In my own centre a number of consultant staff independently observed that severely depressed patients were often not responding to ECT. This prompted a careful survey of ECT practice within the hospital over a period of 11 weeks, including monitoring of electrode placement, seizure duration, and concurrent medication (24 patients, 120 treatments).

Hospital practice is to use the lowest setting of current to produce a visible seizure, using an Ectron Duopulse Series 2A. If no seizure activity is observed, the stimulus is repeated once under the same anaesthetic, and a greater stimulus used for subsequent treatments (ECT setting 2 instead of setting 1).

Initially, seizure duration was monitored clinically by an independent observer; the interval between the stimulus and cessation of the clonic phase was measured using a stopwatch. Using this method, it was demonstrated that 55% of treatments had produced a seizure duration of less than 30 s (the arbitrarily defined cut-off point for missed or inadequate seizures used by many workers). Bilateral and unilateral electrode placements were used with approximately equal frequency. The percentage of unilateral treatments which produced an inadequate seizure was 62%, while for bilateral treatments the corresponding figure was 44% ($\chi^2 = 4.04$, d.f. = 1, $P < 0.05$). Five patients never achieved a seizure duration of 30 s or longer, and four of these were receiving unilateral treatments. Only four patients were receiving medication which might have elevated the seizure threshold, such as benzodiazepines.

It has been widely debated whether clinical monitoring of seizure duration in ECT is acceptable (Christensen & Koldbaek, 1982; Fink & Johnson, 1982; Fink, 1987). With the increasing sophistication of anaesthesia, cerebral seizure activity could be masked by the muscle relaxant. Because of this possibility, a two-lead portable EEG machine was subsequently employed to assess the validity of the clinical method. One patient receiving a course of right unilateral ECT was monitored throughout treatment using left tempero-parietal EEG leads. On no occasion did the clearly observable EEG spike discharges outlast clinical jactitation by more than 2 seconds. This finding is contrary to that of Christensen & Koldbaek (1982), and suggests that clinical observation is unlikely to underestimate seizure duration significantly. Furthermore, the discrepancy between the durations of seizures induced by bilateral and unilateral treatments remains.

This survey suggests that inadequate seizures with ECT may be very common, especially with unilateral treatments. Because of recent awareness of dose-related side-effects, clinicians have been encouraged to use the lowest current which will result in a seizure (Royal College of Psychiatrists, 1977; Pippard & Ellam, 1981). Has the pendulum swung too far, so that these 'threshold doses' are producing inadequate seizures?

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Diethylpropion, Bupropion, and Psychoses

SIR: I read with great interest the recent report by Carney (*Journal*, January 1988, **152**, 146–147) of psychoses associated with the use of the diet pill diethylpropion. We recently described four cases of psychoses which emerged during treatment with the unicyclic aminoketone antidepressant bupropion (Golden *et al*, 1985). Diethylpropion and bupropion share strikingly similar chemical structures; replacement of the former's diethyl group with a t-butyl group and the addition of a chloride atom to the meta position of the phenyl ring would yield the latter (Mehta, 1983).

We found that those patients who experienced psychoses in association with bupropion treatment demonstrated significant increases in plasma concentrations of the dopamine metabolite homovanillic acid, suggesting that perturbations in dopaminergic systems might underlie their toxic reactions (Golden *et al*, 1988). A similar mechanism of action might account for the psychotic symptomatology associated with diethylpropion.

Bupropion is still undergoing investigation in anticipation of its release for clinical use. Overall, we have found it to be a strikingly effective treatment for many patients who have failed to respond to conventional antidepressants. As in the case

with diethylpropion, the clinician should be aware that an occasional patient may develop psychotic side-effects in association with its use.

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Self-Inflicted Eye Injuries

SIR: With reference to the report by Thomas *et al* on eye injuries (*Journal*, November 1987, **151**, 691–693), I would like to present two cases, both male and 22 years of age and both admitted to hospital with a diagnosis of paranoid schizophrenia. In one case the patient showed on admission bilateral corneal abrasions that he had inflicted himself with his fingernails because his eyes were "unable to tell between left and right". The other patient had succeeded in enucleating his right eye with his fingers, although he did not give any explanation for his action. About one year later he was readmitted to hospital; on this occasion he bit off and swallowed one-third of his tongue. At that time he would say that the devil was inside his body.

There are many reports in the literature about self-inflicted injuries in schizophrenic patients and they tend to be particularly bloody and cold acts, suggesting perhaps a change in their way of perceiving pain and in the way they relate to their own bodies.

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Psychosomatic Medicine and Contemporary Psychoanalysis

SIR: We hope that the lukewarm review by Teresa Black of Graeme J. Taylor's book *Psychosomatic Medicine and Contemporary Psychoanalysis* (*Journal*, April 1988, **152**, 590–591) will not deter people from reading it. In our view it is an important book, which encompasses various fields of work, and repays careful reading by those seriously interested in integrating concepts and research within overlapping disciplines.

Far from being a disadvantage, as indicated by the reviewer, the breadth of Taylor's view is his strength, and he has attempted something which is, indeed, important: collating ideas, hypotheses, and facts drawn from research in different fields of study, and with considerable scholarship. Those who are interested in integrating research across boundaries will be glad to see a book of such exceptional calibre, with its well authenticated information, written with clarity.

It is perhaps difficult for any reviewer to have had experience of such a range of complex fields; the book covers neurophysiology, psychobiological animal studies, psychosomatic disorders, and recent psychoanalytical theory, while relating work of such diverse authors as the infant animal work of Hofer and Ader, the child studies of Winnicott, Mahler and Bowlby, and the psychoanalytical observations of Kohut and Kernberg. An example is the clarifying and linking of object relations theory with Hofer's work on psychobiological internal regulators which, when defective, are basic to the understanding of inadequate coping mechanisms of adult life, and are, therefore, particularly relevant in psychosomatic disorders.

This is a well-written seminal book by an original thinker and is of importance.

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Vitamin B12 in Psychotic Depression

SIR: Vitamin B12 and folate are essential in several important metabolic processes in man. Low folate levels have been associated with mood disturbance, whereas low B12 has been more often associated with organic disorders and psychosis (Evans *et al*, 1983). Most early studies of B12 in psychiatric disturbances used heterogeneous groups of medicated patients, older and less accurate measures of B12, and broad diagnostic categories (Shulman, 1967). In addition, the relationship between B12 and folate levels and