forward in the management of long-term psychotic conditions in the community.

Berna, M., Shugart, R. & Mullen, J. (1998)

Determination of olanzapine in human plasma and serum by liquid chromatography/tandem mass spectrometry. *Journal of Mass Spectrometry*, **33**, 1003–1008.

Lieberman, I. (ed.) (1988) Reintegration of the Schizophrenic Patient, p. 51. London: Science Press.

Olesen, O. V. & Linnet, K. (1998) Determination of olanzapine in serum by high performance liquid chromatography using ultraviolet detection. *Journal of Chromatography: Biomedical Applications (Amsterdam)*, 714, 309–315.

Perry, P. J., Sanger, T. & Beasley, C. (1997) Olanzapine plasma concentrations and clinical response in acutely ill schizophrenic patients. *Journal of Clinical Psychopharmacology*, 17, 472–477.

Prieto, J.V. & Hoffman, D.W. (1997) HPLC monitoring of olanzapine. Theropeutic Drug Monitoring, 19, 580.

J.W. Coates Mental Health Services, Rotherham General Hospital, Moorgate Road, Rotherham S60 2UD

Olanzapine in the treatment of anorexia nervosa

In January 1999 a 49-year-old woman with anorexia and obsessive-compulsive symptoms was admitted to hospital with an initial weight of 31.2 kg (body mass index 12.0), height 163 cm. She had never weighed >40 kg. She had a 35-year history of a severe eating disorder with several admissions in the past. Physically she was skeletal and suffered from bed sores following her inability to get out of bed unaided. Mental state examination revealed extensive obsessive-compulsive symptoms – mainly fear of food contamination, preoccupation with nutritional issues, confusion and seriously disturbed body image. She was insightless and consistently claimed that she was grossly overweight. Furthermore, she was assessed to be clinically depressed.

She was detained under Section II of the Mental Health Act 1983 (later converted to Section III). Hereafter, she agreed to voluntary food intake, which was monitored by a dietician.

She was started on olanzapine 10 mg daily in the hope that this would alleviate her fixed perception of her own body image. It was also hoped that the unwanted effect of weight gain (Tollefson & Kuntz, 1999) would be helpful. Because of complaints of tiredness and dizzy spells we agreed to reduce the olanzapine to 5 mg. Within a few weeks the patient became more compliant with the ward staff's daily programme of activities (increased contact with other patients, light weight-training and new routines of eating). At no point after she was started on olanzapine did she lose any weight. She had in the past tried chlorpromazine and several antidepressants without any effect.

Although still chronically ill, her mental state examinations showed continuous improvement over the following months – the confusion cleared; her insight changed markedly, especially in the way she was able to link adverse early experiences to her current condition; her preoccupation with body image and food issues was less prominent and allowed her to eat sufficiently. Most remarkable was how the air of hopelessness and low self-esteem lifted.

On 4 July 1999 she weighed 53.1 kg. Shortly afterwards she was discharged to a rehabilitation unit where she continues to progress.

The dramatic improvement in this patient was closely associated with the time she was started on olanzapine, but alternative/contributing factors to her recovery include a committed team effort (nurse, dietician, physiotherapist, occupational therapist, doctors), the different therapeutic environment (she was admitted out of her catchment area) and the geographical distance from her family.

It has for some time been known that olanzapine improves mood and cognition by its effects on noradrenaline and dopamine release (Bymaster *et al*, 1999). This patient also seemed to benefit from a much reduced pathological fear of fatness. This case report also indicates that the weightgaining propensities of olanzapine can be useful for patients with anorexia. Further research in this area could change our way of understanding and treating the increasing problem of eating disorders.

Bymaster, E., Perry, K. W., Nelson, D. L., et al (1999) Olanzapine: a basic science update. British journal of Psychiatry, 174 (suppl. 37), 36-40.

Tollefson, G. D. & Kuntz, A. J. (1999) Review of recent chemical studies with olanzapine. British Journal of Psychiatry, 174 (suppl. 37), 30–35.

L. Hansen Western Community Hospital, Walnut Grove, Millbrook, Southampton SOI6 4XE

One hundred years ago

Notes and comment

"Of the 15,000 Scotch insane, 2825, or 19 per cent, were in private families, under the excellent Scotch boarding-out system; and 2345 were supported by their own property or by friends, 15 per cent. Were those proportions made good in Massachusetts, we should now have 1600 of our 8500 insane living in families, instead of 200; and 1300 maintained by their own property or friends, instead of 1100. In these points our State system is inferior to the Scotch; still more is the Pennsylvania system inferior. For there, out of 10,563 insane, only 927 are privately supported, and very few are boarded in families."

Boarding-out is still a markedly successful feature of Scottish administration. Midlothian has 32 per cent of its pauper insane thus provided for; and in the parish of Edinburgh, the percentage of boarded-out patients reaches the astonishing figure of forty. If Pennsylvania has not availed herself of a good opportunity to emulate Scotland in this respect, she has made a doubtful step towards the "local custody" and maintenance of the insane under the "County-care Act" of three years ago. But overcrowding is still rife in Pennsylvania. One wonders why boarding-out does not suggest itself as a means of ready relief rather than county care.

REFERENCE

American Journal of Insanity, LVI, April 1900, 721-722.

Researched by Henry Rollin, Emeritus Consultant Psychiatrist, Horton Hospital, Epsom, Surrey