about 1 cm without discoloration or tenderness. The remainder of the physical examination, including visual field and ophthalmoscopic examination, was normal.

Laboratory investigations, including complete blood count, differential white cell count, serum electrolytes, chest x-ray, urine analysis, blood urea nitrogen, creatinine, and glucose, examination for antinuclear antibody and rheumatoid factor, and serum protein electrophoresis, were normal and serological test for syphilis was negative. The erythrocyte sedimentation rate (Westergren) was 4 mm in 1 h on three determinations.

After the third day in hospital the swelling decreased by about half and, since the patient remained free from other symptoms, she was discharged home. Diagnoses entertained included cranial arteritis, trauma, autoerythrocyte sensitivity, and allergic reaction, but none was established.

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International units and standards for proteins

SIR,—Those working in clinical immunology and protein immunochemistry will welcome the letter from Drs J H Humphrey and I Batty (10 April, p 898), of the International Union of Immunological Societies, listing some of the existing standards in this field and indicating others to be developed.

While agreeing with the need for sound, common standard preparations, we feel that the assigning of international units to such preparations is another matter. Total proteins and a number of individual serum proteins have been measured in weight per volume units for decades, and we would urge that for such measurements international units have little place in routine clinical practice, where clinicians have come to learn and accept results expressed in more conventional terms. Also, the International Federation of Clinical Chemistry Standards Committee has an expert panel on proteins which is aiming to have standards calibrated where possible in g/l by the best criteria currently available. The profession has already experienced an upheaval with the introduction of SI units, and there seems little practical advantage in causing another tremor by changing the mode of reporting of many human serum proteins.

We agree that when a pure preparation of a substance is not available and it is not possible to assign a weight value to a standard, there is obviously a good case for reporting in international units. We hope, however, that editors of journals will not adopt the suggestion in the last sentence of the letter from Drs Humphrey and Batty; in our opinion that would be a retrograde step and would discourage the search for a more rational mode of reporting based on weight or (when appropriate) molar equivalents.

The practical value of assigning immunoglobulin weight equivalents to international units has already been recognised, as indicated by Drs Humphrey and Batty, and we hope that their committee is gathering the necessary information from reputable international centres to enable it to issue weight equivalents for other serum proteins in its standard preparations. In the meantime the supra-

regional protein centres will continue to express results in terms of weight per unit volume for the convenience of their users.

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Flupenthixol for depression

SIR,—Dr J P R Young and his colleagues (8 May, p 1116) are to be congratulated on their study showing the equivalence of flupenthixol and amitriptyline in the treatment of depressed outpatients. As they admit, however, "the improvement . . . may have been due partly to anxiolytic drug effects," and here lies the crunch. The scales used are designed to measure the severity of dissatisfaction with life rather than to separate those with specifically biological symptoms of depressive illness. Furthermore, the marked response of their patients within the first week, before the antidepressive effects of amitriptylene take effect, also supports the conclusion that their sample contained many patients with mixed neurotic illness, who are not only prone to respond to placebo but also to any drug with sedative properties.

To help the practising doctor choose the most effective drug for the individual patient could the authors tell us the degree to which their patients had biological symptoms (such as loss of appetite and libido, retardation, etc) and the relationship of these to drug response?

It would indeed be convenient if we could find a drug that worked in all psychiatric conditions, the only decision being that of choosing the dose, a development that would quickly lead to unemployment among psychiatrists. Unfortunately for the public, I doubt whether the evidence supports this conclusion.

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* * * We sent a copy of this letter to Dr Young, whose reply is printed below—ED, *BMJ*

SIR,—In reply to Dr Kellett's letter on the recent trial of flupenthixol and amitriptyline, all the subjects included in the trial were referred to hospital with predominant symptoms of depression; all were felt to be clinically depressed on initial psychiatric assessment. For each patient four standardised questionnaires¹⁻⁴ were completed serially to quantify the severity of depressive symptoms. Each questionnaire was designed to measure depression. In addition, with each patient a formal assessment of the common biological accompaniments of depression was made at each visit using a standardised inventory.⁵ Each patient included in the trial was rated for alteration in sleep pattern, appetite and

weight change, libido, and diurnal variation in mood and energy. Every patient in the series was recorded as showing some "biological symptoms" of depression. Variation in these several functions was found, as expected, to follow closely changes in rating scale scores for depression during the course of treatment. Raw data for all the above "biological symptoms" are available on request. The alteration in sleep pattern for the series as a whole was represented in the paper in graph form. Changes in appetite and weight recorded in the trial are to be published later with other data relating to carbohydrate craving previously reported with amitriptyline.

It is to misread the paper, therefore, to suggest that the trial subjects were simply "dissatisfied with life" or that the sample contained "many patients with mixed neurotic illness." How many depressed patients are not dissatisfied with life, anxious, or otherwise neurotic? As stated in the paper, "though not severely depressed, the patients studied seemed typical of those referred to hospital for antidepressant outpatient treatment, their mean Hamilton depression score being 24."

The apparent antidepressant properties of flupenthixol, of course, require further confirmation. A longer follow-up assessment is required and, as suggested in the paper, it would probably be worth while to evaluate the drug against more severe forms of depression. It would also be interesting to attempt to differentiate more clearly between the anxiolytic and antidepressant effects of the drug.

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¹ Beck, A T, *et al*, *Archives of General Psychiatry*, 1961, **4**, 561.

² Medical Research Council, Clinical Psychiatry Committee, *British Medical Journal*, 1965, **1**, 881.

³ Crown, S, and Crisp, A H, *British Journal of Psychiatry*, 1966, **112**, 917.

⁴ Hamilton, M, *British Journal of Social and Clinical Psychology*, 1967, **6**, 278.

⁵ Pollitt, J, *Proceedings of the Royal Society of Medicine*, 1971, **64**, 1174.

Danger of instant adhesives

SIR,—Instant adhesives containing alpha-cyanocrylate and similar substances are both extremely rapid and efficient in action. Efficiency and rapidity combine to present dangers to patients and never more so than now and in the future owing to widespread television presentation and national sales.

The public should be warned of the dangers and the medical profession should learn of the difficulties ahead. The adhesives are quite capable of bonding surfaces, and these include human body surfaces, together in a matter of seconds, and once the surfaces are bonded the inanimate can be separated only by considerable force and the human by surgical intervention.

The containers of such adhesives that I have purchased have had explanatory leaflets enclosed with them in their cartons, but unfortunately sometimes the printing on these leaflets is so small that I am quite sure the public would not read it. On one leaflet there were five lines of print to the centimetre. I felt that the warnings were not written in strong enough terms, and, though the danger to eyes was mentioned, the fact that eyelids could be bonded together in seconds was missing. Furthermore, it was stated that immediate bathing of human surfaces with warm water or acetone would remove the