Correspondence

C REACTIVE PROTEIN IN MENTAL ILLNESS DEAR SIR,

Hood (1977) showed that in patients with high erythrocyte sedimentation rate (ESR), C reactive protein (CRP) may have altered electrophoretic mobility due to binding to the protein of lysozyme, which is concomitantly raised. We wish to draw attention to a similar phenomenon, possibly due to a different cause, in some psychiatric patients with normal levels of ESR and CRP.

For immunoelectrophoresis of CRP we use 1 per cent agarose of low electroendosmosis and a buffer (pH 8.8) containing 1.3 g barbital sodium, 0.207 g barbital, 5.62 g glycine and 4.52 g tris (hydroxymethyl methylamine) all dissolved in one litre. Monospecific antiserum against CRP was supplied by Difco. Under these conditions CRP in healthy blood bank donors is negatively charged and migrates to the cathode. 'Anomalous' CRP is positively charged and migrates towards the anode. The distribution of the anomaly is striking: in schizophrenia we found anomalous CRP in 49 out of 61 patients tested, in depression five out of 30, in mania four out of eight, and in 100 blood bank donors used as controls not one had the anomalous protein. No correlations between anomalous CRP and age, sex or drug treatment were observed.

Our attempt to find a cause for anomalous charge in these patients was unsuccessful. 'Abnormal' CRP was precipated by specific antiserum and the immune precipitate was dissolved in 8M urea containing 2 per cent sodium dodecyl sulphate. The dissolved polypeptides were resolved according to molecular weight by polyacrylamide gel electrophoresis. A comparison with a similar preparation from 'normal' CRP did not reveal any additional or missing polypeptide.

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Reference

HOOD, W. (1977) Causes of multiple abnormal bands in serum protein electrophoresis. *Clinical Chemistry*, 23, 1192.

HYSTERIA: A LARGE SERIES IN IRAQ

Dear Sir,

We have studied 268 consecutive patients attending casualty departments in the last four years and diagnosed as suffering from hysteria. We usually treated the patients to remove the symptom if possible, using mainly brief electrical stimulation to the limbs, one ECT, intravenous injections of diazepam 10 mg, counselling and sometimes admission to hospital to alter aggravating environmental factors.

There were 71 per cent females. The age range was eight to 60 years, most of the patients (89 per cent) being in the second and third decades of life. One hundred and twenty-eight were married, 136 single and five divorced. Thirty-two per cent were illiterate, 68 per cent literate. Half the patients (126) were attending the casualty department for the first time with hysteria. The total number of symptoms (some patients had more than one symptom) were: dissociative in 114 patients, motor 68, sensory 48, speech 16, aerophagy, hiccough and hyperventilation 79, agitation and pseudopsychosis 20.

Cultural forces clearly affect the frequency and the manifestation of hysteria. In this country as in other Arabic Islamic cultures, families are of an extended pattern with strong cohesion, dependency, and closeness. Many generations live in the same house where the grandfather is the head. Children are overindulged with much attention and sympathy. Traditionally, women are in less privileged positions than men, and they must eschew all contact with men except for their husband, who is the first man in their life. This tradition still covers the greater section of the community especially in rural areas although it has little force in modern terms.

In such a milieu, it is to be expected that people will mature late, after a long immature period. Accordingly, many will play on the privileges of childhood in facing the difficulties of life, and this will be seen especially in women. Playing the sick role will bring with it more sympathy and immediate reward than any direct claim for attention, and the symptoms will often be dramatic and frightening.

We suspect that in Western countries with nuclear families and greater independence, vulnerable people do not so often respond to stress by dramatic hysteria, but with depression, attempted suicide, alcoholism and drug abuse. The great discrepancy between the old traditions and the modern Western way of life as disseminated by television, magazines, tourism and rapidly increasing education (with mixed sexes) is increasing tension among the young. They do not know how to behave. Even religious faith is weakening.

We observed that those who are educated are more prone to the 'cry for help' (68 per cent). They appear to be vulnerable to the conflict between old and new cultures, whereas simple people, especially those outside big cities, are more satisfied and content. The strong faith and cohesion of the traditional society are stabilizing factors. Another stress is the new law of compulsory education for those between 6 and 45 years of age, which has brought to notice those who cannot cope with the demands of schooling. The sick role can exempt from education on medical grounds.

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OILY INJECTIONS THAT OOZE

DEAR SIR,

Some observations of an experienced nurse on the technique and results of giving depot injections for schizophrenia might help patients, nurses and doctors. I have noticed, and you can easily confirm this, that some of the oily injection frequently leaks out of the puncture in the skin, soiling clothes or sticking plaster. Put plasters on injection punctures and you will see what I mean. Sometimes these leaks must be a significant proportion of the volume of drug originally injected, and I strongly suspect that this is the explanation of the comment frequently heard in psychiatric wards, "the injection never touched her".

Years ago, leaking and staining was a common problem with intramuscular injections of iron. Many nurses nowadays have forgotten, or never been taught, the technique used then of sliding the skin to one side before the injection and then back afterwards, sealing the track of the needle. It works.

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NORADRENERGIC OVER-ACTIVITY IN CHRONIC SCHIZOPHRENIA

DEAR SIR,

U. C. R. Gomes and colleagues (*Journal*, October 1980, 137, 346–51) claim that statistical analyses eliminated the possibility that their finding of increased noradrenaline and cycle AMP in the cerebrospinal fluid of chronic schizophrenics was related to neuroleptic medication. They explained that the Wilcoxon test was applied to patients receiving medication who were matched for (*inter alia*) diagnosis, with patients not receiving medication.

How was this possible, given that Table I showed that all their chronic schizophrenic patients were receiving medication?

A. A. SCHIFF

E. R. Squibb and Sons Limited, Squibb House, 141–149 Staines Road, Hounslow TW3 3JB

DEAR SIR,

Dr Schiff has quite correctly pointed out that all the chronic schizophrenic patients in our study were on neuroleptic medication. It was therefore not possible to make direct comparisons of medicated and unmedicated patients in this category, nor did we claim to have done so.

Consequently, we were compelled to examine the effects of medication on CSF noradrenaline and cyclic AMP concentration in the other three groups of psychiatric patients, i.e. those with acute schizo-phrenia, psycho-organic disorders and personality disorders. Our findings clearly showed that neuroleptic medication made no significant difference to any of the parameters studied. We therefore feel fully justified in our interpretation that ". . . neither the elevated noradrenaline nor cyclic AMP concentrations in the chronic schizophrenics were attributable to drug effects".

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IDENTIFICATION OF DISEASE ENTITIES

DEAR SIR,

Even Kendell and Brockington's paper (*Journal*, 137, 324–31), which doesn't go far enough, makes us pose the question of when is it appropriate to discuss whether psychiatric terms refer to dimensions or categories. The idea that a mathematical technique could resolve it is a philosophical mistake, one which will obscure rather than clarify real issues. Any two

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