to 2.4 s at pulse rate of 70 Hz. Impedance was controlled through the Thymatron impedance meter.

There were only seven missed seizures out of 557 treatments (1.2%), while no patients showed a complete inability to convulse during each ECT session. One patient only showed more than one missed seizure for the session (two out of four). The energy we delivered is considerably lower than that reported by Freeman and Pippard & Russel, and this discrepancy could be explained in terms of the critical electric parameter of the stimulus waveform. The superiority of the brief-pulse waveform compared with the sine wave form in terms of efficacy has been well documented in a number of controlled studies (Weaver *et al*, 1977). In fact, a square wave delivers all of its energy above the threshold, whereas the sine wave delivers substantial amounts of below-threshold energy (Maxwell, 1968). The consequence of this is that all the energy delivered (without dispersion) is valid to induce seizure.

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### References

FREEMAN, C. P. (1988) Failure to convulse with electroconvulsive therapy. *British Journal of Psychiatry*, **154,** 571.

MAXWELL, R. D. H. (1968) Electrical factors in electroconvulsive therapy. *Acta Psychiatrica Scandinavica*, **44,** 436–448.

PIPPARD, J. & RUSSEL, R. (1988) Failure to convulse with ECT. *British Journal of Psychiatry*, **152,** 712–713.

SHARPE, M. & ANDREW, B. (1988) Failure to convulse with electroconvulsive therapy. A case report. *British Journal of Psychiatry*, **152,** 134–136.

WEAVER, L. A., IVES, J. O. & WILLIAMS (1977) A comparison of standardised alternating current and low-energy brief pulse electrotherapy. *Biological Psychiatry*, **12,** 525–534.

## Spontaneous orgasms – an explanation?

SIR: Al-Sheikhli (*Journal*, August 1989, **155,** 269–270) reported a case of spontaneous orgasms in a 45-year-old lady in the absence of gynaecological, hormonal, or overt psychological disturbances and asked for an explanation for the phenomenon. The next step in management should be a careful search for organic brain disease. Lishman (1978) cites a case where a hemangioma of the medial surface of the sensory cortex caused similar experiences localised to the contralateral side of the vagina (Erickson, 1945). This lady's symptoms occur in a transient, episodic, recurrent fashion, which is the basic format of most epileptic disorders. Skull X-ray, an EEG and a computerised tomography scan could help to rule out structural pathology causing secondary electrical changes. A trial of antiepileptic medication seems worthwhile, even in the presence of an apparently normal EEG. This basic 'organic work-up' is essential before any psychological avenues are explored.

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### References

ERICKSON, T. C. (1945) Erotomania (nymphomania) as an expression of cortical epileptiform discharge. *Archives of Neurology and Psychiatry*, **53,** 226–231.

LISHMAN, W. A. (1978) The auras of epilepsy. In *Organic Psychiatry*. Oxford: Blackwell Scientific.

## Pseudodementia

SIR: Howells & Beats (*Journal*, June 1989, **154,** 872–876) describe an intriguing case with partial recovery, to which we should like to add our own experience.

Recently, for the first time in the 10-year history of our unit, we have admitted several unusual cases of 'pseudodementia'. These were four females with florid illnesses, unknown to each other, and admitted at different times. Two were married, one had been living with a common law husband, and one was recently widowed. Three were Canadian born, and one was a West Indian immigrant. Ages ranged from 70 to 80 years. Previous history consisted of a discrete episode of depression, 30 years earlier, in one case and several admissions over 20 years to mental hospitals in other countries, in another. The patients had received ECT. Otherwise there was no history of psychiatric disorder, or drug or alcohol abuse. Histories of the present illness ranged from six months to three years.

The cases presented with bizarre behaviour, varying from frenetic activity and screaming to withdrawal and somnolence. The behaviour varied both between cases and over time. Central to the mental states were dysphoric mood, anxiety, confusion, and Ganser responses. However, only one case approached the level of major affective disorder. All