of non-diabetic hospital outpatients as unsatisfactory because chronic obstructive airways disease, ischaemic heart disease, uraemia, and multiple sclerosis are known to be associated with sexual dysfunction. It is difficult to see what specific pathogenetic denominator could be common to all these conditions and diabetes mellitus. The obvious common one is that patients with any of these disorders are unlikely to be feeling very fit. Although an obvious explanation may not necessarily be correct, its obviousness does not of itself disqualify it.

The writers refer to current research from their unit suggesting that impotence may be the earliest manifestation of diabetic autonomic neuropathy. We await with interest the outcome of this work, but until it has been demonstrated by a prospective study that impotence is followed by other manifestations of diabetic autonomic neuropathy it is surely unjustifiable to call it the "earliest" manifestation.

EVA LESTER
A J GRANT
F J WOODROFFEDiabetic Clinic,
North Middlesex Hospital,
London N18 1QX

PGE₁ and vasospastic disease

SIR,—I was very interested to read the report by Mr P C Clifford and others (18 October,