

adequate seizures, a higher energy output is required for the Duopulse device. Decreasing the intensity or duration of the partial sine wave stimulus, as suggested by the authors, would be likely to have the effect of diminishing its ability to generate an adequate ictal response.

This possibility is an important consideration, since the output of both devices may be marginal with respect to patients with high seizure thresholds, e.g. the elderly. Experience with contemporary American pulse ECT devices has shown, in this regard, that brief pulse seizure thresholds between 50 and 100 J are not rare. On the other hand, such experience has also made it clear that seizure thresholds in other patients may be as low as 5 J, suggesting that fixed parameter devices such as the Ectron Duopulse may not be as optimal in this regard as newer generation equipment by Ectron, Elcot, Mecta, Medcraft, and Somatics (the latter four of US origin).

With respect to the issue of constant voltage versus constant current stimulation, it can be said that the latter appears to be a more physiological means of stimulation in terms of neuronal depolarisation. In addition, as we have pointed out elsewhere (Weiner & Coffey, 1986), relative differences between constant current and constant voltage stimulation also exist concerning the effects of inter-electrode resistance. A high resistance, particularly likely in the elderly, may result in insufficient current delivery with a constant voltage device. A low resistance, however, possibly on the basis of increased shunting of current across the scalp, will be associated with a relatively high current with the constant voltage apparatus. While this latter effect may allow the constant voltage device to compensate for increased scalp shunting, it also raises the likelihood of skin burns in such cases.

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#### References

- WEINER, R. D. (1980) ECT and seizure threshold: effects of stimulus wave form and electrode placement. *Biological Psychiatry*, **15**, 225–241.  
— & COFFEY, C. E. (1986) Differential ability of ECT devices to produce seizures. *Convulsive Therapy*, **2**, 134–135.

SIR: Dr Weiner has published data showing lower seizure thresholds for patients receiving a brief stimulus compared with patients receiving sine-wave

stimulus (Weiner, 1980). This supports the assertion that more energy may be required for a sine-wave stimulus than for a pulse stimulus. However, in Dr Weiner's investigation, he used equipment which produces a continuous sine wave for short duration (Medcraft B-24 MK III). The important difference between this machine and the Ectron Duopulse MK IV used in our study is that in the latter machine, the sine wave is truncated by a thyristor switch. This means that there is a rapid change in voltage similar to the rising edge of the pulses in the Ectron constant current machine. These waveforms can be seen in Fig. 2 of our paper. It is therefore not valid to assume that results obtained with a pure sine-wave stimulus are relevant to a truncated sine-wave stimulus.

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#### Reference

- WEINER, R. D. (1980) ECT and seizure threshold: effects of stimulus wave form and electrode placement. *Biological Psychiatry*, **15**, 225–241.

#### Clonidine and Neuroleptic-Resistant Mania

SIR: Maguire & Singh (*Journal*, June 1987, **150**, 863–864) report the efficacy of clonidine in three cases of haloperidol-resistant mania. In the light of our experience, we would like to stress two points: firstly, the anti-manic effect of clonidine is already documented – our team at the Salpêtrière reported the anti-manic effect of this compound as early as 1980 (Jouvent *et al*, 1980) and, more recently, we published a study bearing on 24 patients; secondly, the latter study showed that a poor previous response to neuroleptic drugs seemed to be a predictor of clonidine efficacy (Hardy *et al*, 1986).

These facts, and the three supplementary cases published by Maguire & Singh, are not necessarily in favour of the 'noradrenergic hypothesis of mania', but may indicate that some patients who do not respond to neuroleptic medication may have an NA hyperactivity which benefits from NA reduction by clonidine.

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## References

- HARDY, M. C., LECRUBIER, Y. & WIDLOCHER, D. (1986) Efficacy of clonidine in 24 patients with acute mania. *American Journal of Psychiatry*, **143**, 1450–1453.
- JOUVENT, R., LECRUBIER, Y., PUECH, A. J., SIMON, P. & WIDLOCHER, D. (1980) Antimanic effect of clonidine. *American Journal of Psychiatry*, **137**, 1275–1276.

## Khat-Induced Paranoid Psychosis

SIR: Gough & Cookson (*Journal*, June 1987, **150**, 875–876) mention that khat had caused psychosis in their patient as the urine screen was positive for amphetamines. It is evident that the authors use the word “amphetamines” to refer to phenylalkylamines, as otherwise they would have been more specific. This implies that the test was non-specific and could have been positive for many other compounds which are in common use, for example as cough remedies. It is true that the two important active chemical constituents in khat, cathinone and d-norpseudoephedrine (DNE), which are responsible for the euphoriant properties, are both phenylalkylamines.

Our contention is that it would not be possible to differentiate cathinone and DNE from other amphetamine-like compounds in the routine urine screen for amphetamines, but a more definitive testing using chromatographic techniques would yield conclusive results. Cathinone is easily hydroxylated to form l-norpseudoephedrine and DNE in the body. The relative proportions of cathinone and norpseudoephedrine in urine may indicate the time interval between khat chewing and their excretion in the urine. Khat users would, as a matter of habit, continue to chew it, and a follow-up of the patient may yield conclusive results.

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SIR: We never suggested that “khat had caused psychosis” in our patient because the urine drug screen was positive for amphetamines, merely that this result was to be expected in view of the chemical constituents in khat. We would refer the authors to the original report (Gough & Cookson, 1984), in which the case was discussed in detail and the type of assay used specified. The patient was observed at home prior to admission actually chewing the leaves, which were identified as khat by a Regional Drug Information Centre.

Our previous letter was prompted by Critchlow & Seifert's case report (*Journal*, February 1987, **150**,

247–249), where a urine drug screen was positive for morphine and dihydrocodeine but negative for amphetamines, which is not in keeping with a diagnosis of khat-induced psychosis.

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## Reference

- GOUGH, S. P. & COOKSON, I. B. (1984) Khat-induced schizophreniform psychosis in the UK. *The Lancet*, *i*, 455.

## Psychiatry and Glasnost

SIR: At the recent Regional (European) Conference of the World Association for Social Psychiatry (WASP) held in Budapest, Hungary (13–15 November), Professor Modest Kabanov of Leningrad highlighted changes in attitude stemming in part from Glasnost.

The concerns about Soviet psychiatry and allegations of its misuse are now taken seriously by Soviet academics and the Government, leading to open discussion in the press and other media. One such example was a detailed article in *Izvestia*, “In defence of the unprotected mentally ill”, on 10 July, 1987. This stimulated the open-minded investigation and review of cases by independent committees, one of which was headed by Professor Kabanov. This appears to be a new development and not dissimilar to the mental health tribunal mechanism prevailing in England.

Professor Kabanov went on to describe new legislation procedures and guidelines currently being considered and soon to be implemented which will mitigate against incorrect diagnosis and the inappropriate use of psychiatry. Incorporated in this is the concept of independent assessment, including a possible contribution from foreign academics. In Leningrad these changes have already been effected, helped by the initiative of Professor Kabanov. Hopefully they will become accepted and generally implemented throughout the USSR.

Professor Kabanov concluded by stating that Soviet psychiatrists would welcome constructive discussion, and suggested a forum at the next World Conference of WASP to be convened in London in November 1988, where a key topic might be ‘Global issues in social psychiatry’, with active participation by Eastern Bloc socialist countries.

Finally, he put in a plea, in the words of Voltaire: “I may disapprove of what you say, but I defend to