elicited again in some individuals and also increased in some cultural environments.

The propensity to make a conversion – or to retain it – could at least be partly determined by a certain style of mother-child relationship. Recent advances in our knowledge of development in infancy may throw light on the origins of the conversion phenomenon. For instance, the concept of 'affect attunement', proposed by Stern (1985), can help us understand how the conversion response could be elicited through a certain kind of mother-child interaction. Here, any kind of initiative by the baby would be interpreted by the mother as being a bodily need, and she would answer in a highly aroused way. The child would then have to maintain a high level of physical excitation to keep in touch with his mother and to keep a sense of shared experience.

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Folate and depression

SIR: The folate depression debate continues with attention currently focusing on the efficiency of folate supplementation as an adjustment to standard regimens in the management of depression (Anderson *et al*, *Journal*, January 1992, **160**, 130). However, the safety of such practices should also be examined as studies have shown that increased intake of folate can interfere with seizure control in epilepsy (Strauss & Bernstein, 1974), while Reynolds (1991) suggested that excess folate intake in a pregnant woman could harm the developing nervous system of the foetus. Nonetheless, low folate levels have been found in some patients with depression. However, the results which are usually expressed as percentages do not make full use of the data for the whole group; indeed the values have varied considerably in different studies, for example 10% (Hallstrom, 1969) and 30% (Carney, 1967). The use of confidence intervals would give more accurate results.

We measured red blood cell folate levels in patients admitted to an acute psychiatric ward with unipolar and bipolar depression: 17% of the former group had red cell folate levels below 200 mg/l with confidence intervals of 274.2–349.6 mg/l; while in the latter group the figures were 9% and 233.5–309.5 mg/l. The percentage figures are not as great as in other studies but the confidence intervals were at the lower end of normal. This may suggest that low red blood cell folate levels may be an early marker of the onset of depression in some patients, and may even prove to be a sensitive marker of depression control. Measurement of red cell folate levels may have an important role to play in the clinical assessment of patients with depression.

We would therefore recommend that while investigation continues into the efficacy of folate supplementation, thought should be given to folate measurement being a part of the clinical assessment of the depressed patient.

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Outdated ECT machines

SIR: Dr Pippard's article (*Journal*, May 1992, **160**, 621–637) makes an important recommendation which is supported by the result of a recent audit of electroconvulsive therapy (ECT) practice at Glenside Hospital. He advises that the Ectron Duopulse Series 3 machine does not give adequate electrical stimulation and should be replaced by a more modern machine.

In 1992, we performed a retrospective audit of ECT at our hospital. The audit criterion was that of an induced fit of greater than 25 seconds following electrical stimulation. The machine in use then was an Ectron Duopulse Series 3, which had been regularly serviced by the medical physics department. The case notes of the 73 patients who had received

ECT in 1991 were examined. There were 51 women and 22 men. The average age was 63.3 years. ECT was given according to the recognised advice in the UK (Royal College of Psychiatrists, 1989). A total of 646 applications of ECT were given (an average of 8.85 per course). Following stimulation, 295 fits lasting longer than 25 seconds occurred; however, 315 fits of less than 25 seconds and 36 complete failures to fit were noted. A consultant anaesthetist and clinical assistant on regular attachment gave the anaesthetic agent which was always methohexitone and suxamethonium. Seizures were observed and timed by the psychiatrist and nurse in charge. No variables such as the patient's age and sex, the concurrent prescription of drugs with anticonvulsant properties, and the machine setting (ECT1 or ECT2) were found to influence seizure duration.

At this point a new Ectron Series 5 machine was purchased and used in the ECT department. This machine has a larger electrical output. A repeat prospective audit was performed to see what effect this new machine would have on seizure length. The treatment of 30 patients was audited. There were 24 women and 6 men with an average age of 54.6 years. A total of 217 applications of ECT were given (an average of 7.2 per patient, per course): 169 applications resulted in fits of greater than 25 seconds, 46 in fits of less than 25 seconds, and 2 in no fit at all. The average length of seizure induced on each application increased from 25.6 seconds in the first audit, to 36.3 in the second audit (standard deviation of the difference of the means = 2.55), and a comparison using the two-tailed *t*-test gave this a *P* value of less than 0.001.

There was no statistical difference between the two groups of patients in sex ratios, or in the proportion of patients receiving drugs with anticonvulsant side-effects. There was, however, a difference in the average age: in the original sample this had been 63.32 years but in the follow-up audit was 54.6 years (standard deviation of the difference of the means = 3.54). This was a clear-cut difference, and using the two-tailed *t*-test had a *P* value of less than 0.01. It is also interesting to note that in the second audit it was found that there was a significant negative correlation between age and length of seizure. This was analysed using the rank order of correlation (Spearman): the rho value was −0.478, giving a *P* value on a one-tailed *t*-test of less than 0.02. Looking at the data of the second audit more closely, it was apparent that the average seizure length was greater for all age groups except for the one patient aged over 80 years. It therefore seems unlikely that the overall increase in successful convulsions was simply due to an age difference between the two samples.

It seems probable that the higher proportion of patients having ultra-short convulsions prior to the introduction of the new ECT machine was due to the use of the Ectron Series 3 machine. This produces a relatively low electrical output, which is likely to be below the stimulation threshold in a significant proportion of subjects, and should be replaced by newer models.

Here is an example of the completion of a cycle of audit and the successful introduction of a change in patient management.

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ECT in schizophrenia: need for reappraisal?

SIR: Introduced for the treatment of schizophrenia, the use of electroconvulsive therapy (ECT) has declined over the past few decades in the West (Weiner, 1989). Its less dramatic response in alleviating symptoms and the absence of long-term superiority over neuroleptics have been highlighted in literature. Coupled with this, the negative attitude towards ECT in the society and among physicians has resulted in a reduction in its prescription.

Currently, its use in schizophrenia remains restricted to acute presentations, especially with catatonic and affective symptoms (Weiner, 1989). Physicians who employ this treatment modality often regard it as a last resort when the disturbance is unmanageable, and neuroleptics used sequentially or in combination have failed. Fortunately in India, a more liberal use of ECT in schizophrenia exists (Shukla, *Journal*, December 1981, **139**, 569–571). This may be due to a positive attitude among psychiatrists (gained through experience) and benefit in terms of cost and reduced admissions. In addition, the sociocultural context and its implications on patient consent (Jacob & Rajan, *Journal*, April 1991, **158**, 576) does not impede its usage. In our experience, ECT employed with concomitant neuroleptic medication in the treatment of schizophrenia results in a decrease in symptoms and an improvement in functioning in a significant number of individuals. Improvement is seen in positive psychotic attributes which seems to be independent of depressive manifestations. We note an accelerated reduction in symptoms when ECT is employed in combination with neuroleptics, even in chronic patients. The rapidity of response