

generalised background slowing with paroxysmal sharp wave and spike activity, findings consistent with clozapine treatment. Investigations to exclude an organic cause of cognitive impairment were negative.

Neuropsychological assessment confirmed deficits in memory and spatial memory with a Rey Osterreith figure recall of 9.7% (impaired), a Benton Visual Retention Test score of 6 correct and 7 errors (both moderately impaired), and a Rivermead Behavioural Memory Test score of 8 (poor). There was also a significant deterioration in full-scale and non-verbal IQ (80 and 68 respectively; Wechsler Adult Intelligence Scale-Revised) from the estimated pre-morbid level of 105–110 as indicated by the National Adult Reading Test. The clozapine dose was decreased to 450 mg and the patient subjectively reported an improvement in her memory.

Repeat EEG showed moderate improvement with mild diffuse background abnormality. Repeat neuropsychological testing showed an improvement in non-verbal IQ with a change of 68–76 on performance IQ. Follow-up neuropsychological assessment at one year, with clozapine dosage now reduced to 400 mg, showed improvement on cognitive testing to have been maintained together with improvement in verbal and non-verbal IQ to 96. Overall memory performance is now in the normal range with a Rey Osterreith figure recall of 58.5%, a Benton Visual Retention Test score of 7 correct, 3 errors, and a Rivermead Behavioural Memory Test score increased to 10.

Neuropsychological deficits in schizophrenia are well recognised. Goldberg *et al* (1990) concluded that neuropsychological dysfunction is a consistent feature of schizophrenia related primarily to the clinical disease process. Goldberg *et al*'s study (*BJP*, January 1993, 162, 43–48) confirmed that although clozapine is associated with an improvement in both positive and negative symptoms in a group of schizophrenic patients, a wide range of cognitive functions remain impaired. However, clozapine did have an adverse effect on a measure of visual memory. A number of investigators have observed a relationship between impaired memory and the anticholinergic properties of medications in schizophrenia. Clozapine is the most potent anticholinergic of the available neuroleptics and may impair cognition as a result of this activity. Saletu *et al* (1987) have confirmed this in normal subjects. Drowsiness and EEG abnormalities confirmed to be associated with clozapine use may also be implicated in deficits on cognitive testing.

Cognitive deficits in our patient could be seen as part of the schizophrenic disease process or, alternatively, as a result of the high doses of clozapine used. This is supported by the patient's subjective report and the evidence of improved reversible EEG changes and neuropsychological performance following decreased dose. This case highlights the importance of adequate neuropsychological testing

before treatment with clozapine and the importance of using the minimum effective dose.

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Lithium dosage and inositol levels

SIR: Lithium reduces brain inositol levels by inhibition of inositol monophosphatase (Hallacher & Sherman, 1980). While serum inositol, originating in the diet, provides inositol to peripheral tissues, some peripheral tissues have been shown to have reduced inositol after lithium treatment (Sherman *et al*, 1986). Recently, Bersudsky *et al* (1992) reported that inositol (3 g daily) greatly ameliorated lithium-induced polyuria-polydipsia. In two patients, an improvement of lithium-induced skin lesions was also noted. We hereby report a case where severe lithium-induced psoriasis was almost eliminated by inositol treatment.

Case report. A 57-year-old, retired, high-school teacher with bipolar manic-depressive illness had a 36-year history of bipolar mood disorder. Severe psoriasis, exacerbated by lithium, limited lithium levels to 0.6 mM, at doses of 900 mg/day, and lithium was often stopped for long periods. Six months ago the patient was started again on lithium (900 mg/day), since he was in a manic state, which resulted in a severe exacerbation of psoriasis. Following Bersudsky *et al* (1992), we added 1.0 g inositol, three times a day for one week, resulting in a mild improvement of the psoriasis. The dose was then raised to 6 g daily, after consideration of the possible risk of reversal of the clinical benefit of lithium. Since the patient could not tolerate lithium because of the psoriasis, the possible benefit of inositol in our view outweighed the risks of reversal of its therapeutic effect. After 48–72 hours on inositol (6 g daily), the patient's psoriasis was dramatically improved with regression of diffuse scaling, papules and plaques and absence of new lesions. He had never before had an improvement of psoriasis on lithium. After one week inositol was stopped and lesions returned within 48–72 hours. Return of inositol after seven days led to a rapid regression of psoriasis. It was then possible to raise the lithium dose to 1200 mg, reaching levels of 0.9–1.0 mM and complete clinical psychiatric remission. Further withdrawals of inositol have led to exacerbations of psoriasis but not as severe as in the past.

The above case suggests that inositol may specifically antagonise lithium effects (Kofman *et al*, 1993) and that it may be possible to find an inositol dose useful in antagonising peripheral side-effects but low enough to avoid hypothetical antagonism of therapeutic effects in the brain (Kofman & Belmaker, 1993).

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CORRIGENDA

BJP, November 1993, **163**, 639. The 12th line of the second paragraph, second column, should read “. . . it is indefensible, and certainly unnecessary, that people . . .”

BJP, November 1993, **163**, 696. The author of “Catatonia: the tension insanity” is Wai-Yu Joseph Lee.

A HUNDRED YEARS AGO

Reports of lunatic asylums for 1892

Bethlem Royal Hospital. The daily average number of certified patients in residence at this hospital during the year 1892 was 243, as compared with 246 in 1891. The admissions of certified patients who were detained for treatment numbered 238. Of these, 68, or 29 per cent., had had previous attacks and 87, or 36 per cent., had a family history of insanity, whilst in 53, or 22 per cent., there was a family history of alcoholism. Of these 53, 11 seemed to owe their attack of insanity to the abuse of alcohol, as against 6 patients whose insanity was to be attributed to the same cause without such inheritance. The percentage of patients who were discharged as recovered was, for men 42.9, for women 52.6 and for both sexes 48.3. The total number of deaths for the year was 17, the percentage being, for certified patients alone, 10.1 and 4.1 for males and females respectively, and for both sexes 6.9. There was one case of suicide: it was that of a young melancholic patient who had shown very marked signs of improvement and who was

allowed to go with an attendant to the Agricultural Hall. Whilst there he escaped from the attendant and made his way to a friend, from whom he borrowed some money, and purchased a second-hand revolver, with which he shot himself in a barn. The coroner's jury were able to acquit the asylum authorities of all blame. As Dr. Percy Smith says, it is not always possible to know what is passing in the mind of a determined patient, however satisfactory his progress may have been towards recovery. He states that of the whole number of patients who were admitted no less than 60 had a history of having had influenza at some antecedent period. In many of these the insanity was merely *post hoc* and not *propter hoc*; but in 16 cases influenza seemed to have played a most important part in producing mental disease, though it was of course not necessarily the only factor leading to it.

Reference

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