

had no other psychopathology in addition to her delusions. According to the relatives who escorted them, Jane had been quite well until she married John and had gradually taken on some of John's odd behaviour. There was no history of mental illness in Jane's family background. Their relatives described their relationship as closed to outsiders and emotionally very close.

John alone was put on Modecate 50 mg monthly. His psychotic features, including his delusions, disappeared, and his social interaction improved. Jane was not put on any treatment, but her condition improved after that of her husband.

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ECT SEIZURE DURATION AND ALLEVIATION OF DEPRESSION

DEAR SIR,

Katona and Berrios (*Journal*, April 1983, 142, 426) are correct in stating that ECT seizure duration is longer when measured by EEG criteria than by gross observation of tonic-clonic movements. However, these investigators are for two reasons probably incorrect in suggesting that inter-group differences in EEG seizure duration may account for the difference in anti-depressive efficacy found by Robin and de Tissera (*Journal*, October 1982, 141, 357–66) between low energy pulse and high energy sinusoidal stimulus waveforms.

Firstly, while Robin and de Tissera did measure seizure duration solely with the naked eye, it is probable that, had they measured seizure duration with EEG monitoring, any difference in seizure duration obtained with the two methods would have been randomly distributed among their three treatment groups. This is because patients were randomly assigned to the three ECT groups and because there is ample evidence in the ECT literature showing no difference in EEG seizure duration between ECT with low versus high energy stimulus waveforms (Cronholm and Ottosson, 1963; Weiner, 1980; Daniel *et al*, 1982, 1983; Weiner *et al*, 1983).

Secondly, no ECT study to date has demonstrated statistically a positive correlation between the anti-depressive efficacy of ECT and EEG seizure duration without confounding EEG seizure duration with treatment number, as did Maletzky (1978) and a recent investigation by Kramer (1983). In this regard, I do not

think that Maletzky's anecdote quoted by Katona and Berrios obviates the need to control for treatment number. In fact, a recent study (Weiner *et al*, 1983) found that the anti-depressive efficacy of ECT was related neither to the mean nor total EEG seizure duration in patients receiving a comparable number of brief-pulse or sinusoidal treatments.

What appears to be important with respect to therapeutic efficacy is not the precise duration of seizure activity (Weiner *et al*, 1983), but rather the administration of 5–8 adequately generalized tonic-clonic seizures (d'Elia *et al*, 1983). In this regard, some types of low-energy brief-pulse waveforms (pulse-widths of 0.6 msec. or less), as used by Cronholm and Ottosson (1963) and Robin and de Tissera (1982), may produce inadequately generalized seizures, a hypothesis discussed elsewhere (*Journal*, May 1983, 142, 536–37) with respect to Robin and de Tissera's results.

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