The poor clinical results with the use of antagonist may be due to the continuation of 'craving'; modification of this could improve compliance and reduce the risk of relapse.

Fluoxetine has been demonstrated to act as an 'anti-craving' drug substitute for amphetamines in animals and man, and for alcohol in man (Murphy *et al*, 1988). There have also been positive results in the reduction of cocaine used by Methadone Maintenance Treatment Program (MMTP) patients (Pollack & Rosenbaum, 1991).

Our observation regarding nine consecutive patients (seven males and two females: mean age 26 years, s.d. 3 years), all attenders at the Treatment Centre of Drug Addiction of the Psychiatric Clinic at Pisa University, corroborates these data. The patients have been treated with naltrexone plus fluoxetine, and their response to the treatment has been compared with the first nine consecutive patients, attending at the same out-patient unit who were treated only with naltrexone. Only one patient treated with naltrexone combined with fluoxetine relapsed, compared with five patients treated only with naltrexone ($\chi^2 = 4.00$; $P = 0.045$).

All patients met DSM–III–R criteria for heroin dependence; the severity of the illness was rated from mild to moderate. Patients were considered satisfactory responders if they remained off heroin and if they were well-adjusted socially three months after the start of the treatment. Medical examinations were performed every month. Case histories of drug addiction and social adjustment were evaluated by means of rating scales; they showed no significant differences between the two groups at the initiation of the treatment.

Only the MMTP patients usually achieve a program retention rate, after three months follow-up, comparable with our results. Fluoxetine may therefore reduce the craving which is the Achilles' heel of this condition.

Our criteria for selecting patients for treatment with antagonists are very strict. Nevertheless, combining this with fluoxetine in these patients appears to improve outcome. The efficacy of the naltrexone-fluoxetine combination needs to be confirmed by double-blind controlled trials.

GREENSTEIN, R. A., O'BRIEN, C. P., MINTZ, J., *et al* (1976) Clinical experience with naltrexone in a behavioural research study. In *Narcotic Antagonists: Naltrexone. Progress Report. NIDA Research Monograph 9* (eds J. Demetrios & P. Renault), pp. 141–149. Rockville: NIDA.

GUELFI, G. P. & TRAMPETTI, R. (1989) Il Naltrexone nella terapia dei tossicidipendenti: problemi e risultati. In *Il Naltrexone nel trattamento medico, psicologico e sociale del tossicodipendente* (eds G. P. Guelfi & N. Piersantelli), pp. 41–53. Milan: Boehringer Mannheim, Italia.

MURPHY, J. M., WALLER, M. B. & GATTO, G. J. (1988) Effects of fluoxetine on the intragastric self-administration of ethanol in the alcohol preferring P line of rats. *Alcohol*, **5**, 283–286.

POLLACK, M. H. & ROSENBAUM, J. F. (1991) Fluoxetine treatment of cocaine abuse in heroin addicts. *Journal of Clinical Psychiatry*, **52**, 31–33.

WIKLER, A. (1974) Requirements for extinction of relapse-facilitating variables for rehabilitation in a narcotic-antagonistic treatment program. In *Narcotic Antagonists. Advances in Biochemical Psychopharmacology* (eds M. C. Broude, L. S. Harris, E. L. May, *et al*). New York: Raven Press.

ICRO MAREMMANI
PAOLO CASTROGIOVANNI

*Psychiatric Clinic*
*Pisa University*
*Via Roma 67*
*56100 Pisa*
*Italy*

LAURA DAINI
ORIETTA ZOLESI

*Drug Addiction Fellowship*
*Cagliari 4 Pisa University*

**Violence on an acute ward**

SIR: Violence is a serious problem for those working in the health service (DHSS, 1988) and is commonly encountered in caring for the mentally ill, particularly in the hospital setting (James *et al*, 1990). This investigation was prompted by an apparent increase in the number of violent incidents on an acute admission ward.

This study was carried out in a 30-bed acute admission ward in the psychiatric wing of a district general hospital. The following data were examined retrospectively for the 48 months from January 1986 to December 1989, using a validated methodology described by James *et al* (1990). The number of incidents of physical violence was recorded by the nurses (categorised according to whether the violence was directed at staff, patients, or property).

Over the four-year study period, 456 violent incidents were recorded. Violence against staff ($n = 270$, 59%) and against other patients ($n = 119$, 28.4%) ranged from biting to punching. Those against property ($n = 56$, 12%) consisted of destruction of furniture, fabric, and fittings; 11 incidents did not fit into any of the three subgroups. The level of violence increased ten-fold over the study period from 24 to 224 violent incidents per year ($\chi^2 = 220$, d.f. = 3, $P < 0.001$). Similarly, the three subgroups of violence also increased: violence against patients ($\chi^2 = 67.9$, d.f. = 3, $P < 0.001$), violence against staff ($\chi^2 = 143.4$, d.f. = 3, $P < 0.001$) and violence against property ($\chi^2 = 16$, d.f. = 3, $P < 0.005$).

