

## Correspondence

### SIMULATED AND REAL ECT

DEAR SIR,

In modern studies of the efficiency of ECT lack of careful recording of the seizure activity is not acceptable. It is not satisfactory only to state that a bilateral modified convulsion is evoked (Lambourn and Gill, *Journal*, December 1978, **132**, 514–19). This may imply everything from a maximal generalized seizure to a submaximal seizure influenced by drugs with anti-epileptic action, reflecting variations from high to negligible anti-depressive efficiency. Lacking EEG-recording of the seizure activity in the cited paper, a low anti-depressive efficiency may be suspected in view of the facts that benzodiazepines had been given and the outcome after six treatments was unimpressive.

The paper gives a new illustration that the best way to 'prove' the inefficiency of a treatment is to give it in inadequate dose to small patient series using a measuring instrument of unaccounted reliability.

More is required before 40 years' of clinical experience and scientific evidence is thrown away and the essential role of the seizure activity in ECT is questioned.

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DEAR SIR,

I should like to make four comments on the paper by Lambourn and Gill (*Journal*, December 1978, **133**, 514–19). Although one means of assessing outcome was to be 'days in hospital' there is no reference to this in the results or discussion sections. As a possible explanation for the alleged similar outcome for both groups 'the possibility was examined that a sub-group of patients did well but their responses were masked by our presentation of mean results; the distribution of good responses were similar between the groups, and no clinical features distinguished them'. However, the authors did not consider whether or not a sub-group of the patients receiving simulated ECT (S)

may have fared worse than those receiving real treatment (R). If one examines the assessments after six treatments by 'Hamilton outcome improvement' it is seen that outcome is as follows: +++ 6R and 6S; ++ 5R and 5S; + 4R and 1S; 01R and 4S. Thus when poor outcome (+ and 0) is considered there is no doubt that those receiving S are over-represented. Examination of 'referring doctors' global assessment of outcome' also reveals a preponderance of poor responders in the S group.

My final two comments concern the administration of the treatments thrice weekly to a total of 6. It seems possible that, whatever the mode of action of ECT, longer intervals between applications over a longer period are required for maximum benefit as in the more usual practice of giving treatment twice weekly. Also, more than six treatments may be required. There is suggestive evidence from the study itself in support of one or both of these points. It is only suggestive since drugs were also administered, 6 patients were lost to follow up and patient groups were small. Of patients receiving further ECT over and above the initial 6, 4 improved in the R group and 5 in the S with no relapses in either. Of those receiving no further ECT 1 improved and 2 relapsed in the R group, the figures for the S group being 2 and 2.

Thus, bearing in mind the small numbers and other caveats, this study could well be interpreted as supporting the view that real ECT is more effective than the simulated version.

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### OCCIPITAL ALPHA ACTIVITY AND PERSONALITY

DEAR SIR,

Kondo, Bean, Travis and Knott (*Journal*, April 1978, **132**, 378–80) draw three conclusions from their experiment on EEG alpha activity and personality, namely: 1. 'the data do not support Eysenck's hypothesis concerning the relationship of cortical activity to personality types'; 2. 'both scales of the EPI can be reliably related to occipital alpha';

3. 'that occipital alpha and personality traits may predict one another'.

There are a number of issues relating to the experiment which cast doubt on whether these conclusions can be drawn from the data:

1. Rigorous test of Eysenck's theory of personality requires strategies other than basal EEG measurement, e.g., task performance paradigms (Gale 1973, 1974).
2. The subjects were all young, either university students or staff, and were paid for participating. This introduces bias (Orne 1962, Rosenthal, 1965), and Gale (1973, p 235) comments that such samples 'do not allow for the formulation of general statements concerning extraversion and the EEG'.
3. During the experiment, subjects were asked to 'close their eyes, sit back and relax'. Gale (1973, p 238) shows that such non-specific instructions 'constitute a major source of error variance'.
4. EEG data were analysed separately with regard to the two personality measures, i.e. no account was taken of interaction between them. Either a quadrant analysis or a comparison of high and low E scorers with N held constant (and vice-versa) would have been more appropriate.
5. Comparison of extreme groups does not allow the conclusion that 'alpha and personality traits predict one another': for this, correlational analysis is required.
6. The authors state that 'both scales of the EPI can be *reliably* related to occipital alpha' (my italics). 'Reliable' presumably means 'capable of replication': there are in the literature five studies which claim to demonstrate no relationship between extraversion and alpha activity, and five which claim to demonstrate a relationship opposite to that claimed by the present authors. These studies are reviewed by Gale (1973), who points out that the relationship between personality and EEG is not immutable, but depends to a large extent on experimental conditions.

Also, in the present experiment, the authors found no relationship between N scores and alpha activity, in contrast to their previous finding (Travis *et al.*, 1974). This earlier result cannot therefore be taken to show that N is *reliably* related to alpha activity, as the finding is not presently replicated. Apart from this, the results of the two experiments are not strictly comparable, as eyes-closed integrated alpha was measured in the present study, and eyes-open alpha index in the earlier.

Gale (1973, p 247, *et seq.*) has suggested methodological criteria for future study of the relationship between extraversion and the EEG. It may be that consideration of these recommendations would lead to more rigorous testing of hypotheses relating to EEG and personality.

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#### CIMETIDINE AND PSYCHIATRIC COMPLICATIONS

DEAR SIR,

Cimetidine, the histamine H<sub>2</sub> receptor blocking agent, is now widely used in medical practice for the treatment of peptic ulceration. Organic psychoses have occasionally been reported to occur with this treatment, particularly in the elderly (McMillen *et al.*, 1978). The manufacturers of cimetidine have also been informed of a single case of an anxiety-depressive syndrome due to cimetidine, which completely remitted after the drug was discontinued. We have recently met a similar case, which we feel is worth reporting, in order to draw attention to this possible complication of cimetidine therapy.

A 37-year-old married woman developed acute dyspepsia and anaemia. She was found to have malaena and a duodenal ulcer was demonstrated radiologically. After blood transfusion and treatment with cimetidine, 200 mgs t.d.s. and 400 mgs nocte, all her symptoms disappeared. Three weeks after beginning treatment with cimetidine, she developed acute panic attacks, palpitations and dizziness. These occurred spontaneously and she refused to be left alone or to leave the house. After some weeks, a