The level of violence, with 456 incidents, is very high. Furthermore, there was an alarming increase in

the total level of violence over the four-year period, and its three subgroups. This is consistent with several recent studies (DHSS, 1988; Haller & Deluty, 1988; Noble & Roger, 1989; James *et al*, 1990). There may be several explanations for this. Firstly, the levels of violence may be genuinely increasing. Secondly, the perception and awareness of violence may be increasing, and the observed increase may simply be a reflection of the reporting bias. Thirdly, with modern emphasis on community psychiatry, the non-violent and less violent patients are likely to be discharged, leaving a concentration of violent in-patients. It is well recognised that in-patient violent behaviour is accounted for by a small number of patients and often occurs in clusters (Singh, 1988). Also, the closure of large hospitals and the establishment of wards on space-efficient district general units may result in loss of space, and overcrowding has been associated with increased violence (Edwards & Reid, 1983). Violent crime in society may be increasing in any case (HMSO, 1985).

As the levels of violence and the rate of increase was alarming and appears to reflect a consistent trend in the recent British literature, each of the above hypotheses needs rigorous testing.

DHSS (1988) *Violence to Staff: Report of the DHSS Advisory Committee on Violence to Staff*. London: DHSS.

Edwards, J. G. & Reid, W. H. (1983) Violence in psychiatric facilities in Europe and United States. In *Assaults Within Psychiatric Facilities* (eds J. R. Lion & W. H. Reid). New York: Grune & Stratton.

James, D. V., Fineberg, N. A. & Shah, A. K. (1990) An increase in violence on an acute psychiatric ward: a study of associated factors. *British Journal of Psychiatry*, **156**, 846–852.

Haller, R. M. & Deluty, R. H. (1988) Assaults on staff by psychiatric in-patients: a critical review. *British Journal of Psychiatry*, **152**, 174–179.

HMSO (1985) *Criminal Statistics: England and Wales*. London: HMSO.

Noble, P. & Roger, S. (1989) Violence by psychiatric in-patients. *British Journal of Psychiatry*, **155**, 384–390.

Singh, I. (1988) Violence, nursing and inpatient psychiatry. *Lancet*, *ii*, 940.

Ajit Shah

*Section of Epidemiology and General Practice*
*Institute of Psychiatry*
*De Crespigny Park*
*London SE5 8AF*

## Continuation ECT

Sir: Scott *et al* (*Journal*, December 1991, **159**, 867–870) describe a 67-year-old woman treated with continuation ECT for recurrent unipolar depressive illness. They distinguish between continuation treatment designed to minimise the re-emergence of symptoms of the index illness and prophylactic (or maintenance) treatment (M-ECT) designed to minimise the likelihood of further episodes of illness.

In a recent survey, old age psychiatrists were asked whether they used M-ECT (Benbow, 1991). The term was not defined, and respondents probably did not distinguish between continuation and prophylactic treatment. The proportion replying that they used M-ECT was 21%; 79% replied that they did not, although some appended comments indicating that they would consider its use as an option for appropriate individuals. These figures are similar to those reported by Pippard & Ellam (1981). I would agree with Dr Scott *et al* that M-ECT is used more often than standard teaching would suggest. I am not sure, however, that our present state of knowledge allows for guidelines to be proposed.

The American Psychiatric Association Task Force Report (1990) states that patients referred for continuation ECT should fulfil three criteria. They should firstly have a history of recurrent ECT-responsive illness. Secondly, the illness should be refractory or intolerant of pharmacotherapy, or the patient should prefer ECT. Thirdly, the patient should be willing to consent to and comply with treatment. The report encourages facilities to offer M-ECT as a treatment option. M-ECT is 'empirically defined' as the prophylactic use of ECT for more than six months beyond the date of remission of the index episode, and is indicated when cessation of continuation treatment is followed by recurrent symptoms, when continuation treatment is not completely effective, or when there is a strong history of recurrent illnesses.

Duncan *et al* (1990) pointed out that until controlled prospective trials of M-ECT are carried out, we must rely on a flexible approach, tailored to each individual. They suggested that two independent psychiatrists should be involved in the decision to use the treatment for an individual. This might be unnecessarily restrictive, but is worth further discussion in the debate on continuation uses of ECT.

We must thank Dr Scott *et al* for highlighting an area which needs further exploration and which has been much neglected in the past.

American Psychiatric Association Task Force Report (1990) *The Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training and Privileging*. Washington, DC: American Psychiatric Association.

Benbow, S. M. (1991) Old age psychiatrists' views on the use of ECT. *International Journal of Geriatric Psychiatry*, **6**, 317–322.

Duncan, A. J., Ungvari, G. S., Russell, R. J., *et al* (1990) Maintenance ECT in very old age. *Annals of Clinical Psychiatry*, **2**, 1–6.